



# **NORTH DISTRICT DEVELOPMENT PLAN**

## **PROJECT # 958080**

Initial Study

The following Initial Study has been prepared in compliance with CEQA.

### **Prepared By:**

**University of California, Riverside  
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1223 University Avenue, Suite 240  
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**June 2018**

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## INTRODUCTION

### Initial Study

Pursuant to Section 15063 of the *California Environmental Quality Act (CEQA) Guidelines* (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency (the public agency principally responsible for approving or carrying out the proposed project) as a basis for determining whether an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The *State CEQA Guidelines* require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed University of California Riverside ("UC Riverside") North District Development Plan to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section IV of this document and based on the analysis contained in this Initial Study, it has been determined that the proposed NDD Plan could result in potentially significant impacts; therefore, preparation of an Environmental Impact Report (EIR) is appropriate.

The University of California (University), as the lead agency pursuant to CEQA, requires each campus of the University of California to prepare a Long Range Development Plan (LRDP) that sets forth concepts, principles, and plans to guide the future growth of the campus. Pursuant to this obligation, UC Riverside prepared the 2005 LRDP and the supporting Final Environmental Impact Report (Final EIR) for the UC Riverside campus (State Clearinghouse No. 2005041164). In November 2005, The Board of Regents of the University of California (The Regents) certified the Final EIR and approved the 2005 LRDP. In 2006, UC Riverside amended the 2005 LRDP to allow a 3.25-acre deed restriction in the Agricultural Operations fields south of MLK (2005 LRDP Amendment 1). In 2011, UC Riverside approved a major amendment (Amendment 2) to the 2005 LRDP, based on an evaluation of its environmental impacts in a Final EIR (State Clearinghouse No. 2010111034). The LRDP Amendment 2 EIR supplemented the 2005 LRDP EIR, focusing on the incremental environmental effects of LRDP Amendment 2. In 2013, the 2005 LRDP was amended (Amendment 3) to provide an overlay to the land use designation of one 10-acre site on the West Campus for the siting of a solar array project.

The 2005 LRDP, as amended by Amendments 1, 2, and 3, is the land use planning document used by UC Riverside to guide the development of the campus to accommodate a projected student body of 25,000 full time equivalent (FTE) students which was estimated to be reached by 2020. The 2005 LRDP EIR, as augmented and updated by the 2011 LRDP Amendment 2 EIR, is the environmental document that provides a full evaluation of the environmental effects of campus development anticipated under the

2005 LRDP and is used by the Campus to conduct tiered environmental review of specific development projects proposed on the campus, pursuant to CEQA Guidelines Section 15152.

The proposed North District Development Plan (NDD Plan) is a plan put forth by UC Riverside to provide up to 6,000 student beds on the East Campus on an approximately 55-acre site located in the northeastern portion of the campus. The NDD Plan comprises Phase 1 which involves the construction of about 1,500 student beds and associated facilities by 2021 and a future phase(s) which involves the construction of up to 4,500 student beds and associated facilities between 2019 and 2024/5. The project site is developed with Canyon Crest Family Student Housing that was occupied by student families until 2017 and is currently vacant. The site is designated for Family, Apartments, and Residence Hall Student Housing and Related Support, and Athletics and Recreation in the 2005 LRDP. Furthermore, as a student housing project, the proposed project would support current and projected enrollment on the campus. The student population for the campus is projected to exceed the LRDP threshold of 25,000 prior to the projected completion of buildout of the project in 2024/5. Therefore, the University has determined that it will not tier the environmental review of this project from the 2005 LRDP EIR and the 2011 LRDP Amendment 2 EIR, but will instead prepare a stand-alone EIR that evaluates and disclose the potential environmental impacts of the proposed NDD Plan.

At this time, project-level details are available only for Phase 1 development. With respect to the future phase(s) of development, the NDD Plan provides a development program and a land use diagram, but does not have details with respect to specific buildings. Given this level of detail, the EIR for the NDD Plan will provide a program-level analysis for the entire plan and a project-level analysis of the potential environmental impacts from the implementation of Phase 1.

### **Anticipated Project Approvals**

Necessary project approvals are anticipated to include, but are not limited to, consideration of the following by The University of California Board of Regents (anticipated in March 2019):

- Certification of the North District Development Plan EIR,
- Amendment to the UCR LRDP,
- Approval of the North District Development Plan, and
- Approval of the design of the first phase of the proposed project.

### **Public and Agency Review**

The Notice of Preparation (NOP) and this Initial Study will be circulated for public and agency review from June 19, 2018 through July 20, 2018. Copies of the Initial Study are available during normal operating hours at Campus Planning – Capital Asset Strategies, UCR and online at

<http://cpp.ucr.edu/environmental/ceqadocs.html>. Comments on the NOP/Initial Study must be received by 5:00 PM on July 20, 2018. They may be e-mailed to [CEQA@ucr.edu](mailto:CEQA@ucr.edu) or sent to:

Campus Planning – Capital Asset Strategies  
1223 University Avenue, Suite 240  
Riverside, California 92507  
Attn: Tricia D. Thrasher, ASLA, LEED AP

A public scoping meeting for the NDD Plan EIR will be held on July 3, 2018, from 5:30 PM to 7:30 PM at University Village Suite 210 located at 1223 University Avenue, Riverside, California. The public and agency review period for the EIR is anticipated to commence in approximately November 2018.

### **Organization of the Initial Study**

This Initial Study is organized into the following sections:

**Section I – Project Information:** provides summary background information about the proposed project, including project location, lead agency, and contact information.

**Section II –Project Location and Description:** includes a description of the proposed project, including the need for the project, the project’s objectives, and the elements included in the project.

**Section III –Environmental Factors Potentially Affected:** identifies which environmental factors, if any, involve at least one significant or potentially significant impact that cannot be reduced to a less than significant level.

**Section IV – Determination:** indicates whether impacts associated with the proposed project would be significant, and what, if any, additional environmental documentation is required.

**Section V – Evaluation of Environmental Impacts:** contains the Environmental Checklist form for each resource and presents an explanation of all checklist answers. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project and determining which impacts, if any, need to be mitigated or to be further evaluated in an EIR.

**Section VI – Supporting Information Sources:** lists references used in the preparation of this document.

**Section VII – Initial Study Preparers:** lists the names of individuals involved in the preparation of this document.

## I. PROJECT INFORMATION

1. Project title:

North District Development Plan

2. Lead agency name and address:

The Regents of the University of California  
1111 Franklin Street  
Oakland, CA 94607

3. Contact person and phone number:

Tricia D. Thrasher, ASLA, LEED AP  
Principal Environmental Planner  
University of California, Riverside  
(951) 827-1484  
CEQA@ucr.edu

4. Project location:

University of California, Riverside  
Riverside, California 92507

5. Project sponsor's name and address:

University of California, Riverside  
Campus Planning – Capital Asset Strategies  
1223 University Avenue, Suite 240  
Riverside, California 92521

6. Custodian of the administrative record for this project (if different from response to item 3 above.):

Same as above.

## II. PROJECT LOCATION AND DESCRIPTION

The NDD Plan (proposed project) is a proposed land use plan to redevelop an existing student housing project site on the East Campus with a new higher-density student housing project. The NDD Plan designates land uses for the entire 55-acre site, and the Campus anticipates that the plan area will be developed in phases, beginning with Phase 1 in the southern portion of the 55-acre site. The NDD Plan includes a mix of land use designations that would allow for the construction of student housing units (for first year, second year, transfer, and upper division undergraduate and graduate students), support spaces, site improvements, utilities and supporting infrastructure improvements, dining facilities, recreational fields, an athletic field, and related parking.

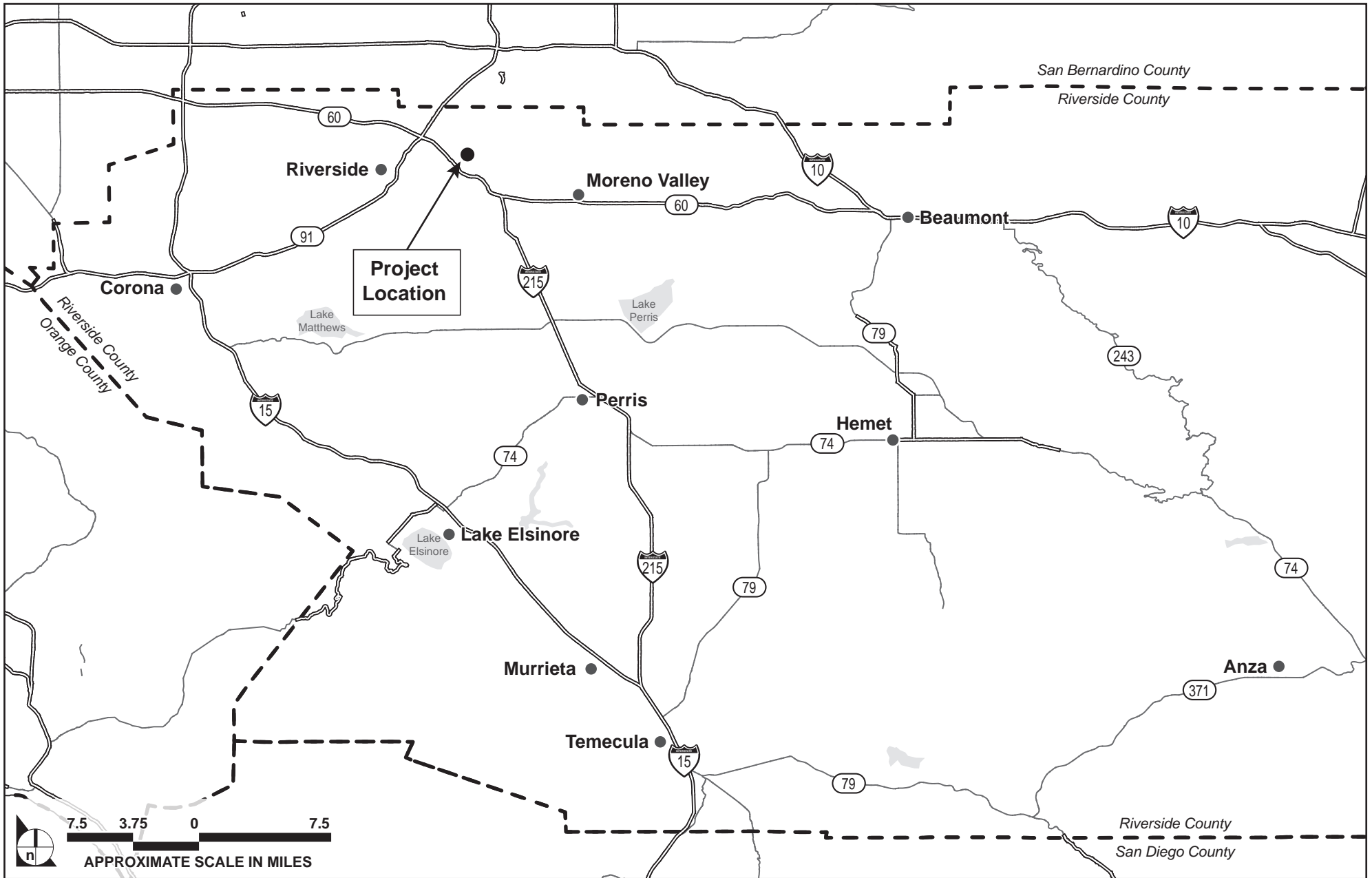
**Location:** The UC Riverside campus is located in the City of Riverside, three miles east of downtown Riverside and just west of the Box Springs Mountains. The City of Riverside is located within the County of Riverside, in a larger geographic area known as the Inland Empire, which includes western Riverside and San Bernardino counties. **Figure 1, Regional Location**, shows the location of the campus in a regional context. The campus is generally bounded by University Avenue and Blaine Street on the north, Watkins Drive and Valencia Hill Drive and its extension south on the east, a line extending east from Le Conte Drive on the south, and Chicago Avenue on the west. The campus is bisected diagonally by the I-215/SR-60 freeway. The area to the east of I-215/SR-60 is called the East Campus.

The proposed NDD Plan area is an approximately 55-acre site located in the northeastern portion of East Campus (**Figure 2, Project Location**). The Plan area consists of the existing vacant Canyon Crest Family Student Housing Complex which includes single-family dwellings, most of which are vacant although some are now used as storage and maintenance facilities, including permanent structures and modular units in the northwestern portion of the site. A park with a playground is located in the western portion of the Plan area, south of Cherry Street. There are nine asphalt-paved residential streets within the Plan area in addition to several gravel roads. The project site is surrounded by Blaine Street and a small shopping plaza to the north and Canyon Crest Drive and the Falkirk Apartments to the west. The Plan area is bounded by Linden Street to the south along with the Police Facility, a track facility, the Student Recreation Center, and the Aberdeen-Inverness (A-I) Residence Halls. To the east of the project site are parking lots, the UC Riverside Child Development Center, and the Campus Corporation Yard (which includes three campus support facility buildings [Corporation A, B, and C], two warehouses (Warehouse #1 and #2), the Mail Services building, the Transportation and Parking Services (TAPS) building and yard, a car shed, a gas storage building, and outdoor storage and parking areas).

### North District Development Plan

**Land Use Plan:** **Figure 3, Proposed Land Use Designations** presents the land use designations that are included in the NDD Plan. **Table 1** below presents the acres assigned to each land use designation/district and the types and intensity of land uses planned for each land use district.





SOURCE: Impact Sciences, 2018

FIGURE 1



Project Site



SOURCE: Google Maps, 2018

FIGURE 2



SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 3

**Table 1**  
**North District Development Plan**  
**Proposed Land Use Designations and Districts**

<b>Land Use</b>	<b>Acres</b>	<b>Bed/Spaces/Seats/Mixed Use</b>
Student Residential and Mixed Uses District 1	4.25	700-1,000 Beds 10,000-15,000 sf Mixed Use
Student Residential and Mixed Uses District 2	6.15	800-1300 Beds 13,000-22,000 sf Mixed Use 600 Seat Dining Facility
Student Residential and Mixed Uses District 3	5.45	700-1,400 Beds 30,000-50,000 sf Mixed Use
Student Residential and Mixed Uses District 4	8.40	1,400-2,600 Beds 50,000-70,000 sf Mixed Use
Student Residential and Mixed Uses District 5	3.40	700-1,000 Beds
Athletics Event Center	5.70	5,000-7,000 Seats
Parking 1	2.15	Less than or equal to 1,200 Spaces
Parking 2	4.05	Less than or equal to 1,200 Spaces
Open Space	11.60	--
<i><b>Total Acres</b></i>	<b>51.15</b>	

The NDD Plan provides for the phased development of apartments, mixed-use residential, resident life amenity spaces, living and learning spaces, resident life support spaces, dining facilities, athletics facilities, and parking areas (**Figure 4, North District Development Plan (Conceptual)**). **Table 2** below sets forth the number of student beds and other amenities that would be developed in Phase 1 of the Plan and the additional beds and facilities that would be built in the future phase(s).

The NDD Plan sets forth details regarding the facilities that would be built in Phase 1 and includes a land use diagram to guide the development of the future phase(s). The Plan, however, establishes building heights, noting that heights would range from 5 to 6 stories for the apartment buildings, 5 to 6 stories for residence halls, 1 to 2 stories for mixed use buildings, a 2-story dining facility, and parking structures would be 7 levels.

LEGEND

- APARTMENTS
- LIVING - LEARNING SPACES
- RESIDENT LIFE AMENITIES
- RESIDENT LIFE SUPPORT
- MIXED-USE RESIDENTIAL
- DINING FACILITIES
- ATHLETIC FACILITIES
- PARKING AREAS



NOT ACCORDING TO SCALE

SOURCE: Solomon Cordwell Buenz, 2018



1031.004•06/18

FIGURE 4

North District Development Plan (Conceptual)

**Table 2**  
**North District Development Plan**  
**Phased Development Program**

<b>Unit Mix</b>	<b>Phase 1</b>	<b>Future Phase</b>	<b>NDD Plan Total</b>
Apartments	1,500 beds	2,558 beds	4,058 beds
	361,836 sq. ft.	1,009,811 sq. ft.	1,371,647 sq. ft.
Residence Halls	--	1,200 beds	1,200 beds
		244,059 sq. ft.	244,059 sq. ft.
Residential Floor Amenity / Support Spaces	7,846 sq. ft.	TBD	TBD
Circulation, Mechanical, & Structure	147,958 sq. ft.	TBD	TBD
Living, Learning, Community & Administration	10,704 sq. ft.	TBD	TBD
Support & Maintenance	5,177 sq. ft.	TBD	TBD
Dining Facilities	--	33,380 sq. ft.	33,380 sq. ft.
Field House	--	21,893 sq. ft.	21,893 sq. ft.
Competition Field	--	3,000 seats	3,000 seats
Surface Parking	844 spaces	--	--
Structured Garage Parking	--	2,164 spaces	2,164 spaces

**Open Space and Landscaping:** The NDD Plan proposes a large open space area in the eastern portion of the Plan area. The site material palette for the NDD Plan would include hardscape and softscape materials that are derived from the existing campus aesthetic. Key intersections and open spaces, such as the primary plaza, main building entries, and courtyard patios, would include specialty paving that highlights the importance of those spaces. Planting materials would include native and adaptive species that are drought tolerant, reflect the native landscape of the region, and highlight UC Riverside’s commitment to sustainability and water use reduction. Incorporation of trees throughout the site would provide shade and respite from the heat while creating pleasant places to rest and relax throughout the Plan area.

During construction, tree protection zones would be placed at or beyond the dripline of trees wherever possible. Protection fencing would include 8-foot high chain-link fence. Per the tree survey and arborist evaluation, two tiers of trees would be considered for preservation.<sup>1</sup> Of the 681 trees in the site

1 The full North District Tree Evaluation, completed by Psomas in March 2017, is included as Appendix B to this Initial Study. According to the Evaluation, first tier trees consists of the following criteria: High health rating (4 min.), high aesthetic rating (4 min.), California natives, significant height, significant canopy, significant trunk. The second tier trees are selected for: Moderate-high health rating (3 min.), moderate-high aesthetic rating (3 min.), significant height, significant canopy, significant trunk. The third tier trees include: Low-moderate health

inventory, 46 shrubs, 132 invasive specimens (for example pepper trees) and six short-lived specimens would be removed. Of the remaining 497 trees, 110 trees are first tier and 56 are second tier. All third tier trees would be removed in Phase 1. The arrangement of buildings on the site of the future phase(s) would be positioned to retain clusters of healthy, existing trees. This approach would give the site development an immediate sense of scale and would provide shade for residents and visitors. The goal would be to add replacement trees at a rate of approximately four-to-one, which would help to strengthen the landscape design, highlight pedestrian corridors and provide future shade and comfort throughout the open spaces.

**General Access and Circulation:** Vehicular access would be provided from Linden Street, Blaine Street, and Watkins Drive.

As depicted in **Figure 5**, multi-modal routes would be provided to encourage walking and riding to and from the campus with the intent of creating a pedestrian friendly experience for students, staff, and visitors to the North District. Additional pedestrian walks, plazas, and bicycle routes would be developed under the NDD Plan. Bike lanes shall be included on all major streets. Bike parking would be provided throughout the NDD Plan area. Secure bike parking would be included inside the buildings as well as in outdoor, secure parking facilities. These would be provided at a rate of one stall per four residents. Temporary and visitor parking would be provided at all residential buildings, the NCAA field, and the dining facility at a rate of 2.5 percent of the maximum occupancy, with a minimum of four spaces per building.

**Service Access:** The Plan's network of pedestrian walks would be sized and designed to allow for service access along the main multi-modal pathways throughout the site. Convenient pick-up locations for each housing area along the service routes would facilitate trash and recycling storage at residential buildings with. The new dining facility would include loading and service area for food delivery and substantial trash and recycling collection.

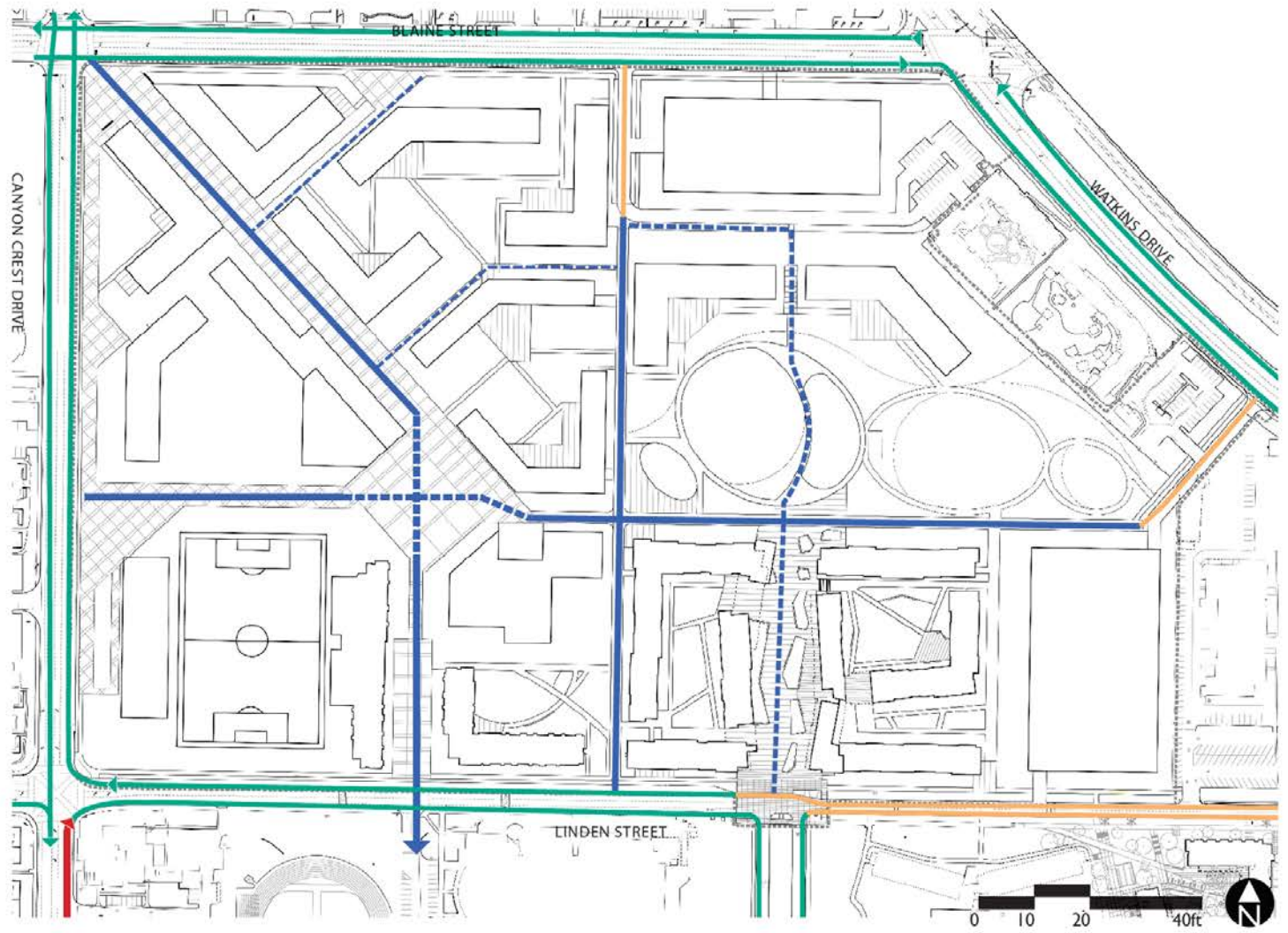
**Emergency Access:** The NDD Plan would be designed to allow for direct emergency access to all buildings. Access would be provided on the surrounding streets as well as on the multi-modal malls throughout the development site. The design of these paths would meet the requirements for emergency vehicles, including the 22,000 pounds per square inch (psi) loading and access to building facades. Pedestrian egress routes have also been established to provide safe and direct routes for evacuation of the site during emergencies.

#### **Utilities:**

*Water:* Riverside Public Utilities (RPU) currently provides water to the Campus. Combined 12-inch fire and water lines would be installed throughout the NDD Plan area to serve future buildings. Tie-in points

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rating (less than 3), low-moderate aesthetic rating (less than 3), California invasive tree species, trees that are short lived and/or brittle, trees that are dead or dying.



SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 5

North District Development Plan - Multi-Modal Routes



to the existing public 14-inch public water line would be installed at the intersections of Linden Street and the recreational mall and Linden Street and Aberdeen Drive. As shown in **Table 3**, peak domestic water demand under Phase 1 would be about 940 gallons per minute (GPM) and at NDD Plan buildout would be approximately 3,340 GPM.

**Table 3**  
**Water and Wastewater Projections**

Utility Type	Phase 1 (GPM) <sup>a</sup>	Future Phase (GPM)	NDD Plan Total (GPM)
Peak Domestic Water Demand	940	2400	3,340
Wastewater Generation	940	2400	3,340
<i>Source: UCR Facilities, May 2018</i>			

*Wastewater:* Sanitary sewer lines would be installed to serve the proposed buildings. Three tie-in points would be installed at Linden Street and Aberdeen Drive, Linden Street nearby the recreational mall, and at Canyon Crest Drive. Development under the NDD Plan would upsize 800 feet of the existing City sewer line located within Canyon Crest Drive, north of Linden Street, from 8 inches to 15 inches.

*Stormwater:* The NDD Plan area would be separated into seven drainage areas (Drainage Areas A through G). Stormwater flow would be directed towards proposed detention and treatment areas within each drainage area.

*Electricity and Natural Gas:* The RPU currently provides electricity to the campus. Natural gas is provided to the campus by the Southern California Gas Company (SCGC). The Campus plans to size the new utility infrastructure to accommodate the future development in the NDD Plan area.

**Sustainable Design Features:** The approach to sustainable project master planning would be as follows:

*Physical and Environmental Design*

- The NDD Plan will minimize site disturbance by locating the development on land that is previously developed (the site currently houses the Canyon Crest Family Student Housing complex) and by preserving as many Tier 1 and Tier 2 trees as possible, focusing on larger clusters of those trees. New trees that are adaptive to the local environment would be added at a rate of approximately 4:1.

- The NDD Plan attempts to replicate natural site hydrology processes, to manage 85th percentile rainfall event rainwater runoff onsite using low-impact development strategies.
- Using a combination of existing and new shading trees, planting areas, and high albedo paving and roofing materials, the NDD Plan reduces the urban heat island effect resulting from roof and paved non-roof site surfaces.
- To increase night sky access, improve nighttime visibility, and reduce the consequences of development for the campus wildlife and off-campus neighbors, the NDD Plan will be designed to minimize light pollution by limiting uplight and light trespass beyond the Plan area, using the International Dark Sky Association's (IES/IDA) Model Lighting Ordinance light fixture selection criteria.
- To manage solid waste, the project will provide convenient locations for the collection of waste, recycling, and composting throughout the development and will recycle, reuse, or salvage at least 50 percent of nonhazardous demolition and construction debris.

#### *Organization/Building Form and Orientation*

- Each building will be configured for the best use of space and solar orientation possible within the overall masterplan concept. Design features would incorporate passive solar design to minimize heat gain and glare on south facing windows. All south, west, or southwest facing windows would be recessed by two feet from the rest of the building with an external overhang at the top floor, whereas north facing windows would be flush with the building's exterior to allow for slightly larger units.
- The NDD Plan will promote livability, walkability, and transportation efficiency, by being a compact development with a 33 dwelling units per acre residential density.

#### *Landscape and Irrigation Systems/Materials*

- Outside of the athletics event center, outdoor water use would be reduced by prioritizing the planting of native/adaptive and drought tolerant plant species, with sub-surface irrigation to reduce maintenance, runoff, and fertilizer and pesticide applications. Outdoor water use will comply with the state of California Model Water Efficient Landscape Ordinance. The Ordinance seeks to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater reuse (optional), onsite storm water capture (optional), and by limiting the portion of landscapes that can be covered in turf.

- The proposed design of the NDD Plan would provide tree-lined blocks and shaded sidewalks to encourage walking, skating, and bicycling. These strategies also help reduce urban heat island effects, improve air quality, increase evapotranspiration, and reduce cooling loads in buildings.

### *Mobility Systems*

- North District is located on an existing bicycle network, with existing bike paths and lanes on Watkins Drive, Blaine Street, and Canyon Crest Drive. The Plan will provide long-term bicycle storage for at least 30 percent of all regular building occupants, according to the LEED rating system requirements, which exceeds the campus existing requirements of 25 percent (Appendix B of the RFP). The Plan will also provide short-term bicycle storage for at least 2.5 percent of all peak visitors to the North District.
- North District is also located on an existing quality public transit network that serves to reduce the number of vehicle miles travelled significantly for the future residents of the development.
- The NDD Plan will provide safe, appealing, and comfortable street environments (walkable streets) that encourage the existing patterns of walking, biking, and skate-boarding on campus to continue onto the North District.

**Plan Phasing:** The construction under the NDD Plan would occur from 2019 through 2024/5. Construction would occur in phases with Phase 1 providing about 1,500 beds and occurring from 2019 to 2021. The phasing of the remainder of the NDD Plan development is uncertain at this time and may occur in one or more phases. The entire development program is expected to be completed by 2024/5.

**Population:** As a residential project, development under the NDD Plan is intended to meet the needs of projected campus enrollment and would not, of itself, increase the enrollment at UC Riverside. The NDD Plan would add an additional approximately 5,258 on-campus beds for students, and compared to existing conditions, about 5,100 students would live on campus rather than seeking housing in the City of Riverside and other communities. The NDD Plan would add approximately 70 staff to the campus.

### **Phase 1**

Phase 1 would be the first development completed within the NDD Plan. As described in **Table 4**, Phase 1 proposes to construct on-campus student apartments, living and learning spaces, resident life amenity spaces, two surface parking lots, and reconfigure two small adjacent parking lots that serve the existing UC Riverside Child Development Center (**Figure 6, North District Development Plan - Phase 1 Site Plan**).

TOTAL PHASE 1 AREA  
- 19.40 AR



© 2011

SOURCE: Soloman Cordwell Buenz, 2017

FIGURE 6

**Table 4**  
**Phase 1 Building Program**

<b>Program Element</b>	<b>No. of Units</b>	<b>No. of Beds</b>	<b>Sq Ft /Unit</b>	<b>Building Space (gross square feet)</b>
4 Bedroom / 2 Bathroom Apartment	264	1,044	975	255,000
2 Bedroom / 2 Bathroom Apartment (Double)	106	424	864	91,584
Single Occupied Unit (RA Unit)	20	20	483	9,660
2 Bedroom / 2 Bathroom Apartment (RD)	2	4	864	1,728
1 Bedroom / 1 Bathroom Apartment (ARD)	8	8	483	3,864
<b>Total Program</b>	<b>400</b>	<b>1,500</b>	<b>911</b>	<b>361,836</b>
Residential Floor Amenity / Support Spaces				7,846
Circulation, Mechanical, & Structure				147,958
Living, Learning, Community & Administration				10,704
Support & Maintenance				5,177
Surface Parking				775 spaces
<b>Total Square Footage</b>				<b>533,521</b>
<b>PROJECT TOTALS</b>	<b>400</b>	<b>1,500</b>		<b>533,521</b>

**Student Apartment Buildings:** Student apartments would be located in four buildings, Buildings A through D. Buildings A and B would be 5 to 6 stories in height and Buildings C and D would be 4 to 5 stories high. Each set of buildings, A-B and C-D, would have a general public entrance as well as separate resident entrances.

**Landscaping:** New tree plantings are proposed throughout the site to highlight main walkways and provide canopy in courtyard spaces. About 105 existing trees would remain on the proposed Phase 1 project site (1st and 2nd tier trees and palm trees) and up to 140 proposed trees would be planted. All tier three trees would be removed to eliminate those that are unhealthy and are invasive. Landscaping would consist of climate adaptive planting.

**Parking:** Phase 1 of the proposed project would include four surface parking lots for students, faculty, visitors, and the UC Riverside Child Development Center (see **Table 5**).

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**Table 5**  
**Proposed Surface Parking**

Parking Location	Number of Spaces
Northern Lot	451
Southeastern Lot	324
North Childcare Lot	38
South Childcare Lot	31
<b>Total</b>	<b>844</b>

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**General Access and Circulation:** Vehicular access to Phase 1 of the project site would be from the south along Linden Street, from the north along Blaine Street, or from the East via Watkins Drive.

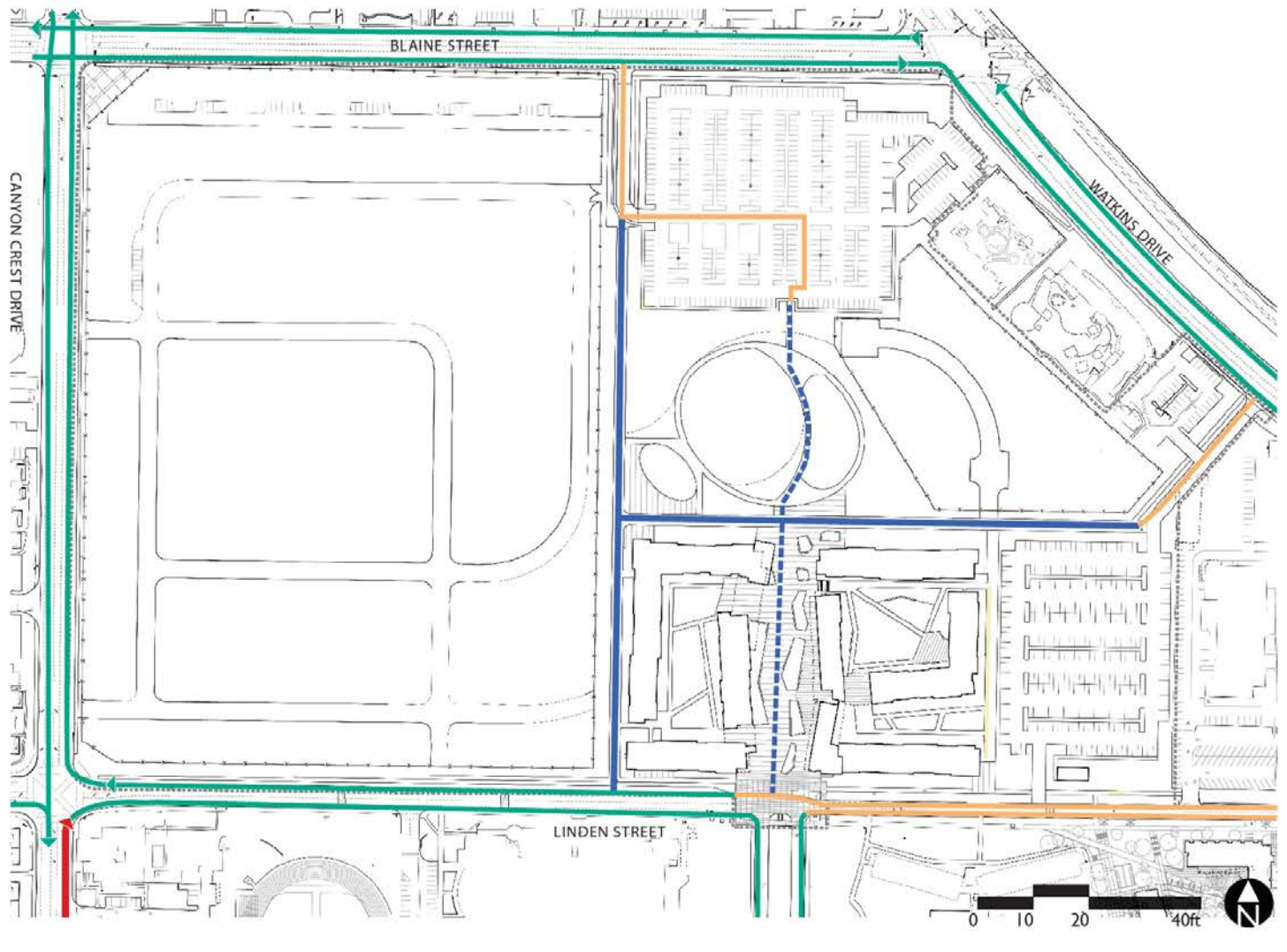
As shown in **Figure 7**, multi-modal routes would be provided to encourage walking and biking to and from the campus with the intent of creating a pedestrian friendly experience for students, staff, and visitors to the project site. Bike lanes would exist on all streets and bike routes include the following classifications: Class 1, 8-foot wide separated or buffered bike lanes; Class 2, 5 to 6-foot striped lanes on streets; Class 3 shared walkways; and Class 4 shared streets with sharrow markings.<sup>2</sup> The Phase 1 project site would have 42 secured indoor bicycle parking space, 345 outdoor secured bicycle parking spaces, and 32 outdoor temporary bicycle parking spaces.

**Service Access:** Service access would be provided via the north south road that transects the project site and from Watkins Avenue to the north south road. The project site's network of pedestrian walks would be sized and designed to allow for service access along the main multi-modal pathways and residential buildings would facilitate trash and recycling storage with convenient pick up locations for each housing area located along the primary service routes.

**Emergency Access:** In Phase 1, the design concept would establish all future emergency access routes, giving responders full access to all buildings and to the undeveloped portions of the site. Emergency access would be provided via Blaine Street, Watkins Avenue, Linden Street, and Canyon Crest Drive. On the project site, emergency vehicles would travel down the north-south road that transects the project site and around the proposed apartment buildings. Where initial buildings would be developed, pedestrian egress routes would also be established to provide safe and direct routes for evacuation of the site during emergencies.

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<sup>2</sup> *Sharrows are shared lanes for motorist and bicyclists.*



SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 7

## **Utilities:**

*Water:* Existing water lines are located within Blaine Street, Canyon Crest Drive, and Linden Street. A combined 12-inch domestic water and fire line is proposed between the grouped apartment buildings and would connect to existing water line in Linden Street at Aberdeen Drive (tie-in point to public water line). Peak domestic water demand under Phase 1 is estimated at 940 gallons per minute.

*Wastewater:* Existing 8-inch sanitary sewer lines are located in Canyon Crest Drive and Linden Street. There are two existing 8-inch sanitary sewer lines in Linden Street; one that serves the vacant Canyon Crest Family Student Housing complex and one that serves the corporation yard located adjacent to the east of the project site. Phase 1 of the proposed project would install sanitary sewer lines that serve each apartment building and would connect to the existing sanitary sewer line in Linden Street at Aberdeen Drive (tie-in point). Phase 1 of the proposed project would also upsize 1,200 feet of the existing City sewer line located within Canyon Crest Drive, south of Linden Street, from 8 inches to 15 inches.

*Stormwater:* The Phase 1 project site is divided into five drainage areas (Drainage Areas A through E). Site drainage is designed for these five areas. Stormwater detention and treatment areas are proposed throughout each of the drainage areas near apartment buildings, surface parking lots, and the proposed park area. Detention and treatment areas would be composed of series of planters designed as gardens and swales that collect, slow, treat and infiltrate stormwater. Stormwater drainage from the Phase 1 project site would generally drain to the west.

**Sustainable Design Features:** The proposed Phase 1 site would be designed to meet all provisions of the University Policy on Sustainable Practices and consider the UC Carbon Neutrality Initiative by targeting Leadership in Energy and Environmental Design (LEED) certification at a Silver level for individual buildings using the framework of the LEED rating system, the project proposes sustainable development that minimizes energy and water use, employs low-impact development criteria, reduces resource consumption for construction and operation, and provides healthy and comfortable living and working spaces. Sustainable features included in Phase 1 would be the same as the sustainable features described above for the NDD Plan.

**Construction:** Phase 1 would demolish the existing Canyon Crest Family Student Housing. Site mobilization and preparation would occur from Spring 2019 to Summer/Fall 2019. Building construction, including surface parking lot construction, would commence in late Summer/early Fall 2019 and would be completed in Fall 2021. Landscaping activities and off-site repairs would occur in the Summer of 2020.

Construction workers would access the site via Blaine Street and Watkins Drive. Construction workers would park on the north parking area, which would also be used as a laydown area for construction of the proposed apartments. A construction trailer compound would be located adjacent to the northern border of the parking and laydown area. Construction workers would also park in an area west of the proposed apartments, which would also be used as a laydown area for construction of the apartments.



**Population:** The first phase of the proposed project would house approximately 1,500 students, which would include both undergraduate and graduate students.

### **Project Objectives:**

The objectives of the NND Plan are to:

- Support the Campus goal to house up to 50 percent of enrolled students on-campus and to guarantee on-campus housing to all freshman and transfer students;
- Enhance the student experience by integrating the principles of residential and academic life;
- Promote environmental and sustainability goals by reducing vehicular trips to and from the campus;
- Provide affordable on-campus student housing;
- Develop and operate approximately 4,000 to 6,000 beds of student housing for first year, second year, transfer, upper division undergraduate students and graduate students, along with adequate support spaces, multi-functional spaces, amenities and associated infrastructure while maximizing the building height and density of the entire project site;
- Provide an approximately 600-seat dining facility by delivery of the Future Phase of the project;
- Complete and open the student housing component of the first phase of approximately 1,500 beds by 2020;
- Complete and open the Athletics Event Center as soon as feasible;
- Establish a new iconic gateway to the Campus on the northwest corner of the project site;
- Provide adequate parking to support all phases of development through delivery of the Future Phase.

### **Discretionary approval authority and other public agencies whose approval is required:**

As the public entity principally responsible for approving or carrying out the proposed project, The Regents of the University of California (Regents) is the Lead Agency under CEQA. The Regents is responsible for complying with the California Environmental Quality Act and determining whether to approve the proposed project.

The South Coast Air Quality Management District (SCAQMD) would act as a responsible agency as any emergency generators included in the project would require a permit from the SCAQMD. There are no natural resources on or near the project site that could trigger the involvement of any trustee agencies.

### III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agricultural and Forest Resources      | <input checked="" type="checkbox"/> Air Quality                   |
| <input type="checkbox"/> Biological Resources                          | <input type="checkbox"/> Cultural Resources                     | <input type="checkbox"/> Geology and Soils                        |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions           | <input checked="" type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality              |
| <input checked="" type="checkbox"/> Land Use and Planning              | <input type="checkbox"/> Mineral Resources                      | <input checked="" type="checkbox"/> Noise                         |
| <input checked="" type="checkbox"/> Population and Housing             | <input checked="" type="checkbox"/> Public Services             | <input checked="" type="checkbox"/> Recreation                    |
| <input checked="" type="checkbox"/> Transportation/Traffic             | <input type="checkbox"/> Tribal Cultural Resources              | <input checked="" type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance |   |   |

#### IV. DETERMINATION

On the basis of the initial evaluation that follows:

- I find that the proposed project WOULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made that would avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

  
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Tricia D. Thrasher, ASLA, LEED AP,  
Principal Environmental Planner

## V. EVALUATION OF ENVIRONMENTAL IMPACTS

As previously noted, the Campus has determined that the NDD Plan is not within the scope of the amended 2005 LRDP and the associated 2005 LRDP EIR and Amendment 2 EIR. Therefore, the analysis in this Initial Study is not tiered from the two program EIRs that address campus development under the amended LRDP. However, this Initial Study utilizes the information in the two EIRs to characterize existing conditions, as appropriate. The 2005 LRDP EIR and the LRDP Amendment 2 EIR are incorporated by reference into this Initial Study.

Although the NDD Plan is not within the scope of the amended 2005 LRDP, UC Riverside has determined that the 2005 LRDP Planning Strategies (PS) and Planning Principles (PP) that have been incorporated into projects proposed under the 2005 LRDP are important to the Campus and will be incorporated into all development under the NDD Plan.<sup>3</sup> The analysis in this Initial Study references applicable Planning Strategies and Planning Principles.

Appendix G of the *State CEQA Guidelines* provides a suggested format to use when preparing an Initial Study. The Environmental Checklist used in this document adopts a slightly different format with respect to response column headings, while still addressing the Appendix G checklist questions for each environmental issue area.

The following Environmental Checklist uses the following response headings to identify potential environmental effects that will be addressed in the NDD Plan EIR:

**Impact to be Analyzed in the EIR:** This category includes those impacts that may or may not be significant. The effect may be a less than significant impact that will be addressed to provide a more comprehensive analysis; an impact for which further analysis is necessary or desirable before a determination about significance can be made; an impact that is potentially significant but may be reduced to a less than significant level with the adoption of mitigation measures, or an impact that may be significant and unavoidable.

**No Additional Analysis Required:** This category includes those impacts where the project would clearly not result in an impact or would clearly result in a less than significant impact under CEQA criteria, and no additional analysis beyond that provided in the Initial Study is necessary.

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<sup>3</sup> Copies of the 2005 LRDP Planning Strategies (PS) and Planning Principles (PP) and mitigation measures (MM) are included in Appendix A to this Initial Study.

**Impact Questions and Responses**

<b>5.1 AESTHETICS</b>	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION:**

- a. A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. In the vicinity of the UC Riverside campus, the Box Spring Mountains are the most prominent visual feature from many locations, and sweeping panoramic views of the Box Springs Mountains were considered a scenic vista. Although panoramic views of the Box Springs Mountains are available in the vicinity of the campus, no specific objects, scenes, settings, or features of interest are visible within that portion of the Box Springs Mountains adjacent to the campus. No specific focal views of the Box Springs Mountains were identified by the Campus in the 2005 LRDP EIR, and scenic vistas were considered to be limited to panoramic views of the Box Springs Mountains from publicly accessible viewpoints. Implementation of the NDD Plan, including the Phase 1 project, could have an adverse effect on a scenic vista. The EIR will include an evaluation of the proposed project’s impacts with regard to scenic vistas.
  
- b. The campus is bisected by the I-215/SR-60 freeway, and is generally bounded by University Avenue, Canyon Crest Drive, Blaine Street, Watkins Drive, Valencia Hill Drive, Le Conte Drive, and Chicago Avenue. None of these roadways is officially designated or identified as eligible for designation as a state scenic highway. Therefore, implementation of the NDD Plan, including the Phase 1 project, would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, and no impact would occur. No further analysis of this issue is required in the EIR.
  
- c. The East Campus under existing conditions is primarily developed with academic and support buildings, student residences, landscaping, roadways, and parking areas. The 2005 LRDP EIR indicated that the introduction of new academic and residential structures on large parcels has the potential to degrade the visual character and quality of the campus. Implementation of future development on the campus would be guided by a range of LRDP planning strategies, including Land Use 1 through 3, Open Space 1 through 7, Conservation 1 through 4, Campus and Community 1, and Development Strategy 1 through 3, all of which would preserve or enhance the visual character and quality of the campus. In addition, future development on the campus would continue existing campus programs and practices, such as PP 4.1-1 and PP 4.1-2(a) and (b),

which would require that buildings be designed to be consistent with the Campus Design Guidelines and that mature trees be relocated, whenever feasible. It is anticipated that development under the NDD Plan, including the Phase 1 project, would also implement the LRDP planning strategies and existing campus programs and practices mentioned above and would not substantially degrade the existing visual character or quality of the site and its surroundings, and this impact would be less than significant. However, in order to provide complete information and discussion of this topic, further analysis of this issue will be included in the EIR.

- d. Although there are some sources of light and glare currently on the project site, implementation of the NDD Plan, including the Phase 1 project, would result in the construction of a large number of new substantially taller buildings with increased sources of light and/or glare. The NDD Plan EIR, which includes analysis of the Phase 1 project, will review new sources of light and glare to evaluate the potential impacts on day or nighttime views in the area.

#### **CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not substantially damage scenic resources; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

All other potential cumulative aesthetic impacts for all other topics will be addressed in the NDD Plan EIR.

<b>5.2 AGRICULTURAL AND FORESTRY RESOURCES</b>	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a. As shown in Figure 4.2-1 of the 2005 LRDP EIR (Farmland on the UC Riverside Campus), development within the NDD Plan area, including the Phase 1 project site, would not be within an area designated as Farmland. Implementation of the NDD Plan, including the Phase 1 project, would not result in the loss of Farmland, and there would be no impact. Further evaluation in the NDD Plan EIR is not required.
- b. Lands affected by proposed development under the NDD Plan, including the Phase 1 project, are not zoned for agricultural use or under a Williamson contract. Therefore, no impacts would occur and further evaluation in the NDD Plan EIR is not required.
- c. There are no areas within the NDD Plan area, including the Phase 1 project site, that are zoned as forestland or timberland. No impact would occur and further evaluation in the NDD Plan EIR is not required.
- d. No part of the NDD Plan area, including the Phase 1 project site, contains forest lands. Furthermore, the surrounding area does not include any forest land or timber land. No impact would occur and further evaluation in the NDD Plan EIR is not required.
- e. The lands surrounding the NDD Plan area, including the Phase 1 project site, are campus lands and not zoned for agricultural use. In addition, the NDD Plan, including the Phase 1 project, would neither construct any uses sensitive to agricultural noise or activities nor construct any uses that would conflict with agricultural practices. Therefore, the NDD Plan, including the Phase 1 project, would not create land use conflicts with adjacent agricultural lands that could result in the abandonment of agricultural uses or cause the lands to convert to non-agricultural uses. Therefore, no impact would occur and further evaluation in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

The NDD Plan, including the Phase 1 project site, would not convert Prime Farmland to non-agricultural uses. Additionally, the NDD Plan and the Phase 1 project site would not result in an impact on forest land, timberland, lands under Williamson Act contract, and would not result in conversion of farmland to non-agricultural uses. Further analysis of cumulative impacts in the NDD Plan EIR is not required.



<b>5.3 AIR QUALITY<sup>4</sup></b>		
Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a. Implementation of the proposed NDD Plan would result in short- and long-term emissions of criteria air pollutants from mobile and stationary sources. These emissions would contribute to the non-attainment status of the South Coast Air Basin for ozone and airborne particulate matter. The NDD Plan EIR will analyze whether implementation of the NDD Plan would conflict with or obstruct implementation of applicable air quality plans. The NDD Plan EIR will also contain analyses of project-specific impacts associated with the Phase 1 project.
- b. New vehicle trips generated by development under the NDD Plan, including the Phase 1 project, and construction activities could increase pollutant levels, and could contribute to a violation of an air quality standard. Emergency generators installed as part of the project could also emit pollutants. The NDD Plan EIR will examine the potential for vehicle and stationary source emissions under the NDD Plan (including emissions associated with the Phase 1 project) to violate state and federal air quality standards or to contribute to existing air quality violations. This issue will be further evaluated in the NDD Plan EIR.
- c. Construction and operation of development planned under the NDD Plan, including the Phase 1 project, would generate air pollutants that could be considerable in a regional, cumulative

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<sup>4</sup> In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)* ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the *CBIA v. BAAQMD* ruling, the project would have a significant impact related to exposure of project residents and structures to hazards related to geology and soils only if the project would exacerbate existing conditions.

context. The EIR will include an evaluation of the air quality impacts that could result from implementation of the NDD Plan (including emissions associated with the Phase 1 project) and from other foreseeable projects in the region to determine whether increases in non-attainment criteria pollutants would be cumulatively considerable. This issue will be further evaluated in the NDD Plan EIR.

- d. Sensitive receptors, considered to be places where children, the elderly, and other sensitive people are located, are more susceptible to the effects of air pollution than the general population. Nearby toxic air contaminants (TAC) and carbon monoxide (CO) pollution can impact sensitive receptors. Sensitive receptors on campus include child care centers, staff/faculty housing, and recreational areas. Implementation of the NDD Plan would result in increased construction, traffic, and operations, which would increase emissions of pollutants, including carbon monoxide, TACs, dust, and ozone precursors. The NDD Plan EIR will include a detailed analysis of increased pollutant emissions under the NDD Plan (including emissions associated with the Phase 1 project) and potential effects on sensitive receptors.
- e. Construction of projects within the NDD Plan area, including the Phase 1 project, would require the use of diesel-fueled equipment and architectural coatings, both of which have an associated odor. However, these odors would be short-term and temporary and would not be pervasive enough to affect a substantial number of people nor would they be objectionable. Routine operation of development under the NDD Plan, including the Phase 1 project, would not involve activities that typically produce odors such as research facilities, wastewater treatment, manufacturing, and agriculture. Occasional use of maintenance products could produce localized odors, but they would be temporary and limited in area. Additionally, there could be airborne odors resulting from cooking activities associated with new dining facilities and odors from new trash receptacles. However, these odors would not be pervasive enough to cause objectionable odors affecting a substantial number of people. Consequently, short-term construction and long-term operation from implementation of the NDD Plan, including the Phase 1 project, would not create objectionable odors that could affect a substantial number of persons, nor expose project site occupants to substantial odors, and the impact would be less than significant. Further evaluation in the NDD Plan EIR is not required.

#### **CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not create objectionable odors that could affect a substantial number of persons, nor expose project site occupants to substantial odors; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

All other potential cumulative air quality impacts for all other topics will be addressed in the NDD Plan EIR.

## 5.4 BIOLOGICAL RESOURCES

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### DISCUSSION:

- a. The NDD Plan area, including the Phase 1 project, is a disturbed site that has been previously developed with the existing Canyon Crest Family Student Housing complex. According to Figure 4.4-1 from the 2005 LRDP EIR, the NDD Plan area, including the Phase 1 project, is not identified as within an area containing sensitive biological resources. Therefore, the proposed development within the NDD Plan area, including construction of the Phase 1 project, would have no impact on special-status species. Further evaluation in the NDD Plan EIR is not required.
- b. Riparian habitat, including designated California gnatcatcher critical habitat, exists on the campus. However, the NDD Plan area, which includes the Phase 1 project site, is not located within a riparian zone or within gnatcatcher critical habitat. Implementation of the NDD Plan, including the Phase 1 project, would have no impact on a sensitive natural community. Further evaluation in the NDD Plan EIR is not required.

- c. Although there are federally protected seasonal wetlands or jurisdictional waters of the United States on the UC Riverside campus, there are none within the NDD Plan area. Therefore, implementation of the NDD Plan, including the Phase 1 project, would not affect any federally protected seasonal wetlands or jurisdictional wetlands. Further evaluation in the NDD Plan EIR is not required.
- d. The NDD Plan area, which includes the Phase 1 project site, is previously disturbed land and is surrounded by urban land uses on all sides. Therefore, the site does not serve as a wildlife corridor.

The existing trees within the NDD Plan area provide important character and environmental benefits, including shade, and have been a cherished part of the Canyon Crest Family Student Housing community. Per the tree survey and arborist evaluation, two tiers of trees would be considered for preservation. Of the 681 trees in the site inventory, 46 shrubs, 132 invasive specimens (for example pepper trees) and six short-lived specimens would be removed. Of the remaining 497 trees, 110 trees are first tier and 56 are second tier (see above for definition of tiers). The remaining are third tier trees, which would be removed in the Phase 1 project. Removal of trees could impact nesting birds. **Mitigation Measures BIO-1** and **BIO-2** described below would be implemented to reduce any potential impact on nesting bird species to a less than significant level. Furthermore, the NDD Plan would protect valuable existing trees based on the tree locations and qualities. The arrangement of buildings on the NDD Plan site would be positioned to retain clusters of healthy, existing trees when possible. Replacement trees would be planted within the Plan area at a rate of approximately four-to-one, which would help to strengthen the landscape design, highlight pedestrian corridors, and provide future shade and comfort throughout the open spaces. During construction, tree protection zones would be placed at or beyond the dripline of trees wherever possible. Any construction work within the tree protection zone would be done by hand and using methods to ensure the safety of the trees to remain. Further evaluation in the NDD Plan EIR is not required.

Phase 1 would retain many existing trees in the northern segment of the site that would serve as a surface parking lot. Throughout the site, new tree plantings are proposed to highlight main walkways and provide canopy in the park and courtyard spaces. Approximately 105 existing trees would remain on the Phase 1 project site (1st and 2nd tier trees and palm trees) and up to 140 new trees would be planted. The 28 fan palms (*Washingtonia robusta*), primarily planted along Linden Street to mark a historic farm access drive, have been noted as iconic heritage trees by UC Riverside and would be protected within Linden Street improvements. In Phase 1, all tier 3 trees would be removed to eliminate those that are unhealthy and are invasive. Removal of trees could impact nesting birds. Similar to the NDD Plan analysis, **Mitigation Measures BIO-1** and **BIO-2** would be implemented to reduce any potential impact on nesting bird species to a less than significant level.

## **Mitigation Measures:**

### **Mitigation Measure BIO-1**

Prior to the onset of construction activities that would result in the removal of mature trees and would occur between March and mid-August, surveys for nesting special-status avian

species and raptors shall be conducted following the California Department of Fish and Wildlife (CDFW) guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.

#### **Mitigation Measure BIO-2**

If active nests of special-status avian species or raptors are found within the construction footprint or within 250 feet of the construction site, exterior construction activities shall be delayed until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFW.

- e. Pursuant to the University of California's constitutional autonomy, development and uses on property owned or controlled by the University that are in furtherance of the University's educational purposes are not subject to local land use regulation, including County and City General Plans or local ordinances for the protection of biological resources. Nevertheless, because of the developed condition of NDD Plan site, which includes the Phase 1 site, implementation of the NDD Plan, including the Phase 1 project, would not conflict with any policies for the protection of biological resources. Therefore, no impacts would occur and no further evaluation in the EIR is required.
- f. A Multiple Species Habitat Conservation Plan (MSHCP) was approved and adopted by Riverside County in 2003 as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) and Natural Communities Conservation Plan (NCCP) focusing on conservation of both species and habitats to address biological ecological diversity conservation needs in western Riverside County. A portion of the campus is included in the MSHCP but is not identified for conservation. The NDD Plan area, which includes the Phase 1 project site, is not within the portion of the campus that is included in the MSHCP. There would be no impact with respect to this criterion and no further evaluation in the NDD Plan EIR is required.

#### **CUMULATIVE IMPACTS:**

As discussed above, implementation of the NDD Plan, including the Phase 1 project, would not result in any impacts on special-status species or a natural community, it would not contribute to any cumulative impacts to special-status species and natural communities in the County. No further evaluation in the NDD Plan EIR is required. The NDD Plan would also not affect wildlife movement and therefore would not contribute to a cumulative impact on wildlife movement. The NDD Plan would have the potential to affect nesting birds. However, with the implementation of the mitigation measures set forth above, the project's impact would be rendered less than significant and its contribution to the cumulative impact on nesting birds would not be considerable. No further evaluation in the NDD Plan EIR is required.

<b>5.5 CULTURAL RESOURCES</b>		Impact to be Analyzed in the EIR	No Additional Analysis Required
<b>Would the project...</b>			
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a) Two historic resource evaluations have been completed for the NDD Plan project site, including a Phase I Cultural Resources Assessment prepared by Psomas in March 2017, and a Historic Resource Evaluation Report for the Canyon Crest Family Housing Complex University of California – Riverside, Riverside County, CA by Daly & Associates in March 2017, both documents are included in Appendix C of this Initial Study.

The Canyon Crest Family Student Housing (CCFSH) complex, historically known as the Canyon Crest Housing complex, was constructed outside of the city limits of Riverside, by the U.S. Army Corps of Engineers in 1940-1941 in conjunction with the building of Camp Haan, just to the south in the Moreno Valley. Camp Haan was built as a preemptive measure to bolster defensive forces on the West Coast due to concerns of armed invasion by Japan. The residential housing complex was constructed for personnel of both Camp Haan and March Air Field. It was quickly occupied by military personnel and their families, but within just a year, the U.S. Army passed control of the property to the Federal Public Housing Authority. They, in turn with legislation passed in 1937 for the creation of public housing, assisted Riverside County in creating their own public housing authority and taking over responsibility for the management of the CCFSH complex. Housing Authority of the County of Riverside (HACR) managed the property day-to-day, and instituted social programs and activities that included a nursery school operated under the auspices of the Riverside City School District. HACR managed the property until 1954 when it was sold by an act of Congress to UC Riverside.

Under the criterion for evaluating the CCFSH complex for listing in the National Register or California Register for its association with events that have made a significant contribution to the broad patterns of history in the cultural heritage of Riverside County, California or the United States, the complex does not appear eligible for listing as a historical resource. The subject property was not found to have been directly associated with the military activities undertaken to protect the West Coast from an attack from Japan, or with the actual wartime training activities of March Air Field or Camp Haan. The CCFSH complex was located away from the military bases so that the residents could take advantage of the shopping, social, and educational resources available in the City of Riverside, which were severely lacking in the Moreno Valley area. The CCFSH complex merely played a supporting role in the war effort by providing housing for persons associated with the military bases. The CCFSH complex does not appear to meet the guidelines for listing in the California Register under Criterion 1 as a historical resource significant in the history of the region. The property does not appear to present the qualities

important to the nationwide history of “home front” activities of World War II, which would make the property eligible for listing in the National Register under Criterion A.

Under the criterion for evaluating properties for listing in the National Register or California Register for their association with the lives of persons important to the history of Riverside County, California, or the United States, the Canyon Crest Family Student Housing complex property does not appear eligible for listing in the National Register under Criterion B, or the California Register under Criterion 2. There is no evidence found that individuals or tenants associated with the property were persons identified as having a direct effect to history of the region, state, or nation.

Per the criterion for evaluating built-environment structures, it is apparent that the individual buildings of Canyon Crest Family Student Housing complex, and the complex as a whole, have not retained sufficient levels of integrity necessary to present the structural characteristics and features required to be a strong representative of a housing complex constructed by the U.S. Army Corps of Engineers in the days leading up to the entrance of the United States into World War II. The individual units were designed using a Minimalist and modest style of architecture that could be constructed as quickly and inexpensively as possible, even though it was to be a permanent residential community. Alterations made later to the individual units when owned by UC Riverside, substantially changed the residential units appearance by removing the original windows, changing the type of roof on the majority of the units, and adding decorative clapboard elements to the exterior facades where none had previously been placed. The property does not appear eligible for listing in the California Register under Criterion 3, or in the National Register under Criterion C, as an example of a World War II-era housing complex. The CCFSH complex has not retained the aspects of physical integrity that include design, setting, materials, workmanship, and feeling, that are required to be present to convey a properties historic significance.

The CCFSH complex has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, California or the nation. The property does not appear eligible for listing in the National Register under Criterion D, or the California Register under Criterion 4. Therefore, the Canyon Crest Family Student Housing complex is not eligible for inclusion on the CRHR or NRHP. Demolition of the buildings on the Canyon Crest Family Student Housing complex and construction under the NDD Plan, including the Phase 1 project, would not significantly impact historical resources. No further evaluation in the NDD Plan EIR is required.

- b-d)** The Eastern Information Center (EIC), located at UC Riverside, conducted a cultural resources records search and literature review for the NDD Plan site, which includes the Phase 1 project site, on February 2, 2017. The EIC is a designated branch of the California Historical Resources Information System and houses records regarding archaeological and historic resources in Riverside, Inyo, and Mono Counties. The review consisted of an examination of the U.S. Geological Survey’s (USGS’) Riverside East 7.5-minute quadrangle maps to determine if any sites are recorded on or if any cultural resources studies have been conducted on or within a one-mile radius of the study area. Data sources consulted at the EIC included archaeological records, Archaeological Determinations of Eligibility (DOE), historic maps, and the Historic Property Data File (HPDF) maintained by the Office of Historic Preservation (OHP). The HPDF contains listings for the NRHP and/or CRHR, California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI).

While no evidence of prehistoric activity has been previously identified in the study area, nor was any evidence observed during the current survey, the NDD Plan site would be situated in an area traversed by Native American groups, as evidenced by sites located a short distance to the southwest. A field survey of the NDD Plan area, which includes the Phase 1 project site, was conducted on January 16, 2017. The field survey of the NDD Plan area did not result in the discovery of any archaeological resources. However, there is a potential to impact previously unknown archeological resources during earth-disturbing activities. In the case that an archaeological resource is discovered during construction, **Mitigation Measure CUL-1** below shall be implemented to reduce impacts to a less than significant level.

A paleontological records search was conducted at the Natural History Museum of Los Angeles County (NHMLAC) on January 5, 2017. The records search conducted at the NHMLAC indicated that the NDD Plan area, which includes the Phase 1 project site, was not sensitive for fossils at depths of less than ten feet. There is potential to impact previously unknown paleontological resources during earth-disturbing activities. However, LRDP PP 4.5-4 would continue to be implemented to reduce this impact to a less than significant level. Similarly, discovery of human remains could still occur during earth moving activities. With implementation of LRDP PP 4.5-5 would reduce the impact to human remains to a less than significant level.

### **Mitigation Measure:**

#### **Mitigation Measure CUL-1**

If an archaeological resource is discovered during construction, all soil-disturbing work within 100 feet of the find shall cease and the University Representative shall contact a qualified archaeologist meeting the Secretary of Interior standards within 24 hours of discovery to inspect the site. If a resource within the project area of potential effect is determined to qualify as a unique archaeological resource (as defined by CEQA), the University shall devote adequate time and funding to determine if it is feasible, through project design measures to preserve the find intact. If it cannot be preserved, the University shall retain a qualified non-University archaeologist to design and implement a treatment plan, prepare a report, and salvage the material, as appropriate. Any important artifacts recovered during monitoring shall be cleaned, catalogued, and analyzed, with the results presented in a report of finding that meets professional standards.

- a) If significant Native American cultural resources are discovered, as determined by the consulting archaeologist for which a Treatment Plan must be prepared, the developer, or his archaeologist shall immediately contact the University Representative. The University Representative shall contact the appropriate Tribal representatives.
- b) If requested by Tribal representatives, the University, the developer, or faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe).

### **CUMULATIVE IMPACTS:**

As discussed above, implementation of the NDD Plan, including the Phase 1 project, would not result in any impacts on historical resources. The NDD Plan would have the potential to affect archaeological resources, paleontological resources, and human remains. However, with implementation of LRDP PP 4.5-4 and 4.5-5, and **Mitigation Measure CUL-1** set forth above, the project's impact would be rendered less than significant and its contribution to the cumulative



impact on archaeological resources, paleontological resources, and human remains would not be considerable. No further evaluation in the NDD Plan EIR is required.

## 5.6 GEOLOGY and SOILS<sup>5</sup>

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>5</sup> In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)* ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the *CBIA v. BAAQMD* ruling, the project would have a significant impact related to exposure of project residents and structures to hazards related to geology and soils only if the project would exacerbate existing conditions.

## DISCUSSION:

- a.(i).** There are no active faults that cross the campus site and the campus site is not subject to significant seismic hazards (UCR 2005). Therefore, there are no faults that cross the NDD Plan area, which includes the Phase 1 project site. As a result there would be no risk of fault rupture. Implementation of the NDD Plan, including the Phase 1 project, would expose people and structures to potentially substantial adverse effects resulting from seismic ground shaking. However, it is anticipated that continued implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c) would ensure that the new buildings would be designed to be consistent with current seismic and geotechnical engineering practice to provide adequate safety levels, as defined in the California Code of Regulations and the University Policy on Seismic Safety. With implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c), this impact would be less than significant. No further analysis in the NDD Plan EIR is required.
- a.(ii).** The NDD Plan, which includes the Phase 1 project, would be implemented on the East Campus where soil erosion hazard mostly ranges from slight to moderate. Implementation of LRDP Planning Strategy Open Space 4, Planning Strategy Conservation 2, Planning Strategy Conservation 3, LRDP PP 4.6-2(a), and PP 4.6-2(b) would reduce the impact from substantial soil erosion or the loss of topsoil to a less than significant level. No septic tanks or alternative wastewater systems would be installed as part of development under the NDD Plan, which includes the Phase 1 project. No further analysis in the NDD Plan EIR is required.
- a.(iii).** Based on soils and depth to groundwater, the risk of liquefaction at the campus is low (UCR 2005). In addition, the risk of deep-seated landsliding is considered to be very low, even on natural slopes. In certain areas on the campus less dense strata and lenses of old alluvium are susceptible to collapse as well as the younger alluvium located near the University Arroyo. Fill material in many areas on the campus was deposited prior to the development of modern building codes. Therefore, the fill materials may exhibit great variability in their density and compressibility and may not be appropriate for the support of structures. In these instances the fill material would need to be recompacted or removed. The Riverside County Open Data geotechnical database maps the NDD Plan area, which includes the Phase 1 project, within a zone of low liquefaction hazard susceptibility (County of Riverside 2016). Furthermore, potential for liquefaction and liquefaction-related secondary effects to develop at the project site following a seismic event is negligible, due to deep groundwater conditions (Haley & Aldrich 2017). No impacts from project implementation would occur. No further analysis in the NDD Plan EIR is required.
- a.(iv).** The NDD Plan area, including the Phase 1 project site, and the surrounding area are characterized by relatively flat topography and therefore would not be subject to landslides. No impact would occur and no further analysis in the NDD Plan EIR is required.
- b.** Development under the NDD Plan, including the Phase 1 project, would be constructed on the East Campus where erosion hazard ranges from slight to moderate. Implementation of LRDP Planning Strategy Open Space 4, Planning Strategy Conservation 2, Planning Strategy Conservation 3, LRDP PP 4.6-2(a), and PP 4.6-2(b) would reduce the potential impact from substantial soil erosion or the loss of topsoil to a less than significant level. Further analysis in the NDD Plan EIR is not required.

- c. Issues related to seismically induced and non-seismic landslide hazards are discussed in the response to **Item (a)(iv)**, above. Issues related to liquefaction and related hazards are discussed in the response to **Item (a)(iii)**, above. Issues related to soil properties are discussed in the response to **Item (d)**, below. No further analysis in the NDD Plan EIR is required.
- d. Most of the soils on the campus have low to moderate shrink-swell characteristics, the potential for water uptake after rainfall to cause soils to expand and damage building foundations is considered low (UCR 2005). Soils on the East Campus generally have low shrink-swell potential. Development under the NDD Plan, including the Phase 1 project, would include the implementation of existing campus programs and practices, such as PP 4.6-1(a). In addition, the projects would be required to comply with applicable provisions of the CBC. Thus, development under the NDD Plan, including the Phase 1 project, would not result in structures being located on expansive soil, creating substantial risks to life or property, and this impact would be less than significant. No further analysis of this issue is required in the NDD Plan EIR.
- e. No septic tanks or alternative wastewater disposal systems are included in the proposed project, therefore no impact would occur. No further analysis in the NDD Plan EIR is required.

#### **CUMULATIVE IMPACTS:**

The impacts of the NDD Plan associated with exposing people and property to ground shaking effects, as well as the effects of soil characteristics associated with differential settlement, liquefaction, and unstable soils would not be significant. Therefore, the NDD Plan would not contribute to any significant cumulative impacts related to geology and soils. No further analysis in the NDD Plan EIR is required.

<b>5.7 GREENHOUSE GAS EMISSIONS</b>		
Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION:**

- a., b.** Development of facilities under the NDD Plan, including the Phase 1 project, would generate GHG emissions associated with construction, mobile, and area sources. Proposed development would incorporate sustainable design features. However, this impact is still considered potentially significant, and this issue will be further analyzed in the EIR. In addition, the NDD Plan EIR will evaluate the potential for development within the NDD Plan area, including the Phase 1 project, to conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

**CUMULATIVE IMPACTS:**

The impact of a project’s GHG emissions is essentially a cumulative effect. Potential GHG emissions impacts will be addressed in the NDD Plan EIR.

## 5.8 HAZARDS & HAZARDOUS MATERIALS<sup>6</sup>

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>6</sup> In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)* ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the *CBIA v. BAAQMD* ruling, the project would have a significant impact related to exposure of project residents to hazards only if the project would exacerbate existing conditions.

## DISCUSSION:

- a. Construction activities under the NDD Plan would involve the use of various products that could contain hazardous materials (such as solvents, adhesives, cements, paints, cleaning agents, degreasers, and fuels used in construction vehicles). Planned development under the NDD Plan would consist of student housing and support spaces, mixed-use student housing, dining facilities, and athletic facilities. Operation of these facilities would also involve hazardous materials, including general maintenance and landscaping. In addition, soil or groundwater contamination could be present at areas that could be developed under the NDD Plan. Development of contaminated sites could potentially expose campus occupants and construction workers to hazardous materials. The NDD Plan EIR will characterize hazardous materials transport, use, and disposal associated with the development under the Plan. The NDD Plan EIR will also identify potentially contaminated sites within the Plan area and will address potential impacts associated with development of contaminated sites.

The Phase 1 project analysis will evaluate the potential risks associated with hazardous materials and the potential for project site contamination.

- b. There are no existing or proposed public schools within one-quarter mile of the NDD Plan area, including the Phase 1 project site. However, the UC Riverside Child Development Center is located immediately adjacent to the NDD Plan area. Although the proposed NDD Plan development would handle hazardous materials and wastes, as described above, operations would comply with federal, State, and local regulations pertaining to hazardous wastes, as well as the procedures required by PP 4.7-1. Adherence to these regulations and policies, which require proper handling techniques, disposal practices, and/or clean-up procedures, would ensure that risks associated with hazardous emissions or materials to the UC Riverside Child Development Center would be eliminated or reduced. Therefore, implementation of NDD Plan would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, and this impact would be less than significant. However, in order to provide additional information and analysis, this impact will be further addressed in the NDD Plan EIR. Potential impacts related to toxic air emissions will be discussed in the NDD Plan EIR as part of the Air Quality analysis.
- d. The NDD Plan area, which includes the Phase 1 project, is not located on properties associated with a hazardous site listed under Government Code Section 65962.5, also known as the Cortese List (Envirostor 2018). As a result, development under the NDD Plan, including the Phase 1 project, would not create a significant hazard to the public or the environment and no impact would occur. Further analysis in the NDD Plan EIR is not required.
- e., f. The UC Riverside campus is not located within two miles of a public airport or public use airport, and is not included in an airport land use plan (UCR 2005). The closest airports to the UC Riverside campus are Flabob Airport, which is located approximately four miles to the west, and March Air Reserve Base, which is located approximately six miles to the southeast. Therefore, development under the NDD Plan, including the Phase 1 project, would not be located within two miles of a public airport or public use airport, and the Plan area is not included in an airport land use plan. No impact would occur. Further analysis in the NDD Plan EIR is not required.

- g.** The NDD Plan, including the Phase 1 project site, is not located within areas that are currently identified as emergency assembly areas (UCR 2016). However, development within the NDD Plan could result in lane or roadway closures which may impact adequate access for emergency vehicles. Therefore, development under the NDD Plan, including the Phase 1 project, may have the potential to physically interfere with the campus Emergency Action Plan (EAP). The NDD Plan EIR will characterize the campus' emergency response plans and capabilities, and it will assess the effects of development under the NDD Plan on the campus' ability to respond to emergencies. The NDD Plan EIR will also address the potential for the Phase 1 project to impair implementation of, or interfere with, the EAP.
- h.** The southeast hills may be susceptible to wildland fires. The NDD Plan area, which includes the Phase 1 project, is not located adjacent to the southeast hills that pose a high risk for wildland fires. Therefore, the proposed NDD Plan would not place people or structures at risk from wildland fires and there would be no impact. Further analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not locate development on or near hazardous material sites, within two miles of a public airport, public use airport, or private airship, and would not place people or structures at risk from wildland fires. Therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative hazard and hazardous materials impacts for all other topics will be addressed in the NDD Plan EIR.



<b>5.9 HYDROLOGY &amp; WATER QUALITY</b>		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a., f.** The facilities that would be developed under the NDD Plan, including the Phase 1 project, would be substantially similar to existing campus uses which would not contribute different types of storm water pollutants than those generated currently. Furthermore, development under the NDD Plan, including the Phase 1 project, would comply with the NPDES Phase I and Phase II requirements which would ensure that campus stormwater quality is not substantially degraded. Additionally, LRDP Planning Strategy Conservation 2 and PP 4.8-1 would be implemented to reduce impacts to water quality. Therefore, development under the NDD Plan, including the Phase 1 project, would have a less than significant impact on water quality. Further analysis in the NDD Plan EIR is not required.

- b. Development under the NDD Plan, including the Phase 1 project, would modestly decrease the amount of impervious areas and would therefore not interfere with groundwater recharge. The increase in occupied building space would increase demand for potable water that could indirectly increase demand for groundwater, as the campus is supplied domestic water by the City of Riverside, which utilizes groundwater wells for potable water. However, development under the NDD Plan would implement LRDP PP 4.8-2(a) through PP 4.8-2(c) to promote conservation measures that would reduce demand for potable water. In addition, LRDP Planning Strategy Conservation 5 would be implemented which requires compliance with Title 24 requirements, which includes the California Plumbing Code and its water conservation measures. Consequently, implementation of the NDD Plan, including the Phase 1 project, would not substantially deplete groundwater supplies, and the NDD Plan project would have a less than significant impact to groundwater supplies and groundwater recharge. Further analysis in the NDD Plan EIR is not required.
- c. Within the majority of the East Campus, soil erosion hazards range from slight to moderate. Construction activities under the NDD Plan, including the Phase 1 project, could result in erosion but the impact would be temporary. The National Pollution Discharge Elimination System (NPDES) permits require that planned projects within the NDD Plan, including the Phase 1 project, develop and implement a SWPPP, including control measures (or Best Management Practices) to control erosion and release of sediment and other pollutants from the NDD Plan area or Phase 1 project site. Furthermore, LRDP Planning Strategy Conservation 2, LRDP Planning Strategy Conservation 3, LRDP PP 4.8-3(c), PP 4.8-3(d), and PP 4.8-3(e) would be implemented as part of the development under the NDD Plan and the Phase 1 project. Therefore, development under the NDD Plan, including the Phase 1 project, would have a less than significant impact related to soil erosion. No further evaluation of impacts in the NDD Plan EIR is required.
- d., e. As described above, the NDD Plan would decrease the amount of impervious areas and the project would include stormwater detention features throughout which would increase percolation and reduce runoff. Therefore, runoff from the site would not increase compared to existing conditions and the NDD Plan would have a less than significant impact to surface runoff and flooding. Similarly, the Phase 1 project would decrease the amount of impervious areas, and runoff from the site would not increase compared to existing conditions. Therefore, the Phase 1 project would have a less than significant impact to surface runoff and flooding. No further evaluation in the NDD Plan EIR is required.
- g. The NDD Plan area, including the Phase 1 project site, is not within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. No impact would occur. No further evaluation in the NDD Plan EIR is required.
- h. As discussed above under **Item (g)**, the NDD Plan area, including the Phase 1 project site, is not within a 100-year flood hazard area. No impact would occur. No further evaluation in the NDD Plan EIR is required.
- i., j. The Prado Dam, the nearest dam to the campus, is located on the Santa Ana River downstream of the campus. The nearest upstream dam is Seven Oaks Dam. The potential for catastrophic failure of the Seven Oaks Dam is considered remote (UCR 2005). Therefore, development under the NDD Plan, including the Phase 1 project, is unlikely to experience inundation from dam failure, mudflow, seiche, or tsunami. There would be no impact with regard to these criteria. No further evaluation in the NDD Plan EIR is required.

**CUMULATIVE IMPACTS:**

All impacts of the NDD Plan associated with hydrology and water quality would not be significant. Therefore, the NDD Plan would not contribute to any significant cumulative impacts related to hydrology and water quality. No further analysis in the NDD Plan EIR is required.

<b>5.10 LAND USE &amp; PLANNING</b>		
Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a. Development under the NDD Plan, including the Phase 1 project, would be located on the East Campus in an area surrounded by existing student housing, dining facilities, athletic facilities, and parking lots. Implementation of the NDD Plan, including the Phase 1 project, would not physically divide an established community. Further analysis in the NDD Plan EIR is not required.
- b. As a state entity, UC Riverside is not subject to regional or local land use controls. The 2005 LRDP is the land use plan that is applicable to the UC Riverside campus. Although the development under the NDD Plan is outside the scope of the 2005 LRDP, the Campus has designed the NDD Plan to be generally consistent with the 2005 LRDP; however, as some changes are being made to the existing land use designations under the NDD Plan, an LRDP Amendment is required. The NDD Plan EIR will analyze consistency with the 2005 LRDP land use plan and policies.
- c. As discussed above under Biological Resources, the NDD Plan area, which includes the Phase 1 project site, is not within the portion of the campus that is included in the MSHCP. There would be no impact with respect to this criterion. Further analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not physically divide an established community or conflict with any applicable habitat conservation plan or natural community conservation plan. Therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these two topics and further analysis in the NDD Plan EIR is not required.

Potential cumulative impact related to conflicts with any applicable land use plan, policy, or regulation will be addressed in the NDD Plan EIR.

**5.11 MINERAL RESOURCES**

Would the project...

Impact to be Analyzed in the EIR

No Additional Analysis Required

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

**a., b.** The NDD Plan area, which includes the Phase 1 project site, is not designated as a mineral resource zone, and no known or potential mineral resources are located on the campus. No impacts would occur. Further analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

No mineral resource zones or mineral resource recovery sites exist on the campus or its environs. Development under the NDD Plan EIR, including the Phase 1 project, would not contribute to a cumulative impact on mineral resources. Further analysis in the NDD Plan EIR is not required.

<b>5.12 NOISE</b>		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a. Development under the NDD Plan, including the Phase 1 project, could result in increases or changes in noise levels from sources such as construction activities, stationary sources, and increased vehicular traffic, which could exceed applicable noise standards. The impact is considered potentially significant. The NDD Plan EIR will evaluate the potential for development under the NDD Plan to increase noise levels and expose people to noise levels in excess of local standards. The NDD Plan EIR will also include project-specific analyses of noise effects associated with the proposed Phase 1 project.
- b. Demolition and construction activities proposed under the NDD Plan and the Phase 1 project would generate perceptible groundborne vibration levels when heavy equipment or impact tools are used. Structures and residents in the proximity of the Plan area, and the Phase 1 project site, could be adversely affected by vibration generated during construction. The NDD Plan EIR will examine the potential for increased groundborne vibration or noise levels associated with development under the NDD Plan. The effects of specific construction practices will be evaluated. The NDD Plan EIR will also include project-specific analyses of potential effects associated with groundborne vibration or noise levels associated with specific development of the Phase 1 project.
- c. Vehicle traffic associated with the proposed project could result in a substantial permanent increase in ambient noise levels along affected roadways. The impact is considered potentially significant. The NDD Plan EIR will analyze permanent increases in ambient noise levels caused by increase in traffic (if any) from the implementation of the NDD Plan, and it will examine permanent noise increases caused specifically from the implementation of the proposed Phase 1 project.

- d. Construction activities associated with the NDD Plan and the Phase 1 project could result in substantial temporary increases in ambient noise levels in the vicinity of the NDD Plan area and the Phase 1 project site. The impact is considered potentially significant. The NDD Plan EIR will examine the potential for construction activities, special events, and operation of emergency vehicles or other operations under the NDD Plan to increase ambient noise levels. The NDD Plan EIR will also analyze temporary or periodic increases in ambient noise levels caused by implementation of the proposed Phase 1 project.
- e., f. The NDD Plan area, which includes the Phase 1 project site, is not located within an airport land use plan study area, nor is it within two miles of a public airport or the vicinity of a private airstrip (UCR 2011). Therefore, implementation of the NDD Plan and the Phase 1 project would not expose people residing or working in the area to excessive noise levels. Further analysis in the NDD Plan EIR is not required.

#### **CUMULATIVE IMPACTS:**

As discussed above, the NDD Plan, including the Phase 1 project, is not located within an airport land use plan study area, nor is it within two miles of a public airport or the vicinity of a private airstrip; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative noise impacts for all other topics will be addressed in the NDD Plan EIR.

<b>5.13 POPULATION AND HOUSING</b>		
Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION:**

- a. The proposed NDD Plan would provide additional on-campus housing for students to respond to existing and projected enrollment. The NDD Plan EIR will further evaluate whether the NDD Plan would induce substantial population growth directly or indirectly, including whether population growth would occur as part with the proposed Phase 1 project.
- b., c. The existing Canyon Crest Family Student Housing Facility is currently vacant and has been since the Summer of 2017. Therefore, implementation of the NDD Plan would not displace housing or people and no impact would occur. Further analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not displace housing or people; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

The cumulative impact related to potential to induce substantial population growth directly or indirectly will be addressed in the NDD Plan EIR.



## 5.14 PUBLIC SERVICES

Would the project...

Impact to be Analyzed in the EIR	No Additional Analysis Required
----------------------------------	---------------------------------

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### DISCUSSION:

- a.(i).** Development under the NDD Plan, including the Phase 1 project, would add building space to the campus and increase the number of students living on campus, which would increase the campus's demand for fire protection services. The NDD EIR will evaluate this increased demand, compare this demand to existing and planned equipment and staffing levels, and will evaluate potential environmental impacts associated with any new or altered facilities that would be required to meet this demand.
- a.(ii).** Development under the NDD Plan, including the Phase 1 project, would increase the number of students residing on the campus, which would increase the campus's demand for police services. The NDD Plan EIR will evaluate this increased demand, compare this demand to existing and planned police staffing levels, and will evaluate potential impacts associated with any new or altered facilities that would be required to meet this demand.
- a.(iii).** The NDD Plan, including the Phase 1 project, would not provide housing for families with school-age children that would attend local schools. There would be no impact on local schools. Further analysis in the NDD Plan EIR is not required.
- a.(iv).** Development under the NDD Plan, including the Phase 1 project, would increase the on-campus population, which could increase demand for parks. The NDD Plan EIR will evaluate this increased demand and will evaluate potential impacts associated with any new or altered facilities that would be required to meet this demand. In addition, the NDD Plan would evaluate the potential impacts from construction of the planned athletic facilities under the NDD Plan. The NDD Plan EIR will include project-specific analyses of potential environmental effects that could result from construction of the Phase 1 project.
- a.(v).** Although development under the NDD Plan, including the Phase 1 project, would increase the number of students that would live on campus, the additional students that would live on-campus would be served by campus libraries, and an expansion of libraries would not be needed. There would be no impact. Further analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not impact local schools or libraries; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative public service impacts for all other topics will be addressed in the NDD Plan EIR.

<b>5.15 RECREATION</b>	Impact to be Analyzed in the EIR	No Additional Analysis Required
<b>Would the project...</b>		
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION:**

- a. UC Riverside maintains a variety of indoor and outdoor recreational facilities. The NDD Plan, including the proposed Phase 1 project, would increase the on-campus population. As adequate recreational facilities would be provided on the campus, the increased on-campus population due to the proposed project would not increase the use of neighborhood and regional parks such that substantial physical deterioration of the facilities would occur or be accelerated. Further analysis in the NDD Plan EIR is not required.
- b. The proposed NDD Plan provides for the construction an athletic facility on campus. The NDD Plan EIR will include a program-level analysis of the potential effects of development under the NDD Plan, and it will analyze the potential environmental effects associated with construction of the athletic field. The Phase 1 project does not include construction of any recreational facilities. Further project-level analysis in the NDD Plan EIR is not required.

**CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not result in substantial physical deterioration of neighborhood and regional recreational facilities; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

The potential cumulative impact from the development of recreational facilities under the NDD Plan will be addressed in the NDD Plan EIR.

## 5.16 TRANSPORTATION & TRAFFIC

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### DISCUSSION:

- a, b** Provision of on-campus housing under the NDD Plan would have the potential to reduce daily and peak hour trips to the campus compared to both existing conditions as well as No Project conditions. The NDD Plan EIR will include a detailed evaluation of the changes in traffic under the NDD Plan. The scope of the traffic analysis will include a detailed evaluation of trip generation due to the project, and if an increase in peak hour trips due to the project is indicated, the traffic analysis will analyze impacts on study intersections, freeway ramp intersections, freeway interchanges, and vehicle miles of travel (VMT). The analysis will estimate the traffic conditions with full implementation of the proposed NDD Plan and with traffic increases caused by other regional growth. The regional growth projections will be based on the RIVTAM regional traffic model. The NDD Plan EIR will evaluate the project-specific traffic impacts that could result from implementation of the Phase 1 project.
- c.** The closest airports to the campus are Flabob Airport, which is located approximately four miles to the west, and March Air Reserve Base, which is located approximately six miles to the southeast. Development under the NDD Plan, including the Phase 1 project, would also not result in a change in air traffic patterns or an increase in air traffic levels, as the Plan area is not located within two miles of the nearest airport, or within the airport land use plan study area for either the Flabob Airport or the March Air Reserve Base, and no impact would occur. No further analysis in the NDD Plan EIR is required.

- d. The NDD Plan, which includes the Phase 1 project, would include alterations to roadways that could produce hazardous design features. The NDD Plan EIR will evaluate potential hazards caused by design features or incompatible roadway uses under the NDD Plan, and it will evaluate the potential for project-specific hazards associated with the proposed Phase 1 project.
- e. Implementation of the NDD Plan, which includes the Phase 1 project, could affect emergency access by causing roadway changes that could hinder emergency access. The NDD Plan will evaluate potential program-level impacts to emergency access and will evaluate project-specific emergency access for the proposed Phase 1 project.
- f. The NDD Plan EIR will analyze any adopted policies, plans, or programs regarding alternative transportation that are applicable to the campus in order to determine if the NDD Plan, including the Phase 1 project, would conflict with those plans. The NDD Plan EIR will evaluate the potential effects of implementing the NDD Plan and the project-specific effects associated with the proposed Phase 1 project.

#### **CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan would not result in a change in air traffic patterns; therefore, campus development under the NDD Plan would not contribute to cumulative effects with regard to this topic.

All other potential cumulative transportation and traffic impacts for all other topics will be addressed in the EIR.

## 5.17 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### DISCUSSION:

- a., b. Assembly Bill (AB) 52, which came into effect on July 1, 2015, requires that lead agencies consider the effects of projects on tribal cultural resources and conduct notification and consultation with federally and non-federally recognized Native American tribes early in the environmental review process. The Campus has obtained a Sacred Lands File search from the Native American Heritage Commission. Pursuant to AB 52, the Campus sent out notification letters to all tribes that have requested notifications from the UC Riverside campus. The letters were sent, receipt requested on March 22, 2018: the Agua Caliente Band of Cahuilla Indians, the Soboba Band of Luiseno Indians, and the Torres-Martinez Desert Cahuilla Indians.<sup>7</sup> According to AB 52, the tribes had 30 days from the receipt of the letter to request consultation with UC Riverside. On April 2, 2018, Katie Croft, Cultural Resources Manager, representing the Agua Caliente Band of Cahuilla Indians, Tribal Historic Preservation Office, responded to the notification letter stating that they did not require consultation. No other requests for formal consultation have been received by UC Riverside from the other two tribes as of the publication of this Initial Study.

The area of disturbance for the NDD Plan area, which includes the Phase 1 project, is not known or expected to contain any TCRs. As noted in **Section 5.5** above, earthmoving activities associated with the proposed NDD Plan, including the Phase 1 project, could expose previously undiscovered buried archaeological resources, including human remains, which could be considered TRCs and could be adversely affected by the project construction. The impact would be considered potentially significant. However, LRDP PP 4.5-4, and **Mitigation Measure CUL-1** would be implemented to ensure that should cultural resources be encountered, they would be protected, documented, and preserved, as appropriate. If human remains are uncovered and are determined to be of Native American origin, the Campus will implement the procedures set forth in LRDP PP 4.5-5 for protection of the remains, documentation, and respectful treatment in

<sup>7</sup> Copies of the correspondence are included as Appendix D to this Initial Study.

consultation with a Native American Most Likely Descendant. Therefore, while no TCRs are expected to be affected by the implementation of the NDD Plan, including the Phase 1 project, these measures would ensure that any previously unknown TCRs encountered during ground disturbing activities associated with the NDD Plan, which includes the Phase 1 project, would not be adversely affected.

#### CUMULATIVE IMPACTS:

As discussed above, implementation of the NDD Plan would have the potential to affect TCRs. However, with implementation of LRDP PP 4.5-4, LRDP PP 4.5-5, and **Mitigation Measure CUL-1**, the project's impact would be rendered less than significant and its contribution to the cumulative impact on TCRs would not be considerable. No further evaluation in the NDD Plan EIR is required.

## 5.18 UTILITIES & SERVICE SYSTEMS

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### DISCUSSION:

- a. Wastewater generated on the project site would be conveyed to and treated at Riverside Regional Water Quality Control Plant (RRWQCP). The NDD Plan, including the Phase 1 project, would increase the volume of wastewater received at the RRWQCP for treatment. Although development under the NDD Plan, including the Phase 1 project, is not expected to cause the RRWQCP to exceed wastewater treatment requirements, this potential impact will be evaluated in the NDD Plan EIR.
- b. Increase in on-campus population under the NDD Plan would increase the volume of water use and the quantity of wastewater discharged to the RRWQCP. The NDD Plan EIR will evaluate the increased demand for water and wastewater treatment and conveyance facilities due to the NDD Plan and it will evaluate potential impacts associated with any new or expanded facilities that would be required to meet this demand. The NDD Plan EIR will also address the project-specific water and wastewater conveyance improvements needed to serve the proposed Phase 1 project.
- c. The NDD Plan would decrease the amount of impervious areas and runoff from the site would not increase compared to existing conditions and improvements to off-campus storm drain systems would not be required. The development of the NDD Plan would require the installation of additional storm drain improvements within the Plan area. The new infrastructure would be



installed in portions of the project site that are already disturbed, and connections to existing stormwater lines would be located on campus. The potential environmental effects associated with the construction of the new storm drain systems would be less than significant. No further evaluation of this issue in the EIR is necessary.

- d. Development under the NDD Plan, including the Phase 1 project, could increase demand for water supplies. The NDD Plan EIR will characterize existing and projected water supplies, evaluate anticipated increases in demand, and determine if this demand could result in new or expanded entitlements.
- e. The NDD Plan EIR will evaluate the increased demand on wastewater treatment and conveyance facilities associated with the proposed Phase 1 project.
- f., g. Nonhazardous municipal waste from the campus is handled by Burrtec Waste Industries. The waste is sent to the Badlands Landfill. The NDD EIR will evaluate whether the existing landfill capacity would be sufficient to accommodate development under the NDD Plan, including implementation of the Phase 1 project. In addition, the NDD Plan EIR will evaluate compliance with federal, state, and local statutes and regulations related to solid waste disposed under the NDD Plan, including solid waste disposal associated with the proposed Phase 1 project.

#### **CUMULATIVE IMPACTS:**

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

Potential cumulative impacts related to wastewater, water supply, and solid waste will be addressed in the NDD Plan EIR.

**5.19 MANDATORY FINDINGS OF SIGNIFICANCE**

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION:**

- a. Development under the NDD Plan, including the Phase 1 project, would not affect fish or wildlife habitat, populations, communities, or ranges (see Biological Resources responses [a] through [f]). Implementation of the NDD Plan, including the Phase 1 project, would not eliminate important examples of the major periods of California history or prehistory (see Cultural Resources responses [a] through [d]). Further analysis in the NDD Plan EIR is not required.
- b. Cumulative impacts for each environmental factor are addressed in the preceding sections. As that discussion shows, development under the proposed NDD Plan could result in significant cumulative impacts with regard to Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, Population and Housing, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Services Systems. These impacts will be evaluated in the NDD Plan EIR.
- c. As indicated in the discussions above, implementation of the NDD Plan, including the Phase 1 project, has the potential to result in significant impacts. The NDD Plan EIR will evaluate whether any of those impacts have the potential to result in substantial adverse effects on human beings either directly or indirectly.

## VI. REFERENCES

County of Riverside. 2016. Liquefaction Open Date GIS. Available online at:

[http://datacountyofriverside.opendata.arcgis.com/datasets/8b4d6c0ed6154902b03be41faebdf588\\_3/features/1084](http://datacountyofriverside.opendata.arcgis.com/datasets/8b4d6c0ed6154902b03be41faebdf588_3/features/1084), accessed June 3, 2018.

Haley & Aldrich. 2017. Preliminary Geotechnical Investigation. May.

University of California, Riverside (UCR). 2005. *2005 Long Range Development Plan*, Environmental Impact Report. Prepared by EIP Associates. November.

UCR. 2005. *Long Range Development Plan*. Prepared by the University of California, Riverside.

UCR. 2011. *2005 Long Range Development Plan Amendment 2*, Environmental Impact Report. Prepared by Impact Sciences, Inc. August.

UCR. 2012, revised 2016. Emergency Action Plan. February.

## **VII. REPORT PREPARERS**

### **University of California, Riverside**

Tricia D. Thrasher, ASLA, LEED AP, Principal Environmental Planner

### **Impact Sciences, Inc.**

Shabnam Barati, Ph.D., Principal  
Lynn Kaufman, Associate Principal  
Angela Pan, Project Manager  
Kara Yates, Publications Manager

**NOTICE OF PREPARATION  
ENVIRONMENTAL IMPACT REPORT**

**Project Title:** North District Development Plan  
**Lead Agency:** University of California  
**Project Location:** **University of California, Riverside (UC Riverside)**  
900 University Ave, Riverside, CA 92521  
**County:** Riverside County

**Contact Person:** Ms. Tricia D. Thrasher, ASLA, LEED AP  
Principal Environmental Planner  
Campus Planning – Capital Asset Strategies  
1223 University Avenue, Suite 240  
Riverside, California 92521

The proposed North District Development Plan (NDD Plan) is a plan put forth by UC Riverside to provide up to 6,000 student beds on the East Campus on an approximately 55-acre site located in the northeastern portion of the campus. The NDD Plan includes Phase 1 which involves the construction of about 1,500 student beds and associated facilities by 2020 and a future phase(s) which involves the construction of up to 4,500 student beds and associated facilities between 2020 and 2024/5. The project site is developed with Canyon Crest Family Student Housing that was occupied by student families until 2017 and is currently vacant. The site is designated for Family, Apartments, and Residence Hall student housing and Related Support, and Athletics and Recreation in the UC Riverside 2005 Long Range Development Plan. Furthermore, as a student housing project, the proposed project would support current and projected enrollment on the campus.

At this time, project-level details are available only for Phase 1 development. With respect to the future phase(s) of development, the NDD Plan provides a development program and a land use diagram, but does not have details with respect to specific buildings. The project would require approval by the Board of Regents of the University of California.

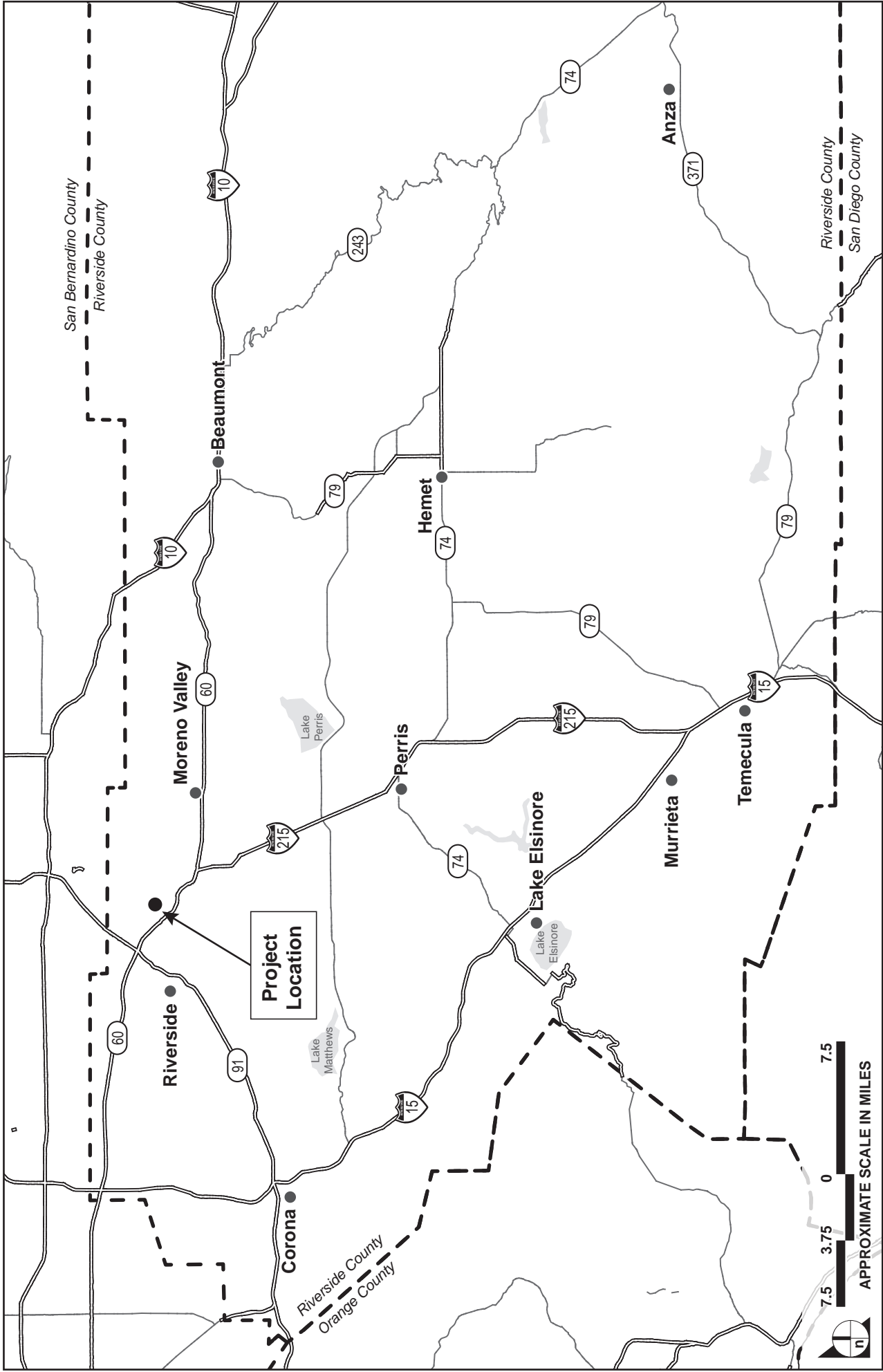
**Environmental Review and Comment**

The University of California will be the Lead Agency and will prepare an EIR for the proposed project. An Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines to identify potential environmental impacts that will be addressed in the EIR. The Initial Study also includes a description of the proposed project. At this time, it is anticipated that the EIR will address environmental impacts in the following resource areas: aesthetics, air quality, cultural resources, greenhouse gas emissions, hazards and hazardous materials, land use and planning, noise, population and housing, public services and recreation, transportation and traffic, tribal cultural resources, utilities, and energy. A copy of this NOP and the Initial Study supporting the scoping of the project EIR is available for viewing or downloading on the Capital Asset Strategies - Campus Planning website at <http://cpp.ucr.edu/environmental/ceqadocs.html>.

The University will hold a public scoping meeting on Tuesday, July 3, 2018 for the EIR. The meeting will be held at University Village Suite 210 located at 1223 University Avenue, from 5:30 PM to 7:30 PM.

We request your views as to the scope and contents of the EIR for the proposed project. This NOP is being circulated for 30 days from June 19 through July 20, 2018. Your comments must be received no later than 5:00 PM on July 20, 2018. Your name should be included with your comments. Please send your comments to the attention of Tricia D. Thrasher at the address noted above. Comments can also be submitted via email to the following address: [CEQA@ucr.edu](mailto:CEQA@ucr.edu). **Email comments must also be received no later than 5:00 PM on July 20, 2018.**

If you have any questions regarding this NOP, please contact Tricia D. Thrasher at the above address or via email at [CEQA@ucr.edu](mailto:CEQA@ucr.edu).



SOURCE: Impact Sciences, 2018

FIGURE 1



SOURCE: Google Maps, 2018

FIGURE 2



EDMUND G. BROWN JR.  
GOVERNOR

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH



KEN ALEX  
DIRECTOR

**Notice of Preparation**

June 19, 2018

JUN25'18 PM4:18  
UCR CAPITAL PROGRAMS

To: Reviewing Agencies  
Re: North District Development Plan  
SCH# 2018061044

Attached for your review and comment is the Notice of Preparation (NOP) for the North District Development Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

**Tricia Thrasher**  
University of California, Riverside  
1223 University Ave., Suite 240  
Riverside, CA 92507-7209

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

  
Scott Morgan  
Director, State Clearinghouse

Attachments  
cc: Lead Agency



**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2018061044  
**Project Title** North District Development Plan  
**Lead Agency** University of California, Riverside

**Type** **NOP** Notice of Preparation

**Description** The proposed North District Development Plan is a plan put forth by UC Riverside to provide up to 6,000 student beds on the East Campus on an approx. 55-acre site located in the northeastern portion of the campus. The NDD Plan includes Phase 1 which involves the construction of about 1,500 student beds and associated facilities by 2020 and a future phase(s) which involves the construction of up to 4,500 student beds and associated facilities between 2020 and 2024/5. The project site is developed with Canyon Crest Family Student Housing that was occupied by student families until 2017 and is currently vacant. The site is designated for Family, Apartments, and Residence Hall student housing and Related Support, and Athletics and Recreation in the UC Riverside 2005 Long Range Development Plan. Furthermore, as a student housing project, the proposed project would support current and projected enrollment on the campus.

**Lead Agency Contact**

**Name** Tricia Thrasher  
**Agency** University of California, Riverside  
**Phone** (951) 827-1484 **Fax**  
**email**  
**Address** 1223 University Ave., Suite 240  
**City** Riverside **State** CA **Zip** 92507-7209

**Project Location**

**County** Riverside  
**City** Riverside  
**Region**  
**Cross Streets** Blaine St., Watkins Dr., Canyon Crest Dr.  
**Lat / Long** 33° 58' 53.52" N / 117° 19' 47.7" W  
**Parcel No.**  
**Township** 1S **Range** 15W **Section** 33 **Base**

**Proximity to:**

**Highways** I-60  
**Airports**  
**Railways** Metrolink/RCTC  
**Waterways**  
**Schools** UCR Child Development  
**Land Use** Campus/Residential

**Project Issues** Schools/Universities; Aesthetic/Visual; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Other Issues; Noise; Population/Housing Balance; Public Services; Coastal Zone; Air Quality; Sewer Capacity; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Supply; Landuse; Cumulative Effects

**Reviewing Agencies** Resources Agency; Colorado River Board; Department of Parks and Recreation; Department of Fish and Wildlife, Region 6; California Department of Education; Office of Emergency Services, California; Department of Housing and Community Development; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Caltrans, District 8; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

**Date Received** 06/19/2018 **Start of Review** 06/19/2018 **End of Review** 07/18/2018

Notice of Completion & Environmental Document Transmittal

2018061044

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: North District Development Plan

Lead Agency: University of California, Riverside Contact Person: Tricia Thrasher
Mailing Address: 1223 University Avenue, Suite 240 Phone: 951-827-1484
City: Riverside Zip: 92507-7209 County: Riverside

Project Location: County: Riverside City/Nearest Community: City of Riverside
Cross Streets: Blaine Street, Watkins Drive, and Canyon Crest Drive Zip Code: 92521
Longitude/Latitude (degrees, minutes and seconds): 33 ° 58 ' 53.52" N / 117 ° 19 ' 47.70" W Total Acres: 55
Assessor's Parcel No.: Section: S33 Twp.: T1S Range: R15 Base: W
Within 2 Miles: State Hwy #: I-60 Waterways: None
Airports: None Railways: Metrolink/RCTC Schools: UCR Child Development

Document Type:

- CEQA: [X] NOP [ ] Draft EIR [ ] NEPA: [ ] NOI Other: [ ] Joint Document
[ ] Early Cons [ ] Supplement/Subsequent EIR [ ] EA [ ] Final Document
[ ] Neg Dec (Prior SCH No.) [ ] Draft EIS [ ] Other:
[ ] Mit Neg Dec Other:

Local Action Type:

- [ ] General Plan Update [ ] Specific Plan [ ] Rezone [ ] Annexation
[ ] General Plan Amendment [ ] Master Plan [ ] Prezone [ ] Redevelopment
[ ] General Plan Element [ ] Planned Unit Development [ ] Use Permit [ ] Coastal Permit
[ ] Community Plan [ ] Site Plan [ ] Land Division [ ] Other:

Governor's Office of Planning & Research
JUN 19 2018
STATE CLEARINGHOUSE

Development Type:

- [ ] Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_
[ ] Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_
[ ] Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_
[ ] Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_
[X] Educational: development of up 6,000 beds for student housing
[ ] Recreational: \_\_\_\_\_
[ ] Water Facilities: Type \_\_\_\_\_ MGD \_\_\_\_\_
[ ] Transportation: Type \_\_\_\_\_
[ ] Mining: Mineral \_\_\_\_\_
[ ] Power: Type \_\_\_\_\_ MW \_\_\_\_\_
[ ] Waste Treatment: Type \_\_\_\_\_ MGD \_\_\_\_\_
[ ] Hazardous Waste: Type \_\_\_\_\_
[ ] Other: \_\_\_\_\_

Project issues Discussed in Document:

- [X] Aesthetic/Visual [ ] Fiscal [X] Recreation/Parks [ ] Vegetation
[ ] Agricultural Land [X] Flood Plain/Flooding [X] Schools/Universities [ ] Water Quality
[X] Air Quality [ ] Forest Land/Fire Hazard [ ] Septic Systems [X] Water Supply/Groundwater
[X] Archeological/Historical [X] Geologic/Seismic [X] Sewer Capacity [ ] Wetland/Riparian
[X] Biological Resources [ ] Minerals [ ] Soil Erosion/Compaction/Grading [ ] Growth Inducement
[ ] Coastal Zone [X] Noise [X] Solid Waste [X] Land Use
[ ] Drainage/Absorption [X] Population/Housing Balance [X] Toxic/Hazardous [X] Cumulative Effects
[ ] Economic/Jobs [X] Public Services/Facilities [X] Traffic/Circulation [ ] Other:

Present Land Use/Zoning/General Plan Designation:

Campus / Residential
Project Description: (please use a separate page if necessary)

Please see Attachment A

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

**Reviewing Agencies Checklist**

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".  
If you have already sent your document to the agency please denote that with an "S".

- |  |  |
|--|--|
| <input type="checkbox"/> Air Resources Board                         | <input type="checkbox"/> Office of Historic Preservation                     |
| <input type="checkbox"/> Boating & Waterways, Department of          | <input type="checkbox"/> Office of Public School Construction                |
| <input type="checkbox"/> California Emergency Management Agency      | <input type="checkbox"/> Parks & Recreation, Department of                   |
| <input type="checkbox"/> California Highway Patrol                   | <input type="checkbox"/> Pesticide Regulation, Department of                 |
| <input type="checkbox"/> Caltrans District # _____                   | <input type="checkbox"/> Public Utilities Commission                         |
| <input type="checkbox"/> Caltrans Division of Aeronautics            | <input type="checkbox"/> Regional WQCB # _____                               |
| <input type="checkbox"/> Caltrans Planning                           | <input type="checkbox"/> Resources Agency                                    |
| <input type="checkbox"/> Central Valley Flood Protection Board       | <input type="checkbox"/> Resources Recycling and Recovery, Department of     |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy          | <input type="checkbox"/> S.F. Bay Conservation & Development Comm.           |
| <input type="checkbox"/> Coastal Commission                          | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board                        | <input type="checkbox"/> San Joaquin River Conservancy                       |
| <input type="checkbox"/> Conservation, Department of                 | <input type="checkbox"/> Santa Monica Mtns. Conservancy                      |
| <input type="checkbox"/> Corrections, Department of                  | <input type="checkbox"/> State Lands Commission                              |
| <input type="checkbox"/> Delta Protection Commission                 | <input type="checkbox"/> SWRCB: Clean Water Grants                           |
| <input type="checkbox"/> Education, Department of                    | <input type="checkbox"/> SWRCB: Water Quality                                |
| <input type="checkbox"/> Energy Commission                           | <input type="checkbox"/> SWRCB: Water Rights                                 |
| <input type="checkbox"/> Fish & Game Region # _____                  | <input type="checkbox"/> Tahoe Regional Planning Agency                      |
| <input type="checkbox"/> Food & Agriculture, Department of           | <input type="checkbox"/> Toxic Substances Control, Department of             |
| <input type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Water Resources, Department of                      |
| <input type="checkbox"/> General Services, Department of             |  |
| <input type="checkbox"/> Health Services, Department of              | <input type="checkbox"/> Other: _____  |
| <input type="checkbox"/> Housing & Community Development             | <input type="checkbox"/> Other: _____  |
| <input type="checkbox"/> Native American Heritage Commission         |  |

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**Local Public Review Period (to be filled in by lead agency)**

Starting Date Tuesday, June 19, 2018 Ending Date Friday, July 20, 2018

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**Lead Agency (Complete if applicable):**

Consulting Firm: <u>Impact Sciences, Inc.</u>	Applicant: <u>University of California, Riverside</u>
Address: <u>28 N. Marengo Avenue</u>	Address: <u>1223 University Avenue, Suite 240</u>
City/State/Zip: <u>Pasadena, CA 91101</u>	City/State/Zip: <u>Riverside, CA 92507-7209</u>
Contact: <u>Lynn Kaufman</u>	Phone: <u>951-827-1484</u>
Phone: <u>626-564-1500</u>	

-----  
Signature of Lead Agency Representative:  Date: 6/18/18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Resources Agency

Resources Agency  
Nadell Gayou

Dept. of Boating & Waterways  
Denise Peterson

California Coastal Commission  
Allyson Hitt

Colorado River Board  
Elsa Contreras

Dept. of Conservation  
Crina Chan

Cal Fire  
Dan Foster

Central Valley Flood Protection Board  
James Herota

Office of Historic Preservation  
Ron Parsons

Dept of Parks & Recreation Environmental Stewardship Section

S.F. Bay Conservation & Dev't. Comm.  
Steve Goldbeck

Dept. of Water Resources  
Nadell Gayou

Fish and Game

Depart. of Fish & Wildlife  
Scott Flint  
Environmental Services Division

Fish & Wildlife Region 1  
Curt Babcock

Fish & Wildlife Region 1E  
Laurie Harnsberger

Fish & Wildlife Region 2  
Jeff Drongesen

Fish & Wildlife Region 3  
Craig Weightman

Fish & Wildlife Region 4  
Julie Vance

Fish & Wildlife Region 5  
Leslie Newton-Reed  
Habitat Conservation Program

Fish & Wildlife Region 6  
Tiffany Ellis  
Habitat Conservation Program

Fish & Wildlife Region 6 I/M  
Heidi Calvert  
Inyo/Mono, Habitat Conservation Program

Dept. of Fish & Wildlife M  
William Paznokas  
Marine Region

Other Departments

California Department of Education  
Lesley Taylor

OES (Office of Emergency Services)  
Monique Wilber

Food & Agriculture  
Sandra Schubert  
Dept. of Food and Agriculture

Dept. of General Services  
Cathy Buck  
Environmental Services Section

Housing & Comm. Dev.  
CEQA Coordinator  
Housing Policy Division

Independent Commissions/Boards

Delta Protection Commission  
Erik Vink

Delta Stewardship Council  
Anthony Navasero

California Energy Commission  
Eric Knight

Native American Heritage Comm.  
Debbie Treadway

Public Utilities Commission  
Supervisor

Santa Monica Bay Restoration  
Guangyu Wang

State Lands Commission  
Jennifer Deleong

Tahoe Regional Planning Agency (TRPA)  
Cherry Jacques

Cal State Transportation Agency CalSTA

Caltrans - Division of Aeronautics  
Philip Crimmins

Caltrans - Planning HQ LD-IGR  
Christian Bushong

California Highway Patrol  
Suzann Ikeuchi  
Office of Special Projects

Dept. of Transportation

Caltrans, District 1  
Rex Jackman

Caltrans, District 2  
Marcelino Gonzalez

Caltrans, District 3  
Susan Zanchi - North

Caltrans, District 4  
Patricia Maurice

Caltrans, District 5  
Larry Newland

Caltrans, District 6  
Michael Navarro

Caltrans, District 7  
Dianna Watson

Caltrans, District 8  
Mark Roberts

Caltrans, District 9  
Gayle Rosander

Caltrans, District 10  
Tom Dumas

Caltrans, District 11  
Jacob Armstrong

Caltrans, District 12  
Maureen El Harake

Cal EPA

Air Resources Board  
Airport & Freight  
Jack Wursten

Transportation Projects  
Nesamani Kalandiyur

Industrial/Energy Projects  
Mike Tollstrup

California Department of Resources, Recycling & Recovery  
Kevin Taylor/Jeff Esquivel

State Water Resources Control Board  
Regional Programs Unit  
Division of Financial Assistance

State Water Resources Control Board  
Cindy Forbes - Asst Deputy  
Division of Drinking Water

State Water Resources Control Board  
Div. Drinking Water # \_\_\_\_\_

State Water Resources Control Board  
Student Intern, 401 Water Quality  
Certification Unit  
Division of Water Quality

State Water Resources Control Board  
Phil Crader  
Division of Water Rights

Dept. of Toxic Substances Control Reg. # \_\_\_\_\_  
CEQA Tracking Center

Department of Pesticide Regulation  
CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

RWQCB 1  
Cathleen Hudson  
North Coast Region (1)

RWQCB 2  
Environmental Document  
Coordinator  
San Francisco Bay Region (2)

RWQCB 3  
Central Coast Region (3)

RWQCB 4  
Teresa Rodgers  
Los Angeles Region (4)

RWQCB 5F  
Central Valley Region (5)  
Fresno Branch Office

RWQCB 5R  
Central Valley Region (5)  
Redding Branch Office

RWQCB 6  
Lahontan Region (6)  
Lahontan Region (6)  
Victorville Branch Office

RWQCB 7  
Colorado River Basin Region (7)

RWQCB 8  
Santa Ana Region (8)

RWQCB 9  
San Diego Region (9)

Other \_\_\_\_\_



## AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
  - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
  
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
  
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
  
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
  
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

*This process should be documented in the Cultural Resources section of your environmental document.*

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf)

Some of SB 18's provisions include:

1. **Tribal Consultation**: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation**. There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality**: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation**: Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.







SOUTHERN CALIFORNIA  
ASSOCIATION OF GOVERNMENTS  
900 Wilshire Blvd., Ste. 1700  
Los Angeles, CA 90017  
T (213) 236-1800  
www.scag.ca.gov

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Corridor Agencies  
Energy & Environment  
Linda Parks, Ventura County  
Transportation  
Curt Hagman, San Bernardino  
County

July 20, 2018

Ms. Tricia D. Thrasher, Principal Environmental Planner  
Campus Planning - Capital Asset Strategies  
1223 University Avenue, Suite 240  
Riverside, California 92521  
Phone: (951) 827-1484  
E-mail: tricia.thrasher@ucr.edu

**RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the North District Development Plan [SCAG NO. IGR9656]**

Dear Ms. Thrasher,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the North District Development Plan ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.<sup>1</sup> SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the North District Development Plan in Riverside County. The proposed project includes a plan to provide up to 6,000 student beds on the East Campus of UC Riverside on an approximately 55 acre site located in the northeastern portion of the campus.

**When available, please send environmental documentation to SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) or by email to [au@scag.ca.gov](mailto:au@scag.ca.gov) providing, at a minimum, the full public comment period for review.**

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or [au@scag.ca.gov](mailto:au@scag.ca.gov). Thank you.

Sincerely,

  
Ping- /ng

Acting Manager, Compliance and Performance Monitoring

<sup>1</sup>Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

**COMMENTS ON THE NOTICE OF PREPARATION OF A  
DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE  
NORTH DISTRICT DEVELOPMENT PLAN [SCAG NO. IGR9656]**

**CONSISTENCY WITH RTP/SCS**

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

**2016 RTP/SCS GOALS**

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

<b>SCAG 2016 RTP/SCS GOALS</b>	
RTP/SCS G1:	<i>Align the plan investments and policies with improving regional economic development and competitiveness</i>
RTP/SCS G2:	<i>Maximize mobility and accessibility for all people and goods in the region</i>
RTP/SCS G3:	<i>Ensure travel safety and reliability for all people and goods in the region</i>
RTP/SCS G4:	<i>Preserve and ensure a sustainable regional transportation system</i>
RTP/SCS G5:	<i>Maximize the productivity of our transportation system</i>
RTP/SCS G6:	<i>Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)</i>
RTP/SCS G7:	<i>Actively encourage and create incentives for energy efficiency, where possible</i>
RTP/SCS G8:	<i>Encourage land use and growth patterns that facilitate transit and active transportation</i>
RTP/SCS G9:	<i>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies"</i>
	<small>*scAG does not yet have an agreed-upon security performance measure.</small>

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS	
Goal	Analysis
RTP/SCS G1: <i>Align the plan investments and policies with improving regional economic development and competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR oaae number reference</i>
RTP/SCS G2: <i>Maximize mobility and accessibility for all people and goods in the region</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

**2016 RTP/SCS STRATEGIES**

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

**DEMOGRAPHICS AND GROWTH FORECASTS**

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit <http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf>. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted City of Riverside Forecasts		
	Year2020	Year2035	Year2040	Year2020	Year2035	Year2040
Population	19,663,000	22,091,000	22,138,800	336,300	384,100	386,600
Households	6,458,000	7,325,000	7,412,300	101,200	117,700	118,600
Employment	8,414,000	9,441,000	9,871,500	157,900	195,900	200,500

**MITIGATION MEASURES**

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: <http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx>). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

SENT VIA USPS AND E-MAIL:

July 20, 2018

CEQA@ucr.edu

Ms. Tricia Thrasher, ASLA, LEED AP  
Principal Environmental Planner  
Campus Planning – Capital Asset Strategies  
University of California  
1223 University Avenue, Suite 240  
Riverside, CA 92521

## **Notice of Preparation of an Environmental Impact Report for the Proposed North District Development Plan**

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Environmental Impact Report (EIR). Please send SCAQMD a copy of the EIR upon its completion. Note that copies of the EIR that are submitted to the State Clearinghouse are not forwarded to SCAQMD. Please forward a copy of the EIR directly to SCAQMD at the address shown in the letterhead. **In addition, please send with the EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files<sup>1</sup>. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

### **Air Quality Analysis**

SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from SCAQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on SCAQMD's website at: [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: [www.caleemod.com](http://www.caleemod.com).

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<sup>1</sup> Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

SCAQMD has also developed both regional and localized significance thresholds. SCAQMD staff requests that the Lead Agency quantify criteria pollutant emissions and compare the results to SCAQMD's CEQA regional pollutant emissions significance thresholds to determine air quality impacts. SCAQMD's CEQA regional pollutant emissions significance thresholds can be found here: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>. In addition to analyzing regional air quality impacts, SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by SCAQMD staff or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the proposed project and all air pollutant sources related to the proposed project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.

#### Mobile Source Health Risk Assessment

Notwithstanding the court rulings, SCAQMD staff recognizes that the Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of SCAQMD staff's concern about the potential public health impacts of siting sensitive populations within close proximity of freeways, SCAQMD staff recommends that, prior to approving the project, Lead Agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

When specific development is reasonably foreseeable as a result of the goals, policies, and guidelines in the proposed project, the Lead Agency should identify any potential adverse health risk impacts using its best efforts to find out and a good-faith effort at full disclosure in the CEQA document. Based on a review of aerial photographs and information in the NOP, SCAQMD staff found that the proposed project will be located immediately next to the I-215/ SR-60 Freeway. Because of the close proximity to the existing freeway, residents at the proposed project<sup>2</sup> would be exposed to diesel particulate matter (DPM), which is a toxic air contaminant and a carcinogen. Diesel particulate matter emitted from diesel powered engines (such as trucks) has been classified by the state as a toxic air contaminant and a carcinogen.

Since future residences of the proposed project would be exposed to toxic emissions from the nearby sources of air pollution (e.g., diesel fueled highway vehicles), SCAQMD staff recommends that the Lead Agency conduct a health risk assessment (HRA)<sup>3</sup> to disclose the potential health risks to the residents

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<sup>2</sup> According to the Project Description in the Notice of Preparation, the proposed project would include new construction of up to approximately 6,000 student beds.

<sup>3</sup> "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis," accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

from the vehicle emissions coming from vehicles operating on the I-215/ SR- 60 Freeway in the Draft EIR<sup>4</sup>.

#### Guidance Regarding Residences Sited Near a High-Volume Freeway or Other Sources of Air Pollution

SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and the SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, the SCAQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. SCAQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. This Guidance Document is available on SCAQMD's website at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. Guidance<sup>5</sup> on strategies to reduce air pollution exposure near high-volume roadways can be found at: [https://www.arb.ca.gov/ch/rd\\_technical\\_advisory\\_final.PDF](https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF).

#### Mitigation Measures

In the event that the proposed project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying potential mitigation measures for the proposed project, including:

- Chapter 11, Mitigating the Impact of a Project, of SCAQMD's CEQA Air Quality Handbook
- SCAQMD's CEQA web pages available here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf>
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Many strategies are available to reduce exposure, including, but are not limited to, building filtration systems, sound walls, vegetation barriers, etc. Because of the potential adverse health risks involved with siting housing near a freeway, it is essential that any proposed strategy must be carefully evaluated before

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<sup>4</sup> SCAQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When SCAQMD acts as the Lead Agency, SCAQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

<sup>5</sup> In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

implementation. In the event that enhanced filtration units on housing residents are proposed, the Lead Agency should consider the limitations of the enhanced filtration. For example, in a study that SCAQMD conducted to investigate filters<sup>6</sup>, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the resident. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and it does not account for the times when the residents have their windows or doors open or are in common space areas of the project. Moreover, these filters have no ability to filter out any toxic gases from vehicle exhaust. The presumed effectiveness and feasibility of any filtration units should therefore be evaluated in more detail prior to assuming that they will sufficiently alleviate near roadway exposures to DPM emissions and before they are relied upon by Lead Agency as mitigation measures to support a less than significant cancer risk finding (CEQA Guidelines Section 15091(a)(1)).

### **Alternatives**

In the event that the proposed project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a “no project” alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.

### **Permits**

In the event that the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project. For more information on permits, please visit SCAQMD webpage at: <http://www.aqmd.gov/home/permits>. Questions on permits can be directed to SCAQMD’s Engineering and Permitting staff at (909) 396-3385.

### **Data Sources**

SCAQMD rules and relevant air quality reports and data are available by calling SCAQMD’s Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available at SCAQMD’s webpage at: <http://www.aqmd.gov>.

SCAQMD staff is available to work with the Lead Agency to ensure that project air quality impacts are accurately evaluated and any significant impacts are mitigated where feasible. If you have any questions regarding this letter, please contact Robert Dalbeck, Assistant Air Quality Specialist, at [rdalbeck@aqmd.gov](mailto:rdalbeck@aqmd.gov).

Sincerely,

*Daniel Garcia*

Daniel Garcia

Program Supervisor

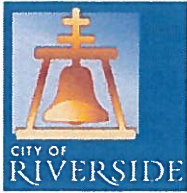
Planning, Rule Development & Area Sources

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<sup>6</sup> This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see also 2012 Peer Review Journal article by SCAQMD: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.



DG/RD  
RVC180621-05  
Control Number



Community Development  
Department  
Planning Division

*City of Arts & Innovation*

July 20, 2018

Ms. Tricia Thrasher, ASLA, LEED AP  
Principal Environmental Planner  
University of California Riverside  
1223 University Avenue, Suite 240  
Riverside, CA 92521

Subject: City of Riverside's Review of a Notice of Preparation of an Environmental Impact Report (EIR) for UC Riverside's North District Development (NDD) Plan

Dear Ms. Thrasher:

Thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for UCR's North District Development (NDD) Plan.

We understand that the NDD Plan involves redevelopment of approximately 55 acres in the northeast portion of UCR's East Campus. The existing Canyon Crest Family Student Housing (unoccupied), would be replaced by higher density student housing of up to 6,000 student beds. The NDD Plan provides for the phased development of apartments, mixed-use residential, resident life amenity spaces, living and learning spaces, resident life support spaces, dining facilities, athletics facilities, and parking areas.

The City has reviewed the Environmental Initial Study, and we wish to provide the following comments:

Public Works Department:

- The City's Traffic Engineering Division requests the opportunity to review the Scoped Traffic Impact Analysis (TIA) for the Draft EIR, and requests that the analysis follow the City's TIA Guidelines.
- A sewer capacity study should be prepared to appropriately analyze project impacts to the City sewer system, and identify mitigation for potentially significant impacts related to wastewater impacts.

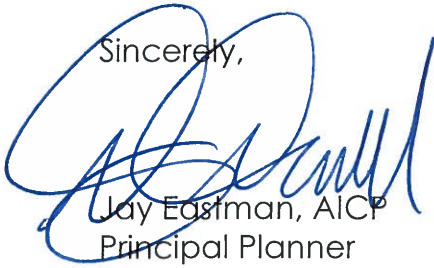
Riverside Public Utilities Department:

- A Water Supply Assessment needs to be completed in conjunction with the Draft EIR.
- The project's impact on the City's Water Transmission and Distribution system needs to be fully analyzed in the EIR as noted on the Initial Study checklist.

The City of Riverside appreciates your consideration of the comments provided in this letter. Please forward the pending Draft EIR for the NDD Plan to the City of Riverside Planning Division. Should you have any questions regarding this letter, please contact Doug Darnell, AICP, Senior Planner, at (951) 826-5219, or by e-mail at ddarnell@riversideca.gov.

We thank you again for the opportunity to provide comments on this proposal, and look forward to working with you in the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jay Eastman".

Jay Eastman, AICP  
Principal Planner

FOR:  
cc: Rusty Bailey, Mayor  
Riverside City Council Members  
Al Zelinka, FAICP, CMSM, City Manager  
Rafael Guzman, Assistant City Manager  
David Welch, Community & Economic Development, Interim Director  
Kris Martinez, Public Works Director  
Todd Jorgensen, Public Utilities Interim General Manager  
Adolfo Cruz, Parks, Recreation and Community Services Director  
Kristi Smith, Chief Assistant City Attorney

JE:dd

## 2005 LRDP PLANNING STRATEGIES, PROGRAMS AND PRACTICES, AND MITIGATION MEASURES

### Planning Strategies

#### *Land Use*

1. Achieve academic core densities of 1.0 FAR or higher on the East Campus and 1.6 to 1.9 FAR on the West Campus in order to achieve a balance of academic land area versus other required uses.
2. In order to achieve these development densities, infill sites in the partially developed East Campus academic core and expand to the West Campus academic zone immediately adjacent to the I-215/SR-60 freeway, maintaining a compact and contiguous academic core.
3. Maintain the teaching and research fields on the West Campus south of Martin Luther King Jr. Boulevard.
4. Pursue a goal of housing 50 percent of student enrollment in on campus or campus controlled housing.
5. Remove existing family housing units on the East Campus, and provide replacement and additional units of family housing on the West Campus.
6. Provide expanded athletics and recreational facilities and fields on the East and West Campuses, adjacent to concentrations of student housing.
7. Over time, relocate parking from central campus locations to the periphery of the academic core and replace surface parking with structures, where appropriate.

#### *Open Space*

1. Protect the steep and natural southeast hillsides designated as a Natural Open Space Reserve, to protect wildlife habitat, to provide a visual backdrop to the campus, and protect against erosion.
2. Within the Natural Open Space Reserve, no major facilities will be allowed (except for sensitively sited utility projects), vehicular and pedestrian access will be limited, and native plant materials will be used, where needed, for erosion, screening, and restoration.
3. In Naturalistic Open Space areas, where arroyos and other natural features exist, preserve wherever possible, existing landforms, native plant materials, and trees. Where appropriate, restore habitat value.
4. Provide landscaped buffers and setbacks along campus edges, such as Valencia Hill Drive and its extension south of Big Springs Road, Martin Luther King Jr. Boulevard, and the I-215/SR-60 freeway.
5. Retain the Carillon Mall as a major Campus Landmark Open Space, respecting its existing dominant width of approximately 200 feet throughout its length. Other "named" malls and walks will be 100 feet wide.

6. Provide a new Campus Landmark Open Space on the West Campus, the Gage Canal Mall, to reflect the natural dry arroyos that are part of the Riverside landscape, and provide gathering/activity space within and adjacent to the Mall.
7. Provide neighborhood parks and tot lots in the family housing areas as neighborhood open space.

### *Campus and Community*

1. Provide sensitive land use transitions and landscaped buffers where residential neighborhoods might experience noise or light from UCR activities.
2. Encourage a “permeable” edge with the community where interaction is desirable, especially along University Avenue and in areas where a high proportion of students live in close proximity to the campus.
3. Discourage vehicular traffic originating off campus from moving through campus as a short cut.
4. Provide strong connections within the campus and its edges to promote walking, bicycling and transit use, rather than vehicular traffic.
5. Continue to improve campus signage and wayfinding to provide easy access for visitors and to discourage impacts in neighboring residential areas.
6. Locate public-oriented uses, such as performance facilities, galleries and major sports venues, where they can be easily accessed and where they can contribute to the vitality and economic health of businesses along University Avenue.
7. Work cooperatively with the City of Riverside to effect the redevelopment of University Avenue between the campus and Chicago Avenue as a high intensity mixed use district, with an abundance of campus/community serving businesses and uses.
8. Encourage the City to explore the opportunity for student housing in a mixed use configuration along University Avenue.
9. Strongly encourage private developers to provide a variety of housing types that target both current and future needs of the overall community and the campus.
10. Use City/UCR/RCC enhancement of Downtown cultural, arts and entertainment resources and the campus need for off-campus housing as the foundation of a revitalization program.
11. Support the City in their coordination of Block Grant, Redevelopment set-aside, and other funds for the upgrading of Neighborhood Reinvestment Areas adjacent to University Avenue.
12. Support the City in creating design guidelines for community, student, faculty, staff and visitor housing along University Avenue that has a friendly street presence.
13. Support the City in amending the Eastside Community Plan to update housing strategies and action plans for rehabilitation of existing housing stock and new construction. This should be done in conjunction with modifications to the University Avenue Specific Plan.

14. Support the City in creating a “town/gown square” at the southwest corner of the intersection of University and Chicago Avenues to provide retail and services for the community and campus.
15. Support the City in developing design guidelines for mixed use housing and retail along University Avenue.
16. Partner with the City to create a Riverside/UCR Entrepreneurial Program at the “town/gown square” related to minority business Opportunities in the University Avenue and Hunter Business Park areas.
17. Work with the City to link the open spaces of UCR, University Avenue, the Marketplace and the Downtown with enhanced streetscape treatments for University to Market and from Market to Santa Fe Street along Mission Inn Avenue/7th Street.
18. Work with the City to link the open spaces of UCR with the Citywide Trail Network.
19. Work with the City to develop streetscape concepts with banners, lighting, street furniture and public art that celebrate the linkages between the University and Downtown. Banners should highlight cultural and artistic events in Downtown and at UCR when appropriate.
20. Work with the City to evaluate the conversion of University Avenue from Iowa Avenue to the I-215/SR 60 freeway from an auto emphasis street to a biking, pedestrian, transit street with localized auto access. Consider Martin Luther King Jr. Boulevard/14th Street and Blaine/3rd Street as primary freeway connecting streets.
21. Work with the City to emphasize University Avenue as the link between the UCR campus and Downtown rather than as the link to the freeways.
22. Work with the City to encourage bicycle and pedestrian use and safety, including minimizing the number of curb cuts for residential and retail development along University Avenue to Chicago Avenue and then to the Downtown.

### ***Transportation***

1. Develop an integrated multi-modal transportation plan to encourage walking, biking, and transit use.
2. Expand shuttle or tram service connecting major parking lots and campus destinations, and linking the East and West Campuses. Coordinate this system with RTA routes and schedules.
3. Provide a continuous network of bicycle lanes and paths throughout the campus, connecting to off-campus bicycle routes.
4. Over time, limit general vehicular circulation in the central campus, but allow transit, service, and emergency vehicle access, and provide access for persons with mobility impairments.
5. Provide bicycle parking at convenient locations.
6. Implement parking management measures that may include
  - Restricted permit availability

- Restricted permit mobility
- Differential permit parking (price determined by proximity to facilities/buildings).

### ***Development Strategies***

1. Establish a design review process to provide regular review of building and landscape development on campus.
2. Review and update, as needed, the Campus Design Guidelines and the Campus Landscape Guidelines (now the 2007 Campus Design Guidelines) to ensure conformity with LRDP planning strategies.
3. Review other plans that may be prepared, such as district, sub-area or transportation plans, for conformity with the goals and design intent of the 2005 LRDP.

### **Programs and Practices**

#### ***Aesthetics***

PP 4.1-1                      The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Land Use PP 4.9-1(a))

PP 4.1-2(a)                      The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Land Use PP 4.9-1(b))

PP 4.1-2(b)                      The Campus shall continue to relocate, where feasible, mature “specimen” trees that would be removed as a result of construction activities on the campus.

(This is identical to Land Use PP 4.9-1(c).)

PP 4.1-2(c)                      To reduce impacts to the Natural Open Space Reserve area:

- (i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

- (ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provide wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Hydrology PP 4.8-3(a).)

PP 4.1-2(d)

To reduce disturbance of Natural and Naturalistic Open Space areas:

- (i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.
- (ii) Removal of native shrub or brush shall be avoided, except where necessary.
- (iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.
- (iv) Excess fill or construction waste shall not be dumped in washes.
- (v) Vehicles or other equipment shall not be parked in washes or other drainages.
- (vi) Overwatering shall be avoided in washes and other drainages.
- (vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Biological Resources PP 4.4-1(b) and Hydrology PP 4.8-3(b).)

### *Air Quality*

PP 4.3-1

The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Transportation and Traffic PP 4.14-1)

PP 4.3-2(a)

Construction contract specifications shall include the following:

- (i) Compliance with all SCAQMD rules and regulations
- (ii) Maintenance programs to assure vehicles remain in good operating condition
- (iii) Avoid unnecessary idling of construction vehicles and equipment



- (iv) Use of alternative fuel construction vehicles
- (v) Provision of electrical power to the site, to eliminate the need for on-site generators

PP 4.3-2(b)

The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

- (i) Apply water and/or approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
- (ii) Replace ground cover in disturbed areas as quickly as possible
- (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
- (iv) Water active grading sites at least twice daily
- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period
- (vi) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces
- (x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Geology PP 4.6-2(a) and Hydrology PP 4.8-3(c).)

PP 4.3-2(c) The Campus shall continue to implement SCAQMD Rule 1403—Asbestos when demolishing existing buildings on the campus.

### ***Biological Resources***

PP 4.4-1(a) To reduce impacts to the Natural Open Space Reserve area:

- (i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.
- (ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Aesthetics PP 4.1-2(c) and Hydrology PP 4.8-3(a).)

PP 4.4-1(b) To reduce disturbance of Natural and Naturalistic Open Space areas:

- (i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.
- (ii) Removal of native shrub or brush shall be avoided, except where necessary.
- (iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.
- (iv) Excess fill or construction waste shall not be dumped in washes.
- (v) Vehicles or other equipment shall not be parked in washes or other drainages.
- (vi) Overwatering shall be avoided in washes and other drainages.
- (vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Hydrology 4.8-3(b).)

PP 4.4-2(a) Impacts to riparian and wetland habitats shall be avoided, wherever feasible. If avoidance is not feasible, then the impacts will be evaluated as part of the Clean Water Act section 404 and California Fish and Game Code section 1602 permit application process. If mitigation is required, the University of California will develop and implement a resource mitigation program to be reviewed and

approved by the USACE and CDFG through the state and federal permit process. The permit shall mitigate the habitats such that they are consistent with the Clean Water Act and CDFG policy of “no net loss” of wetland. Furthermore, impacted wetlands and/or riparian vegetation that cannot be avoided would be replaced at a ratio approved by the USACE and CDFG. If replacement within the area is not feasible, then an approved mitigation bank or other off-site area will be used. The revegetation of impacted areas or mitigation parcels will be performed by a qualified restoration specialist and shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to areas that are adjacent to existing patches of native habitat.

PP 4.4-2(b) In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

- (i) Public education and outreach on stormwater impacts
- (ii) Public involvement/participation
- (iii) Illicit discharge detection and elimination
- (iv) Pollution prevention/good housekeeping for facilities
- (v) Construction site stormwater runoff control
- (vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Geology and Soils PP 4.6-2(b) and Hydrology PP 4.8-3(d).)

### ***Cultural Resources***

PP 4.5-2 If any project is proposed that would require or result in the relocation or demolition of a historic structure, the Campus shall prepare a project-specific CEQA analysis, pursuant to Section 15064.5 et seq. of the CEQA Guidelines.

PP 4.5-3 If construction would occur within the southeast hills or within the portion of the West Campus north of Martin Luther King Boulevard, a surface field survey shall be conducted in conjunction with a project specific environmental analysis in accordance with CEQA. Depending on the results of the survey, the following measures shall be implemented:

- (i) If no evidence of surface archaeological resources is discovered, or if development would occur in areas not designated as sensitive for archaeological resources:
  - Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological

resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. Construction specifications shall require that all construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited.

- The Campus shall require the site project contractor to report any evidence of archaeological resources unearthed during development excavation to the campus.
  - The archaeologist shall then be present during the grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.
- (ii) If any evidence of archaeological materials is discovered on the surface during field survey, then:
- A qualified archaeologist shall prepare a recovery plan for the resources.
  - An archaeologist shall also be present during grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.

PP 4.5-4

Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

- (i) A qualified paleontologist shall determine the significance of the find.
- (ii) The Campus shall make an effort to preserve the find intact through feasible project design measures.
- (iii) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to document and evaluate the data and/or preserve appropriate scientific samples.
- (iv) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.

- (v) Copies of the report shall be submitted to the University and the Riverside County Museum.

PP 4.5-5

In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

### *Geology and Soils*

PP 4.6-1(a)

During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed geotechnical engineer to assess seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards. The study shall follow applicable recommendations of CDMG Special Publication 117 and shall include, but not necessarily be limited to:

- Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site,
- Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints, and
- Evaluation of depth to groundwater.

The structural engineer shall incorporate the recommendations made by the geotechnical report when designing building foundations.

PP 4.6-1(b)

The Campus shall continue to implement its current seismic upgrade program.

PP 4.6-1(c)

The Campus will continue to fully comply with the University of California's Policy for Seismic Safety, as amended. The intent of this policy is to ensure that the design and construction of new buildings and other facilities shall, as a minimum, comply with seismic provisions of California Code of Regulations, Title 24, California Administrative Code, the California State Building Code, or local seismic requirements, whichever requirements are most stringent.

PP 4.6-2(a)

The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to

reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

- (i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
- (ii) Replace ground cover in disturbed areas as quickly as possible
- (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
- (iv) Water active grading sites at least twice daily
- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period
- (vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces
- (x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Hydrology PP 4.8-3(c).)

PP 4.6-2(b)

In compliance with National Pollution Discharge Elimination System (NPDES), the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

- (i) Public education and outreach on stormwater impacts
- (ii) Public involvement/participation
- (iii) Illicit discharge detection and elimination
- (iv) Pollution prevention/good housekeeping for facilities
- (v) Construction site stormwater runoff control

(vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Hydrology PP 4.8-3(d).)

### ***Hazards and Hazardous Materials***

PP 4.7-1 The Campus shall continue to implement the current (or equivalent) health and safety plans, programs, and practices related to the use, storage, disposal, or transportation of hazardous materials, including, but not necessarily limited to, the Business Plan, the Broadscope Radioactive Materials License, and the following programs: Biosafety, Emergency Management, Environmental Health, Hazardous Materials, Industrial Hygiene and Safety, Laboratory/Research Safety, Radiation Safety, and Integrated Waste Management. These programs may be subject to modification as more stringent standards are developed or if the programs are replaced by other programs that incorporate similar health and safety protection measures.

PP 4.7-2 The Campus shall perform hazardous materials surveys on buildings and soils, if applicable, prior to demolition. When remediation is deemed necessary, surveys shall identify all potential hazardous materials within the structure to be demolished, and identify handling and disposal practices. The Campus shall follow the practices during building demolition to ensure construction worker and public safety.

PP 4.7-3 The Campus will inform employees and students of hazardous materials minimization strategies applicable to research, maintenance, and instructional activities, and require the implementation of these strategies where feasible. Strategies include but are not limited to the following:

- (i) Maintenance of online database by EH&S of available surplus chemicals retrieved from laboratories to minimize ordering or new chemicals.
- (ii) Shifting from chemical usage to micro techniques as standard practice for instruction and research, as better technology becomes available.

PP 4.7-4 Prior to demolition of structures on the campus or new construction on former agricultural teaching and research fields, the Campus shall complete a Phase I environmental site assessment to determine the potential for soil or groundwater contamination on a project site. If the assessment determines that a substantial potential exists on the site, the Campus shall develop and implement an appropriate testing and, if needed, develop a remediation strategy prior to demolition or construction activities.

If contaminated soil and/or groundwater is encountered during the removal of onsite debris or during excavation and/or grading activities

- (i) The construction contractor(s) shall stop work and immediately inform EH&S.

- (ii) An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers.
- (iii) If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater.
- (iv) Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation.
- (v) Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal.
- (vi) The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.

PP 4.7-7(a)

To the extent feasible, the Campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the Campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the Campus shall provide appropriate signage indicating alternative routes.

(This is identical to Transportation and Traffic PP 4.14-5.)

PP 4.7-7(b)

To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Transportation and Traffic PP 4.14-8.)

### ***Hydrology and Water Quality***

PP 4.8-1

The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Utilities PP 4.15-5.)

PP 4.8-2(a)

To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

- (i) Install hot water recirculation devices (to reduce water waste)



- (ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)
- (iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time
- (iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems
- (v) Prohibit using water as a means of cleaning impervious surfaces
- (vi) Install water-efficient irrigation equipment to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Utilities PP 4.15-1(b))

PP 4.8-2(b) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

(This is identical to Utilities PP 4.15-1(c))

PP 4.8-2(c) The Campus shall avoid serving water at food service facilities except upon request.

(This is identical to Utilities PP 4.15-1(d))

PP 4.8-3(a) To reduce impacts to the Natural Open Space Reserve area:

- (i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.
- (ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to Natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Aesthetics 4.1-2(c).)

PP 4.8-3(b) To reduce disturbance of Natural and Naturalistic Open Space areas:

- (i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.

- (ii) Removal of native shrub or brush shall be avoided, except where necessary.
- (iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.
- (iv) Excess fill or construction waste shall not be dumped in washes.
- (v) Vehicles or other equipment shall not be parked in washes or other drainages.
- (vi) Overwatering shall be avoided in washes and other drainages.
- (vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Biological Resources PP 4.4-1(b).)

PP 4.8-3(c)

The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

- (i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
- (ii) Replace ground cover in disturbed areas as quickly as possible
- (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
- (iv) Water active grading sites at least twice daily
- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period (vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip

(ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces

(x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Geology PP 4.6-2(a).)

PP 4.8-3(d): In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

(i) Public education and outreach on stormwater impacts

(ii) Public involvement/participation

(iii) Illicit discharge detection and elimination

(iv) Pollution prevention/good housekeeping for facilities

(v) Construction site stormwater runoff control

(vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Geology and Soils PP 4.6-2(b).)

PP 4.8-3(e) Prior to the time of design approval, the Campus will evaluate each specific project to determine if the project runoff would exceed the capacity of the existing storm drain system. If it is found that the capacity would be exceeded, one or more of the following components of the storm drain system would be implemented to minimize the occurrence of local flooding:

(i) Multi-project stormwater detention basins

(ii) Single-project detention basins

(iii) Surface detention design

(iv) Expansion or modification of the existing storm drain system

(v) Installation of necessary outlet control facilities

PP 4.8-10 In the event of an emergency, including catastrophic failure of the California State Water Project pipeline, the Campus would implement the Emergency Operations Plan.

## *Land Use*

PP 4.9-1(a) The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Aesthetics PP 4.1-1.)

PP 4.9-1(b) The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Aesthetics PP 4.1-2(a).)

PP 4.9-1(c) The Campus shall continue to relocate, where feasible, mature “specimen” trees that would be removed as a result of construction activities on the campus.

(This is identical to Aesthetics PP 4.1-2(b).)

## *Noise*

PP 4.10-1(a) UCR will incorporate the following siting design measures to reduce long-term noise impacts:

- (i) Truck access, parking area design, and air conditioning/refrigeration units will be designed and evaluated when planning specific individual new facilities to minimize the potential for noise impacts to adjacent developments.
- (ii) Building setbacks, building design and orientation will be used to reduce intrusive noise at sensitive student residential and educational building locations near main campus access routes, such as Blaine Street, Canyon Crest Drive, University Avenue, and Martin Luther King Jr. Boulevard. Noise walls may be advisable to screen existing and proposed facilities located near the I-215/SR-60 freeway.
- (iii) Adequate acoustic insulation would be added to residence halls to ensure that the interior Ldn would not exceed 45 dBA during the daytime and 40 dBA during the nighttime (10 P.M. to 7 A.M.) in rooms facing major streets.
- (iv) Potential noise impacts would be evaluated as part of the design review for all projects. If determined to be significant, mitigation measures would be identified and alternatives suggested. At a minimum, campus residence halls and student housing design would comply with Title 24, Part 2 of the California Administrative Code.

- PP 4.10-2 The UCR campus shall limit the hours of exterior construction activities from 7:00 A.M. to 9:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday when necessary. Construction traffic shall follow transportation routes prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.
- PP 4.10-5(a) The Campus shall continue to provide on-campus housing to continue the evolution of UCR from a commuter to a residential campus.
- PP 4.10-5(b) The Campus shall continue to implement an Alternative Transportation program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling.
- PP 4.10-6 The Campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.
- PP 4.10-7(a) To the extent feasible, construction activities shall be limited to 7:00 A.M. to 9:00 P.M. Monday through Friday, 8:00 A.M. to 6:00 P.M. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.
- PP 4.10-7(b) The Campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.
- PP 4.10-7(c) The Campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.
- PP 4.10-7(d) The Campus shall continue to conduct regular meetings, as needed, with on campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.
- PP 4.10-8 The Campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.

### ***Public Services***

- PP 4.12-1(a) As development occurs, the following measures will be incorporated:
- (i) New structures would be designed with adequate fire protection features in compliance with State law and the requirements of the State Fire Marshal. Building designs would be reviewed by appropriate campus staff and government agencies.

(ii) Prior to implementation of individual projects, the adequacy of water supply and water pressure will be determined in order to ensure sufficient fire protection services.

(iii) Adequate access will be provided to within 50 feet of the main entrance of occupied buildings to accommodate emergency ambulance service.

(iv) Adequate access for fire apparatus will be provided within 50 feet of stand pipes and sprinkler outlets.

(v) Service roads, plazas, and pedestrian walks that may be used for fire or emergency vehicles will be constructed to withstand loads of up to 45,000 pounds.

(vi) As implementation of the LRDP occurs, campus fire prevention staffing needs would be assessed; increases in staffing would be determined through such needs assessments.

PP 4.12-1(b) (i) Accident prevention features shall be reviewed and incorporated into new structures to minimize the need for emergency response from the City of Riverside.

(ii) Increased staffing levels for local fire agencies shall be encouraged to meet needs generated by LRDP project related on-campus population increases.

PP 4.12-2(a) As development under the LRDP occurs, the Campus will hire additional police officers and support staff as necessary to maintain an adequate level of service, staff, and equipment, and will expand the existing police facility when additional space is required.

PP 4.12-2(b) The Campus will continue to participate in the "UNET" program (for coordinated police response and staffing of a community service center), which provides law enforcement services in the vicinity of the campus, with equal participation of UCR and City police staffs.

### ***Traffic and Transportation***

PP 4.14-1 The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Air Quality PP 4.3-1.)

PP 4.14-2 The Campus will periodically assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments,

and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.

PP 4.14-4 The Campus shall provide design professionals for roadway and parking improvements with the Campus Design Guidelines and instructions to implement those elements of the guidelines relevant to parking and roadway design.

PP 4.14-5 To the extent feasible, the Campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the Campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the Campus shall provide alternate routes and appropriate signage.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(a).)

PP 4.14-6 For any construction-related closure of pedestrian routes, the Campus shall provide alternate routes and appropriate signage and provide curb cuts and street crossings to assure alternate routes are accessible.

PP 4.14-8 To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(b).)

## ***Utilities***

PP 4.15-1(a) Improvements to the campus water distribution system, including necessary pump capacity, will be made as required to serve new projects. Project-specific CEQA analysis of environmental effects that would occur prior to project-specific approval will consider the continued adequacy of the domestic/fire water systems, and no new development would occur without a demonstration that appropriate domestic/fire water supplies continue to be available.

PP 4.15-1(b) To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

(i) Install hot water recirculation devices (to reduce water waste)

(ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the

Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)

(iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time

(iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems

(v) Prohibit using water as a means of cleaning impervious surfaces

(vi) Install water-efficient irrigation equipment to local evaporation rates to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Hydrology PP 4.8-2(a).)

PP 4.15-1(c) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

PP 4.15-1(d) The Campus shall avoid serving water at food service facilities except upon request.

PP 4.15-5 The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Hydrology PP 4.8-1.)



## 2005 LRDP MITIGATION MEASURES

### *Aesthetics*

- MM 4.1-3(a) Building materials shall be reviewed and approved as part of project-specific design and through approval of construction documents. Mirrored, reflective glass is prohibited on campus.
- MM 4.1-3(b) All outdoor lighting on campus resulting from new development shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to prevent stray light spillover onto adjacent residential areas. In addition, all fixtures on elevated light standards in parking lots, parking structures, and athletic fields shall be shielded to reduce glare. Lighting plans shall be reviewed and approved prior to project-specific design and construction document approval.
- MM 4.1-3(c) Ingress and egress from new parking areas shall be designed and situated so as to minimize the impact of vehicular headlights on adjacent uses. Walls, landscaping or other light barriers will be provided. Site plans shall be reviewed and approved as part of project-specific design and construction document approval.

### *Air Quality*

- MM 4.3-2 Programs and Practices 4.3-2(a), (b), and (c), or their equivalent, shall be included in construction contract specifications. The contract specifications shall require the use of low NO<sub>x</sub> diesel fuel and construction equipment to the extent that it is readily available at the time of development.
- MM 4.3-3 To reduce energy consumption and area-wide emission of criteria pollutants, the campus shall annually inspect and enforce an emissions reduction control strategy, which may include, where feasible, the following:

#### **Design**

- Use light-colored roof materials to reduce heat gain
- Orient buildings to the north and include passive solar design features
- Increase building and attic insulation beyond Title 24 requirements
- Provide electric vehicle charging systems at convenient location in campus parking facilities
- Provide prominent website and/or kiosks displaying information about alternative transportation

- Install electrical outlets outside buildings for the use of electric landscape maintenance equipment

### **Operation**

- Implement a subsidized vanpool program
- Implement staggered or compressed work schedules to reduce vehicular traffic
- Use alternative fuel shuttle buses to reduce intra-campus vehicle trips
- Provide shuttle service to major off-campus activity centers and Metrolink station(s)
- Aggressive expansion of the campus TDM program to achieve an AVR of 1.5
- Expand transit subsidies to encourage use of public transit
- Implement incentives for telecommuting
- Convert campus fleet to low emission, alternative fuel, and electric vehicles over time
- Implement solar or low-emission water heaters
- Implement an educational program for faculty and staff and distribute information to students and visitors about air pollution problems and solutions

### ***Biological Resources***

MM 4.4-1(a) To ensure that potential impacts to special status plant and wildlife species that are known to occur within the Natural and Naturalistic areas of the campus or have a moderate or greater potential to occur are reduced to less than significant levels, the campus shall conduct surveys for special-status species prior to disturbance of areas or habitat that are known to support the species. The University shall conduct surveys of the area(s) in accordance with applicable protocols or guidelines developed by the CDFG and/or USFWS, as applicable.

MM 4.4-1(b) If surveys determine that special-status plant or animal species are present, the following measures shall be implemented:

- (i) Vegetation: If sensitive plant species or habitats are observed and would be impacted by project-related activities, a qualified botanist shall develop a species or habitats-specific replacement plan. This plan shall include elements to limit project impacts such as the relocation of individual specimens, the collection of seeds and replanting, or the

preservation and movement of topsoil that contains the seed bank. If replacement within the project area is not feasible, then an approved mitigation bank shall be used. For either case, on-site or off-site revegetation, a mitigation monitoring plan shall be prepared and approved by the CDFG prior to start of construction.

- (ii) Wildlife: If special status wildlife is found within areas of proposed construction and avoidance is not feasible, the campus will consult with the appropriate agencies, obtain any necessary State or federal permits, and prepare a mitigation plan for those special-status species that would be impacted. The mitigation plan would be subject to the approval of applicable State and/or federal agencies, and may include measures such as the relocation of the affected species, protection of other on-campus habitat where the plant or animal is known to occur, or site preparation and revegetation to create suitable habitat.

MM 4.4-3(a) When habitat that could be regulated by the Clean Water Act (Section 404) would be impacted, either directly or indirectly, the University shall perform a jurisdictional and/or wetland delineation to assess the extent of the jurisdictional area(s).

MM 4.4-3(b) If wetland or riparian habitat would be removed as a result of project development, the University shall restore or enhance wetland or riparian habitat as required by the applicable State and/or federal resource agencies.

MM 4.4-3(c) Any proposal for wetland creation or enhancement (pursuant to MM 4.4-3(b) above) will be based upon the completion of soils, hydrologic and other studies confirming the feasibility of the creation or enhancement proposal and shall include United States Army Corps of Engineers (USACE)-approved measures intended to promote occupancy by special status and other wetland-dependent species (e.g., plantings, collection of topsoil and inoculation of target areas).

MM 4.4-4(a) Prior to the onset of construction activities that would result in the removal of mature trees that would occur between March and mid-August, surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.

MM 4.4-4(b) If active nests for avian species of concern or raptor nests are found within the construction footprint or a 250-foot buffer zone, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with USFWS and CDFG

## *Cultural Resources*

- MM 4.5-1(a) Before altering or otherwise affecting a building or structure 50 years old or older, the campus shall retain a qualified architectural historian to evaluate the potential significance of the building, using the significance criteria set forth for historic resources under CEQA Guidelines Section 15064.5. The evaluation process shall include the development of appropriate historical background research as context for the assessment of the significance of the structure in the history of the University system, the campus, and the region. For historic buildings, structures, or features that do not meet the CEQA criteria for historical resource, no further mitigation is required and the impact is less than significant.
- MM 4.5-1(b) The University shall follow the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995) or the State Historical Building Code, as appropriate when making modifications to historic structures eligible for NRHP or CRHR listing.
- MM 4.5-2(a) For any proposal to demolish a structure or building that has been determined by a qualified architectural historian to qualify as an historical resource and where it has been determined that avoidance is not feasible, documentation and treatment shall be carried out as described below:
- (i) If preservation and reuse at the site are not feasible, the historical building shall be documented as described in item (ii) and, when physically and financially feasible, be moved and preserved or reused.
  - (ii) If a significant historic building or structure is proposed to be demolished, the campus shall ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation shall include still and video photography and a written documentary record of the building to the standards of the Historic American Building Survey (HABS) or Historic American Engineering Record (HAER), including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. A copy of the record shall be deposited with the University archives, Rivera Library Special Collections. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site specific and comparative archival research, and oral history collection as appropriate.

## *Hazards and Hazardous Materials*

- MM 4.7-4 Prior to development on former agricultural lands, appropriate soil testing shall be performed to determine whether chemical residue is present from prior activities in amounts that would pose health hazards to construction workers and/or occupants of new buildings. If contamination is determined to be present, PP 4.7-4 shall be implemented.

- MM 4.7-7(a) Evacuation zones designated in the UCR Emergency Operations Plan will be avoided, to the extent feasible, when siting construction staging areas. Where evacuation zones cannot be avoided, alternative evacuation zones shall be identified. UCPD and the Riverside Fire Department shall be notified of alternative evacuation zones so that they can respond accordingly to any emergencies.
- MM 4.7-7(b) The campus Emergency Operations Plan shall be reviewed on an annual basis and updated as appropriate to account for new on-campus development, which may require changes to the plan, such as revised locations for Campus Evacuation Zones.
- MM 4.7-8(a) Provide landscaping around development areas adjacent to preserved open space that emphasizes native or traditional plant material where appropriate and provides a transition to developed areas in a manner that minimizes dense vegetation immediately adjacent to structural development. Landscaping shall be shown on building plans, and plans shall be reviewed and approved for conformance with this measure prior to project design approval and project-specific construction documents.
- MM 4.7-8(b) Implement annual fuel management procedures to maintain a firebreak between the undeveloped areas and structures.

### *Hydrology and Water Quality*

- MM 4.8-9(a) Prior to design approval, the campus will review the plans for all structures to be constructed in the 100-year floodplain for compliance with the following FEMA requirements for nonresidential structures:
- (i) Elevate the lowest floor (including the basement) to or above the base flood level; or
  - (ii) Together with attendant utility and sanitary facilities, design so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
  - (iii) Require that fully enclosed areas below the lowest floor that are subject to flooding be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of flood waters.
- MM 4.8-9(b) For structures placed within the 100-year floodplain, flood control devices will be designed to direct flows toward areas where flood hazards will be minimal.

## *Land Use*

Implementation of the following Mitigation Measures would assure consistency with applicable land use plans and policies:

- MM 4.4-1(a) and (b)
- MM 4.4-3(a) and (b)
- MM 4.4-4(a) and (b)
- MM 4.5-1
- MM 4.5-2
- MM 4.6-1(a)
- MM 4.7-8(a) and (b)
- MM 4.8-9(a) and (b)

## *Noise*

MM 4.10-2                      The campus shall notify all academic and residential facilities within 300 feet of approved construction sites of the planned schedule of vibration causing activities so that the occupants and/or researchers can take necessary precautionary measures to avoid negative effects to their activities and/or research.

## *Traffic and Transportation*

MM 4.14-1(a)                      The intersection of 3rd Street/Chicago Avenue would require an additional left-turn lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)

MM 4.14-1(b)                      In addition to the improvements identified for the 'Without Project' scenario, the intersection of Blaine Street/Iowa Avenue would require an additional left-turn lane on the eastbound approach, and a separate through and right-turn lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)

MM 4.14-1(c)                      In addition to the improvements identified for the 'Without Project' scenario, the intersection of University Avenue/Chicago Avenue would require a separate through and a right-turn lane on the southbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)

MM 4.14-1(d)                      The intersection of University Avenue/Iowa Avenue would require an additional left-turn lane on the eastbound approach to operate at LOS D or better. The

approach currently consists of one left-turn lane, two through lanes, and one right-turn lane. The mitigated approach would consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. (This intersection is under the jurisdiction of the City of Riverside.)

- MM 4.14-1(e) In addition to the improvements identified for the 'Without Project' scenario, the intersection of Martin Luther King Boulevard/Chicago Avenue would require an additional through lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(f) In addition to the improvements identified for the 'Without Project' scenario, the intersection of Martin Luther King Boulevard/Canyon Crest Drive would require an additional left-turn lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(g) The intersection of Linden Street/Aberdeen Drive would require a shared through /left-turn lane and a right-turn lane on the eastbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the University.) Please note that this is a T-intersection.
- MM 4.14-1(h) In addition to the improvements identified for the 'Without Project' scenario, the intersection of Blaine Street/Iowa Avenue would require an additional left-turn lane on the southbound approach, an additional left-turn lane on the eastbound approach, an additional left-turn lane on the westbound approach, and a separate through and right-turn lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(i) The intersection of University Avenue/Iowa Avenue would require an additional left-turn lane on the eastbound approach, and a separate through and right lane on the southbound approach to operate at LOS D or better. The southbound approach currently consists of one left-turn lane, one through lane, and one shared through/right-turn lane. The mitigated southbound approach would consist of one left-turn lane, two through lanes, and one right-turn lane. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(j) The intersection of Martin Luther King Boulevard/Chicago Avenue would require an additional through and an additional right-turn lane on the eastbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(k) In addition to the improvements identified for the 'Without Project' scenario, the intersection of Martin Luther King Boulevard/Canyon Crest Drive would require an additional left-turn lane on the westbound approach to operate at LOS D or better. (This intersection is under the jurisdiction of the City of Riverside.)
- MM 4.14-1(l) The intersection of Linden Street/Aberdeen Drive would require a shared through/left-turn lane and a right-turn lane on the eastbound approach to

operate at LOS D or better. (This intersection is under the jurisdiction of the University.)

MM 4.14-10(a) The campus shall work with the City of Riverside to monitor the demand for off-campus parking in residential neighborhoods or at commercial establishments to determine whether use of off-campus parking by the campus population is substantially restricting availability for neighborhood residents or patrons of commercial establishments.

MM 4.14-10(b) If the campus and the City of Riverside mutually determine that use of off-campus parking by members of the campus population has substantially restricted availability to residents and patrons of commercial establishments, the campus and the City will work cooperatively to implement appropriate measures, which may include, but not be limited to:

- (i) Increased enforcement of existing parking regulations,
- (ii) Changes in parking regulations (e.g., time restrictions for on-street parking), and
- (iii) A permit parking program for affected residential neighborhoods and/or commercial facilities.

MM 4.14-11 If on-campus parking is not available, off-site construction worker parking shall be provided with shuttle service to the remote parking location

MM 4.14-13 As part of the Multi-modal Transportation Program, the UCR Transportation and Parking Services department will work with transit service providers on an annual basis to monitor demand for transit services, to identify needed service improvements, and encourage the implementation of any such improvements.

### ***Utilities***

MM 4.15-6(a) UCR will work with the City of Riverside to evaluate the capacity of existing sewer trunk lines serving the campus and estimate the future impact of LRDP implementation on available capacity.

MM 4.15-6(b) If the study of sewer trunk line capacity determines that available capacity would be exceeded, UCR and the City will negotiate payment of fair share of improvements to provide sufficient discharge capacity to meet campus needs. UCR shall contribute its fair share payments and additional required trunk line capacity shall be provided by the City prior to exceedance of sewer trunk line capacity.



## 2005 LRDP AMENDMENT 2 MITIGATION MEASURES

### *Air Quality*

MM 4.3-1a For each construction project on the campus, the project contractor will implement Programs and Practices 4.3-2(a) and 4.3-2(b).

In addition, the following PM10 and PM2.5 control measure shall be implemented for each construction project:

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

MM 4.3-1b For each construction project on the campus, the University shall require that the project include a construction emissions control plan that includes a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used for an aggregate of 40 or more hours during any portion of the construction project. During construction activity, the contractor shall utilize CARB certified equipment or better for all on-site construction equipment according to the following schedule:

- January 1, 2011 to December 31, 2011: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 2 off-road emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- January 1, 2012 to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- Post January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- A copy of each unit's certified specification, BACT documentation and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit or equipment.
- Encourage construction contractors to apply for AQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate clean-up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: <http://www.aqmd.gov/tao/implementation/soonprogram.htm>
- The contractor shall also implement the following measures during construction:
  - Prohibit vehicle and engine idling in excess of 5 minutes and ensure that all off-road equipment is compliant with the California Air Resources Board's (CARB) in-use off-road diesel vehicle regulation and SCAQMD Rule 2449.
  - Configure construction parking to minimize traffic interference.
  - Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
  - Provide dedicated turn lanes for movement of construction trucks and equipment on- and off site.
  - Schedule construction activities that affect traffic flow on the arterial system to off-peak hour to the extent practicable.
  - Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications.
  - Use diesel-powered construction vehicles and equipment that operate on low-NOx fuel where possible.
  - Reroute construction trucks away from congested streets or sensitive receptor areas.
  - Maintain and tune all vehicles and equipment according to manufacturers' specifications.

MM 4.3-1c

To minimize VOC emissions from the painting/finishing phase, for each construction project on the campus, the project contractor will implement the following VOC control measures:

- Construct or build with materials that do not require painting, or use pre-painted construction materials.
- If appropriate materials are not available or are cost-prohibitive, use low VOC content materials more stringent than required under SCAQMD Rule 113.

MM 4.3-2a

The Campus will:

- Implement a subsidized vanpool program.
- Implement staggered or compressed work schedules to reduce vehicular traffic.
- Use alternative fuel Shuttle buses to reduce intra-campus vehicle trips.
- Provide Shuttle service to major off-campus activity centers and Metrolink stations.
- Aggressive expansion of the campus TDM program to achieve an AVR of 1.5.
- Expand transit subsidies to encourage use of public transit.
- Implement incentives for telecommuting.
- Convert campus fleet to low-emission, alternative fuel and electric vehicles over time.
- Implement solar or low-emission water heaters.
- Implement an educational program for faculty and staff and distribute information to students and visitors about air pollution problems and solutions.

MM 4.3-2b

UCR shall continue to participate in greenhouse gas (GHG) reduction programs such as the American College and University Presidents' Climate Commitment (ACUPCC) and shall adhere to the UC Policy on Sustainable Practices. The measures adopted by UCR are presented in Tables 4.16-9 and 4.16-10 in Section 4.16 Greenhouse Gas Emissions. While these measures are typically targeted at GHG emissions, many act to reduce energy consumption and vehicle use on campus and would consequently also reduce air pollutant emissions from both area and mobile sources. In accordance with the ACUPCC and the UC Policy on Sustainable Practices and through implementation of its Climate Action Plan, UCR shall commit to reducing GHG emissions to 1990 levels by 2020, which would require significant reductions (on the order of 70 percent) from these sources in terms of GHG and therefore reductions in other air pollutants as well.

MM 4.3-6 The University will implement Mitigation Measure 4.3-1, which is designed to reduce construction emissions. It will also implement Mitigation Measure 4.3-2b which will reduce air pollutant emissions resulting from traffic and energy consumption during campus operations.

MM 4.3-7 The Campus will implement Mitigation Measure 4.3-2b, which will reduce traffic associated with campus operations.

### *Noise*

MM 4.10-2 The Campus shall notify all academic and residential facilities within 300 feet of approved construction sites of the planned schedule of vibration causing activities so that the occupants and/or researchers can take necessary precautionary measures to avoid negative effects to their activities and/or research.

### *Public Services*

MM 4.12-1 Should the City propose the construction of a new fire station to serve the campus and its surrounding areas, and the analysis of the environmental effects of the fire station project indicate that there would be potentially significant impacts requiring mitigation, the University will pay its proportional share of the cost of the environmental mitigation required for the project.

### *Traffic and Transportation*

MM 4.14-1a Reconfigure the intersection of Parking Lot 1/Campus Drive to add a lane to the eastbound approach that would result in a joint left-turn/through lane with a separate right-turn lane and signalize intersection.

MM 4.14-1b Travel Demand Management. To reduce on- and off-campus vehicle trips and resulting impacts, the University will enhance its Transportation Demand Management (TDM) program. TDM strategies will include measures to increase transit and Shuttle use, encourage alternative transportation modes including bicycle transportation, implement parking policies that reduce demand, and other mechanisms that reduce vehicle trips to and from the campus. The University shall monitor the performance of campus TDM strategies through annual surveys.

MM 4.14-1c Transit Enhancement. To enhance transit systems serving the campus, the University will work cooperatively with the RTA, and other local agencies to coordinate service routes with existing and proposed Shuttle and transit programs.

MM 4.14-1d Sustainability and Monitoring. The University shall review individual projects proposed under the amended 2005 LRDP for consistency with UC sustainable transportation policy and UCR TDM strategies to ensure that bicycle and pedestrian improvements, alternative fuel infrastructure, transit stops, and other

project features that promote alternative transportation are incorporated into each project to the extent feasible.

MM 4.14-1e Campus Traffic Impact Monitoring. The University will conduct traffic counts at key gateway locations on the campus every five years to determine the amount of traffic generated by the campus.

MM 4.14-1f Mitigation Payments. The University's proportional share of the cost of the roadway improvements in Table 4.14-18 is determined by dividing projected LRDP-related trips by the increase in background traffic between existing conditions and 2020. The projected proportional share percentage of each improvement is provided in Table 4.14-18, but the University's actual share will be determined based on actual project trips as established by monitoring under Mitigation Measure 4.14-1e. It is anticipated that at the time that the City proposes an improvement at an affected intersection and requests a proportional share payment, the University's proportional share will be calculated using the following formula:

Campus Proportional Share % of mitigation project = (calculated impact contribution from EIR) \* (traffic growth in year X/projected LRDP traffic growth in 2020)

Where:

X = the year the mitigation project is constructed

Traffic growth in year X = gateway counts in year X - gateway counts in LRDP baseline year 2010

Projected LRDP traffic growth in 2020 = 2020 LRDP gateway forecasts from EIR - gateway counts in LRDP baseline year (2010)

The University's payment of its proportional share of the cost of the improvements will be made available to the jurisdiction no later than the start of construction of when implementation of the improvement is reasonably certain.

Contributions made by the University that exceed its proportional share of the cost of mitigation or that mitigates more than its impact may be credited towards mitigation by the University of future impacts.

## ***Utilities***

MM 4.15-2 Should the City determine that construction of new water treatment facilities or expansion of existing water treatment facilities is required in order to accommodate campus demand, and the analysis of the environmental effects of constructing or expanding these facilities indicate that there would be potentially significant impacts requiring mitigation, the University will pay its proportional share of the cost of the environmental mitigation required for the project.

- MM 4.15-3                   Should the City determine that construction of new or expanded wastewater treatment facilities is required in order to accommodate campus flows, and the analysis of the environmental effects of constructing or expanding these facilities indicate that there would be potentially significant impacts requiring mitigation, the University will pay its proportional share of the cost of the environmental mitigation required for the project.
- MM 4.15-4                   Should the City determine that construction of new wastewater conveyance facilities or expansion of existing conveyance facilities on and off campus is required in order to accommodate campus discharges, and the analysis of the environmental effects of constructing or expanding these facilities indicate that there would be potentially significant impacts requiring mitigation, the University will pay its proportional share of the cost of the environmental mitigation required for the project.
- MM 4.15-5                   Should the City determine that construction of new storm water facilities or expansion of existing storm water facilities on and off campus is required in order to accommodate campus discharges, and the analysis of the environmental effects of constructing or expanding these facilities indicate that there would be potentially significant impacts requiring mitigation, the University will pay its proportional share of the cost of the environmental mitigation required for the project.

*Greenhouse Gas Emissions*

- MM 4.16-1                   All projects developed under the amended 2005 LRDP shall be evaluated for consistency with the GHG reduction policies of the UCR CAP and the UC Policy on Sustainable Practices, as may be updated from time to time by the University. GHG reduction measures, including, but not limited to, those found within the UCR CAP and UC Policy identified in Tables 4.16-9 and 4.16-10 shall be incorporated in all campus projects so that at a minimum an 8 percent reduction in emissions from BAU is achieved. It is expected that the GHG reduction measures in the UCR CAP will be refined from time to time, especially in light of the evolving regulations and as more information becomes available regarding the effectiveness of specific GHG reduction measures. As part of the implementation of the UCR CAP, the Campus will also monitor its progress in reducing GHG emissions to ensure it will attain the established targets

**LRDP EIR Planning Strategies, Programs and Practices and Mitigation Measures  
Summary of Applicability and Implementation Status  
North District Development Plan**

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
The following information serves as a key to the coding used for the category, responsible unit, mitigation timing, and compliance action:		
<u><b>Responsible UCR Units</b></u> AG OPS: Agricultural Operations CRM: Capital Resource Management DS: Dining Services EHS: Environmental Health and Safety FS: Fleet Services HSG: Housing Services AE: Architects & Engineers PD: Police Department PP: Physical Plant TAPS: Transportation and Parking Services	<u><b>Mitigation Timing</b></u> P: Implement during programming D: Incorporate into project-specific design E: Implement during environmental documentation (CEQA) C: Implement during construction of specific projects O: Implement as an ongoing campus practice	
<u><b>Compliance Action</b></u> AP: Administrative/Planning Activity CD: Incorporate into construction contract specifications ED: Environmental Documentation FO: Field observation activity/inspections	<u><b>Category</b></u> AM: Administrative Measure PS: Project Specific SL: Service Level	
<b>PS Land Use 4</b> Pursue a goal of housing 50 percent of student enrollment in on campus or campus controlled housing. (Category: AM; Responsible Unit: CRM, HSG; Timing: P; Compliance: AP)	Part of Project. No further action required.	The proposed NDD Plan would increase on-campus housing availability for students.
<b>PS Land Use 7</b> Over time, relocate parking from central campus locations to the periphery of the academic core and replace surface parking with structures, where appropriate. (Category: AM; Responsible Unit: CRM, TAPS; Timing: P; Compliance: AP)	Part of Project. No further action required.	The parking included in the NDD Plan would provide parking at the edge of campus.
<b>PS Open Space 4</b> Provide landscaped buffers and setbacks along campus edges, such as Valencia Hill Drive and its extension south of Big Springs Road, Martin Luther King Jr. Boulevard, and the I-215/SR-60 freeway. (Category: AM; Responsible Unit: CRM; Timing: P; Compliance: AP)	Part of Project. No further action required	The proposed NDD Plan would include improvements along Watkins Drive and Blaine Street, with a new landscaped edge providing visual screening of the new buildings and parking lots/structures.
<b>PS Campus and Community 1</b> Provide sensitive land use transitions and landscaped buffers where residential off campus neighborhoods might experience noise or light from UCR activities. (Category: AM; Responsible Unit: CRM; Timing: P; Compliance: AP)	Part of Project No further action required	The proposed NDD Plan would include landscaped buffers and setbacks along Blaine Street and Watkins Drive.

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<p><b>PS Transportation 6</b> Implement parking management measures that may include</p> <ul style="list-style-type: none"> <li>• Restricted permit availability</li> <li>• Restricted permit mobility</li> <li>• Differential permit pricing</li> </ul> <p><i>(Category: AM; Responsible Unit: TAPS; Timing: O; Compliance: AP)</i></p>	<p>Part of Project No further action required</p>	
<p><b>PS Development Strategy 1</b> Establish a design review process to provide regular review of building and landscape development on campus. <i>(Category: AM; Responsible Unit: CRM, AE; Timing: O; Compliance: AP)</i></p>	<p>Part of Project No further action required</p>	<p>The Campus and all relevant entities would review project designs to ensure compatibility with existing campus aesthetics.</p>
<b>AESTHETICS</b>		
<p><b>PP 4.1-1</b> The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design. (This is identical to Land Use PP 4.9-1(a).) <i>(Category: PS; Responsible Unit: CRM, AE; Timing: P, D; Compliance: AP)</i></p>	<p>Part of Project No further action required</p>	<p>The campus has provided the indicated guidelines and instructions to the design team.</p>
<p><b>PP 4.1-2(a)</b> The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible. (This is identical to Land Use PP 4.9-1(b).) <i>(Category: PS; Responsible Unit: CRM, AE; Timing: P, D; Compliance: AP)</i></p>	<p>Part of Project No further action required</p>	<p>The campus has provided the indicated guidelines and instructions to the design team.</p>
<p><b>PP 4.1-2(b)</b> The campus shall continue to relocate, where feasible, mature “specimen” trees that would be removed as a result of construction activities on the campus. (This is identical to Land Use PP 4.9-1(c).) <i>(Category: AM, PS; Responsible Unit: AE, PP; Timing: P, D, E, O; Compliance: AP, CD)</i></p>	<p>Part of Project No further action required</p>	<p>The campus has provided the indicated guidelines and instructions to the design team.</p>
<p><b>MM 4.1-3(a)</b> Building materials shall be reviewed and approved as part of project-specific design and through approval of construction documents. Mirrored, reflective glass is prohibited on campus. <i>(Category: PS; Responsible Unit: AE; Timing: D; Compliance: CD)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>The proposed project has been subject to a design review process. Project design does not include reflective glass.</p>
<p><b>MM 4.1-3(b)</b> All outdoor lighting on campus resulting from new development shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to prevent stray light spillover onto adjacent residential areas. In addition, all fixtures on elevated light standards in parking lots, parking structures, and athletic fields shall be shielded to reduce glare. Lighting plans shall be reviewed and approved prior to project-specific design and construction document approval. <i>(Category: PS; Responsible Unit: AE, PP, TAPS; Timing: D, O; Compliance: AP, CD)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>Project lighting will be directed downward and shielded to prevent glare.</p>
<p><b>MM 4.1-3(c)</b> Ingress and egress from new parking areas shall be designed and situated so as to minimize the impact of vehicular headlights on adjacent uses. Walls, landscaping or other light barriers will be provided. Site plans shall be reviewed and approved as part of project-specific design and construction document approval. <i>(Category: PS; Responsible Unit: AE, TAPS; Timing: D, O; Compliance: AP, CD)</i></p>	<p>Part of Project No further action required</p>	<p>The proposed project has been subject to a design review process.</p>



2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<b>GREENHOUSE GAS EMISSIONS</b>		
<p><b>MM 4.3-1:</b> All projects developed under the amended 2005 LRDP shall be evaluated for consistency with the GHG reduction policies of the UCR CAP and UC Policy on Sustainable Practices, as may be updated from time to time by the University. GHG reduction measures, including, but not limited to, those found within the UCR CAP and UC Policy identified in Table 4.3-6 and 4.3-7 shall be incorporated in all campus projects so that at a minimum an 8 percent reduction in emissions from BAU is achieved. It is expected that the GHG reduction measures in the UCR CAP will be refined from time to time, especially in light of the evolving regulations and as more information becomes available regarding the effectiveness of specific GHG reduction measures. As part of the implementation of the UCR CAP, the Campus will also monitor its progress in reducing GHG emissions to ensure it will attain the established targets.</p> <p><i>(Category: AM, PS; Responsible Unit: CRM, EH&amp;S; Timing: P, D, C, O; Compliance: AP)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>The project includes appropriate GHG reduction measures.</p>
<b>HAZARDS AND HAZARDOUS MATERIALS</b>		
<p><b>PP 4.7-1</b> The Campus shall continue to implement the current (or equivalent) health and safety plans, programs, and practices related to the use, storage, disposal, or transportation of hazardous materials, including, but not necessarily limited to, the Business Plan, the Broadscope Radioactive Materials License, and the following programs: Biosafety, Emergency Management, Environmental Health, Hazardous Materials, Industrial Hygiene and Safety, Laboratory/Research Safety, Radiation Safety, and Integrated Waste Management. These programs may be subject to modification as more stringent standards are developed or if the programs are replaced by other programs that incorporate similar health and safety protection measures. <i>(Category: AM, SL; Responsible Unit: EHS; Timing: C,O; Compliance: AP,FO)</i></p>	<p>Part of Project Ongoing Campus-wide Program Ongoing oversight throughout design, construction and operation</p>	<p>Relevant aspects of these plans will be implemented in the course of normal operations during construction and ongoing operation.</p>
<p><b>PP 4.7-2</b> The campus shall perform hazardous materials surveys on buildings and soils, if applicable, prior to demolition. When remediation is deemed necessary, surveys shall identify all potential hazardous materials within the structure to be demolished, and identify handling and disposal practices. The campus shall follow the practices during building demolition to ensure construction worker and public safety. <i>(Category: PS; Responsible Unit: EHS,AE; Timing: P, D, E, C, O; Compliance: CD, FO)</i></p>	<p>Part of Project Ongoing oversight throughout design and demolition</p>	<p>Asbestos surveys of the existing housing have been conducted.</p>
<p><b>PP 4.7-3</b> The Campus will inform employees and students of hazardous materials minimization strategies applicable to research, maintenance, and instructional activities, and require the implementation of these strategies where feasible. Strategies include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>(i) Maintenance of online database by EH&amp;S of available surplus chemicals retrieved from laboratories to minimize ordering or new chemicals.</li> <li>(ii) Shifting from chemical usage to micro techniques as standard practice for instruction and research, as better technology becomes available.</li> </ul> <p><i>(Category: SL; Responsible Unit: EHS; Timing: O; Compliance: AP, FO)</i></p>	<p>Ongoing Campus-wide Program Ongoing oversight throughout design, construction and operation</p>	<p>Relevant hazardous materials minimization strategies will be implemented the course of normal operations during ongoing operation.</p>

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<b>HAZARDS AND HAZARDOUS MATERIALS (continued)</b>		
<p><b>MM 4.7-1</b> Prior to the commencement of demolition activities, a Soil Management Plan (SMP) shall be prepared per DTSC guidelines and submitted to the DTSC for their review and approval. The SMP shall discuss various methods for the excavation and removal of soil around all structures, at a volume three feet deep and three feet away. On-site soil excavation personnel shall be licensed and trained to properly handle hazardous materials encountered at, and removed from, the site.</p> <p><i>(Category: PS; Responsible Unit: AG OPS,EHS,AE,PP; Timing: P, D, E, C, O; Compliance: ED)</i></p>	Part of Project Ongoing oversight through design and demolition	
<p><b>PP 4.7-7(a)</b> To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes. (This is identical to Transportation and Traffic PP 4.14-5.)</p> <p><i>(Category: PS, SL; Responsible Unit: AE,PP,TAPS; Timing: O, C; Compliance: CD,FO)</i></p>	Part of Project Ongoing oversight through design and construction	
<p><b>PP 4.7-7(b)</b> To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction<sup>1</sup> shall consult with the UCPD, EH&amp;S, and the RFD to disclose roadway closures and identify alternative travel routes. (This is identical to Transportation and Traffic PP 4.14-8.) <i>(Category: PS, SL; Responsible Unit: AE,PP; Timing: O, C; Compliance: CD,FO)</i></p>	Part of Project Ongoing oversight through design and construction	The UCR Office of Architects & Engineers must conduct this coordination prior to any roadway closures.
<b>LAND USE AND PLANNING</b>		
<p><b>PP 4.9-1(a)</b> Provide design professionals with 2007 Campus Design Guidelines See PP 4.1-1</p>	Part of Project	See PP 4.1-1
<p><b>PP 4.9-1(b)</b> Provide design professionals with the 2007 Campus Design Guidelines See PP 4.1-2(a).</p>	Part of Project	See PP 4.1-2(a)
<b>NOISE</b>		
<p><b>PP 4.10-1(a)</b> UCR will incorporate the following siting design measures to reduce long-term noise impacts:</p>		
<p>(i) Truck access, parking area design, and air conditioning/refrigeration units will be designed and evaluated when planning specific individual new facilities to minimize the potential for noise impacts to adjacent developments.</p>	Part of Project No further action required	The project has been designed to consider noise generation and exposure to on- and off-campus residences.
<p>(ii) Building setbacks, building design and orientation will be used to reduce intrusive noise at sensitive student residential and educational building locations near main campus access routes, such as Blaine Street, Canyon Crest Drive, University Avenue, and Martin Luther King Jr. Boulevard. Noise walls may be advisable to screen existing and proposed facilities located near the I-215/SR-60 freeway.</p>	Part of Project No further action required	
<p>(iii) Adequate acoustic insulation would be added to residence halls to ensure that the interior L<sub>dn</sub> would not exceed 45 dB(A) during the daytime and 40 dB(A) during the nighttime (10 PM to 7 AM) in rooms facing major streets.</p>	Not applicable	

<sup>1</sup> Office Design and Construction has been renamed the Office of Planning, Design, and Construction.

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<p>(iv) Potential noise impacts would be evaluated as part of the design review for all projects. If determined to be significant, mitigation measures would be identified and alternatives suggested. At a minimum, campus residence halls and student housing design would comply with Title 24, Part 2 of the California Administrative Code.</p> <p><i>(Category: PS; Responsible Unit: AE; Timing: P, D; Compliance: AP, CD, ED)</i></p>	<p>Part of Project No further action required</p>	<p>The project has been designed to consider noise generation and exposure to on- and off-campus residences.</p>
<p><b>PP 4.10-2</b> The UCR Campus shall limit the hours of exterior construction activities from 7:00 AM to 9:00 PM. Monday through Friday and 8:00 AM. to 6:00PM. on Saturday when necessary. Construction traffic shall follow transportation routes prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.</p> <p><i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: CD)</i></p>	<p>Part of Project Ongoing oversight through construction documents and during construction</p>	<p>This is a standard component of campus construction projects.</p>
<p><b>PP 4.10-5(b)</b> The Campus shall continue to implement an Alternative Transportation program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling. <i>(Category: AM, SL; Responsible Unit: TAPS; Timing: O; Compliance: AP)</i></p>	<p>Ongoing Campus-wide Program</p>	<p>The project will not conflict with the campus's Alternative Transportation program.</p>
<p><b>PP 4.10-6</b> The Campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses. <i>(Category: PS; Responsible Unit: AE, PP; Timing: P, D, E, C, O; Compliance: AP, CD)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	
<p><b>PP 4.10-7(a)</b> To the extent feasible, construction activities shall be limited to 7:00 AM to 9:00 PM. Monday through Friday, 8:00 AM to 6:00 PM on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise. <i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: CD)</i></p>	<p>Part of Project</p>	<p>See PP 4.10-2</p>
<p><b>PP 4.10-7(b)</b> The Campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers. <i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: CD)</i></p>	<p>Part of Project Ongoing oversight through construction documents and during construction</p>	<p>This is a standard component of campus construction projects.</p>
<p><b>PP 4.10-7(c)</b> The Campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors. <i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: CD)</i></p>	<p>Part of Project Ongoing oversight through construction documents and during construction</p>	<p>This is a standard component of campus construction projects.</p>
<p><b>PP 4.10-7(d)</b> The Campus shall continue to conduct regular meetings, as needed, with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed. <i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: AP)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard component of campus construction projects.</p>

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<p><b>PP 4.10-8</b> The Campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible. <i>(Category: PS; Responsible Unit: AE, PP; Timing: C; Compliance: AP)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard component of campus construction projects.</p>
<p><b>MM 4.10-2:</b> The Campus shall notify all academic and residential facilities within 300 feet of approved construction sites of the planned schedule of vibration causing activities so that the occupants and/or researchers can take necessary precautionary measures to avoid negative effects to their activities and/or research. <i>(Category: PS; Responsible Unit: AE; Timing: C; Compliance: AP)</i></p>	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard component of campus construction projects.</p>
<b>PUBLIC SERVICES</b>		
<b>PP 4.12-1(a)</b> As development occurs, the following measures will be incorporated:		
(i) New structures would be designed with adequate fire protection features in compliance with State law and the requirements of the State Fire Marshal. Building designs would be reviewed by appropriate campus staff and government agencies.	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard element of the campus design process. The Campus Fire Marshal is a participant in the design and construction process.</p>
(ii) Prior to implementation of individual projects, the adequacy of water supply and water pressure will be determined in order to ensure sufficient fire protection services.	<p>Part of Project No further action required</p>	<p>A fire flow evaluation has been completed.</p>
(iii) Adequate access will be provided to within 50 feet of the main entrance of occupied buildings to accommodate emergency ambulance service.	<p>Part of Project No further action required</p>	<p>This is a standard element of the campus design process. The site plan (Draft EIR Figure 3.0-4) illustrates such access to the EH&amp;S Expansion building under the proposed design.</p>
(iv) Adequate access for fire apparatus will be provided within 50 feet of stand pipes and sprinkler outlets.	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard element of the campus design process. The Campus Fire Marshal is a participant in the design and construction process.</p>
(v) Service roads, plazas, and pedestrian walks that may be used for fire or emergency vehicles will be constructed to withstand loads of up to 45,000 pounds.	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard element of the campus design process. The Campus Fire Marshal is a participant in the design and construction process.</p>
(vi) As implementation of the LRDP occurs, campus fire prevention staffing needs would be assessed, increases in staffing would be determined through such needs assessments. <i>(Category: AM, PS; Responsible Unit: EHS, AE, PP; Timing: D, O; Compliance: AP, ED)</i>	<p>Ongoing Campus-wide Program</p>	<p>The Campus Fire Marshal has determined that current staffing levels are adequate.</p>
<b>PP 4.12-1(b)</b>		
(i) Accident prevention features shall be reviewed and incorporated into new structures to minimize the need for emergency response from the City of Riverside.	<p>Part of Project Ongoing oversight through design and construction</p>	<p>This is a standard element of the campus design process. The Campus Fire Marshal is a participant in the design and construction process</p>

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
(ii) Increased staffing levels for local fire agencies shall be encouraged to meet needs generated by LRDP project related on-campus population increases. <i>(Category: AM, PS, SL; Responsible Unit: EHS, AE, PP; Timing: D, O; Compliance: AP, CD)</i>	Ongoing Campus-wide Program	
<b>PP 4.12-2(a)</b> As development under the LRDP occurs, the Campus will hire additional police officers and support staff as necessary to maintain an adequate level of service, staff, and equipment, and will expand the existing police facility when additional space is required. <i>(Category: AM, SL; Responsible Unit: PD; Timing: O; Compliance: AP)</i>	Ongoing Campus-Wide Program	This is a standard element of the campus design process.
<b>PP 4.12-2(b)</b> The Campus will continue to participate in the “UNET” program (for coordinated police response and staffing of a community service center), which provides law enforcement services in the vicinity of the campus, with equal participation of UCR and City police staffs. <i>(Category: SL; Responsible Unit: PD; Timing: O; Compliance: AP)</i>	Ongoing Campus-Wide Program	This is a standard element of the campus design process.
<b>TRANSPORTATION AND TRAFFIC</b>		
<b>MM 4.14-1b: Travel Demand Management.</b> To reduce on- and off-campus vehicle trips and resulting impacts, the University will enhance its Transportation Demand Management (TDM) program. TDM strategies will include measures to increase transit and Shuttle use, encourage alternative transportation modes including bicycle transportation, implement parking policies that reduce demand, and other mechanisms that reduce vehicle trips to and from the campus. The University shall monitor the performance of campus TDM strategies through annual surveys. <i>(Category: SL; Responsible Unit: TAPS; Timing: O; Compliance: AP)</i>	Part of Project Ongoing Campus-Wide Program	See PP 4.3-1.
<b>MM 4.14-1c: Transit Enhancement.</b> To enhance transit systems serving the campus, the University will work cooperatively with the RTA, and other local agencies to coordinate service routes with existing and proposed Shuttle and transit programs. <i>(Category: SL; Responsible Unit: TAPS; Timing: O; Compliance: AP)</i>	Part of Project Ongoing Campus-Wide Program	
<b>PP 4.14-2</b> The Campus will periodically assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion. <i>(Category: AM, PS; Responsible Unit: AE; Timing: D, C; Compliance: AP)</i>	Ongoing Campus-Wide Program Ongoing oversight through design and construction	This is a standard component of campus construction projects.
<b>PP 4.14-4</b> The Campus shall provide design professionals for roadway and parking improvements with the Campus Design Guidelines and instructions to implement those elements of the guidelines relevant to parking and roadway design. <i>(Category: PS; Responsible Unit: AE; Timing: P, D; Compliance: AP)</i>	Part of Project No further action required	The campus has provided the indicated guidelines and instructions to the design team.

2005 LRDP Planning Strategies, Programs and Practices and Mitigation Measures	Applicability	Notes
<b>UTILITIES</b>		
<b>PP 4.15-1(a)</b> Improvements to the campus water distribution system, including necessary pump capacity, will be made as required to serve new projects. Project-specific CEQA analysis of environmental effects that would occur prior to project-specific approval will consider the continued adequacy of the domestic/fire water systems, and no new development would occur without a demonstration that appropriate domestic/fire water supplies continue to be available. <i>(Category: PS; Responsible Unit: CRM, AE; Timing: P, D, E; Compliance: ED)</i>	Part of Project No further action required	Campus Physical Plant personnel have confirmed adequacy of the domestic system.
<b>PP 4.15-1(b)</b> Reduce the campus' impact on domestic water resources <i>(Category: AM; Responsible Unit: DS; Timing: O; Compliance: AP, FO)</i>	Part of Project Ongoing Campus-Wide Program	Project design would conform to Title 24 and includes features consistent with LEED certification.
<b>PP 4.15-1(c)</b> The Campus shall promptly detect and repair leaks in water and irrigation pipes. <i>(Category: SL; Responsible Unit: AG OPS, HSG, PP, TAPS; Timing: O; Compliance: AP, FO)</i>	Ongoing Campus-Wide Program	
<b>PP 4.15-1(d)</b> Serve water at food service facilities only upon request. <i>(Category: SL; Responsible Unit: PP, AE; Timing: D, O; Compliance: AP, CD, FO)</i>	Ongoing Campus-Wide Program	
<b>PP 4.15-5</b> The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB. <i>(Category: AM; Responsible Unit: AG OPS, CRM, PP, AE; Timing: D, C, O; Compliance: AP, FO)</i>	Part of Project	Project design incorporates all relevant water quality requirements.

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**UCR North District Development Phase 1 ALL ELECTRIC**  
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**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	13.00	1000sqft	0.30	13,000.00	0
Parking Lot	695.00	Space	6.25	278,000.00	0
High Turnover (Sit Down Restaurant)	2.90	1000sqft	0.07	2,900.00	0
Apartments Mid Rise	416.00	Dwelling Unit	10.95	529,242.00	1502

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Riverside Public Utilities				
<b>CO2 Intensity (lb/MWhr)</b>	1325.65	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics -

Land Use - Estimates based on EIR Project Description.

Construction Phase - Schedule estimated based on information provided by the construction manager.

Trips and VMT -

Demolition - Assumes 268 units with each unit 1000 square feet.

Grading - Assumes re-grading entire site. Site has already been developed and should not require extensive grading.

Architectural Coating -

Vehicle Trips - Based on Phase 1 trip gen. 6006 daily trips. Sat/Sun uses default ratio.

Woodstoves - No woodstoves or fireplaces.

Area Coating -

Energy Use - All electric option is anticipated to use 4,000,764 kwh/year. No natural gas.

Water And Wastewater - Based on plumbing engineer calculations using plumbing code.

Solid Waste -

Construction Off-road Equipment Mitigation - Tier 4 engines to mitigate NOx emissions. Fugitive Dust mitigation reflect compliance with Rule 403.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Consistent with CEC mandatory measures and CalGreen code. UCR has a 9,600 panel, 4.3 megawatt solar array on-site. Assumes 10% of power would be generated on-site.

Water Mitigation - Consistent with CalGreen mandatory measures and PDFs.

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,950.00	5,700.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,850.00	17,100.00
tblArchitecturalCoating	ConstArea_Parking	16,680.00	20,256.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	357,238.00	353,768.00





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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	300.00	370.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	110.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	6.62	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	28.48	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	T24E	772.17	9,617.22
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	12.38	0.00
tblEnergyUse	T24NG	8,764.08	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	77.67	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00

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tblFireplaces	NumberGas	353.60	0.00
tblFireplaces	NumberNoFireplace	41.60	0.00
tblFireplaces	NumberWood	20.80	0.00
tblGrading	AcresOfGrading	162.50	55.00
tblLandUse	LandUseSquareFeet	416,000.00	529,242.00
tblLandUse	Population	1,190.00	1,502.00
tblTripsAndVMT	VendorTripNumber	93.00	101.00
tblTripsAndVMT	WorkerTripNumber	423.00	440.00
tblTripsAndVMT	WorkerTripNumber	85.00	88.00
tblVehicleTrips	ST_TR	6.39	14.13
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	5.86	12.95
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.65	14.44
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,104,074.66	96,908,400.00
tblWater	IndoorWaterUseRate	3,006,250.00	0.00
tblWater	IndoorWaterUseRate	880,247.77	0.00
tblWater	OutdoorWaterUseRate	17,087,351.42	0.00
tblWater	OutdoorWaterUseRate	56,186.03	0.00
tblWoodstoves	NumberCatalytic	20.80	0.00
tblWoodstoves	NumberNoncatalytic	20.80	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3640	3.8433	2.4262	5.2000e-003	0.7303	0.1705	0.9008	0.3123	0.1576	0.4699	0.0000	472.3195	472.3195	0.1089	0.0000	475.0418
2020	0.5791	4.1296	4.7516	0.0132	0.7158	0.1582	0.8740	0.1920	0.1488	0.3408	0.0000	1,196.9480	1,196.9480	0.1120	0.0000	1,199.7488
2021	2.0252	2.0424	2.5834	6.2600e-003	0.2971	0.0866	0.3837	0.0795	0.0809	0.1605	0.0000	564.4199	564.4199	0.0737	0.0000	566.2633
<b>Maximum</b>	<b>2.0252</b>	<b>4.1296</b>	<b>4.7516</b>	<b>0.0132</b>	<b>0.7303</b>	<b>0.1705</b>	<b>0.9008</b>	<b>0.3123</b>	<b>0.1576</b>	<b>0.4699</b>	<b>0.0000</b>	<b>1,196.9480</b>	<b>1,196.9480</b>	<b>0.1120</b>	<b>0.0000</b>	<b>1,199.7488</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0848	0.5482	2.4244	5.2000e-003	0.3750	8.1400e-003	0.3832	0.1530	8.0300e-003	0.1610	0.0000	472.3191	472.3191	0.1089	0.0000	475.0414
2020	0.3443	1.9090	4.8317	0.0132	0.7158	0.0172	0.7330	0.1920	0.0165	0.2085	0.0000	1,196.9476	1,196.9476	0.1120	0.0000	1,199.7484
2021	1.8935	0.6683	2.7676	6.2600e-003	0.2971	6.9200e-003	0.3040	0.0795	6.7200e-003	0.0863	0.0000	564.4196	564.4196	0.0737	0.0000	566.2631
<b>Maximum</b>	<b>1.8935</b>	<b>1.9090</b>	<b>4.8317</b>	<b>0.0132</b>	<b>0.7158</b>	<b>0.0172</b>	<b>0.7330</b>	<b>0.1920</b>	<b>0.0165</b>	<b>0.2085</b>	<b>0.0000</b>	<b>1,196.9476</b>	<b>1,196.9476</b>	<b>0.1120</b>	<b>0.0000</b>	<b>1,199.7484</b>

## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	21.75	68.79	-2.69	0.00	20.38	92.23	34.20	27.28	91.93	53.07	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	6-1-2019	8-31-2019	1.6022	0.2748
3	9-1-2019	11-30-2019	2.1819	0.1509
4	12-1-2019	2-29-2020	1.2066	0.5738
5	3-1-2020	5-31-2020	1.1730	0.5572
6	6-1-2020	8-31-2020	1.1693	0.5534
7	9-1-2020	11-30-2020	1.1640	0.5548
8	12-1-2020	2-28-2021	1.0853	0.5244
9	3-1-2021	5-31-2021	2.2990	1.4649
10	6-1-2021	8-31-2021	1.0495	0.7432
		Highest	2.2990	1.4649

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2958	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,405.6780	2,405.6780	0.0526	0.0109	2,410.2384
Mobile	1.9461	10.4855	26.5194	0.0953	7.8557	0.0779	7.9336	2.1049	0.0727	2.1776	0.0000	8,794.5479	8,794.5479	0.4334	0.0000	8,805.3832
Waste						0.0000	0.0000		0.0000	0.0000	49.1218	0.0000	49.1218	2.9030	0.0000	121.6971
Water						0.0000	0.0000		0.0000	0.0000	30.7446	758.7529	789.4975	3.1744	0.0780	892.0992
<b>Total</b>	<b>4.2419</b>	<b>10.5353</b>	<b>30.8279</b>	<b>0.0955</b>	<b>7.8557</b>	<b>0.1016</b>	<b>7.9573</b>	<b>2.1049</b>	<b>0.0964</b>	<b>2.2013</b>	<b>79.8663</b>	<b>11,966.0042</b>	<b>12,045.8705</b>	<b>6.5703</b>	<b>0.0889</b>	<b>12,236.6143</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2958	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,165.1102	2,165.1102	0.0474	9.8000e-003	2,169.2146
Mobile	1.9461	10.4855	26.5194	0.0953	7.8557	0.0779	7.9336	2.1049	0.0727	2.1776	0.0000	8,794.5479	8,794.5479	0.4334	0.0000	8,805.3832
Waste						0.0000	0.0000		0.0000	0.0000	24.5609	0.0000	24.5609	1.4515	0.0000	60.8486
Water						0.0000	0.0000		0.0000	0.0000	30.7446	758.7529	789.4975	3.1744	0.0780	892.0992
<b>Total</b>	<b>4.2419</b>	<b>10.5353</b>	<b>30.8279</b>	<b>0.0955</b>	<b>7.8557</b>	<b>0.1016</b>	<b>7.9573</b>	<b>2.1049</b>	<b>0.0964</b>	<b>2.2013</b>	<b>55.3055</b>	<b>11,725.4364</b>	<b>11,780.7419</b>	<b>5.1135</b>	<b>0.0878</b>	<b>11,934.7419</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>30.75</b>	<b>2.01</b>	<b>2.20</b>	<b>22.17</b>	<b>1.23</b>	<b>2.47</b>

**3.0 Construction Detail**

**Construction Phase**

## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	7/31/2019	5	43	
2	Site Preparation	Site Preparation	8/1/2019	9/14/2019	5	32	
3	Grading	Grading	9/1/2019	11/30/2019	5	65	
4	Building Construction	Building Construction	12/1/2019	4/30/2021	5	370	
5	Paving	Paving	3/1/2021	7/30/2021	5	110	
6	Architectural Coating	Architectural Coating	3/1/2021	7/31/2021	5	110	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 55**

**Acres of Paving: 6.25**

**Residential Indoor: 1,061,303; Residential Outdoor: 353,768; Non-Residential Indoor: 17,100; Non-Residential Outdoor: 5,700; Striped Parking Area: 20,256 (Architectural Coating – sqft)**

**OffRoad Equipment**



## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	440.00	101.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	88.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1319	0.0000	0.1319	0.0200	0.0000	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0755	0.7693	0.4743	8.3000e-004		0.0386	0.0386		0.0359	0.0359	0.0000	74.4466	74.4466	0.0207	0.0000	74.9644
<b>Total</b>	<b>0.0755</b>	<b>0.7693</b>	<b>0.4743</b>	<b>8.3000e-004</b>	<b>0.1319</b>	<b>0.0386</b>	<b>0.1705</b>	<b>0.0200</b>	<b>0.0359</b>	<b>0.0559</b>	<b>0.0000</b>	<b>74.4466</b>	<b>74.4466</b>	<b>0.0207</b>	<b>0.0000</b>	<b>74.9644</b>

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**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.3100e-003	0.1875	0.0375	4.8000e-004	0.0105	6.8000e-004	0.0112	2.8800e-003	6.5000e-004	3.5300e-003	0.0000	46.7165	46.7165	3.4300e-003	0.0000	46.8023
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.2400e-003	0.0135	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.2903	3.2903	1.0000e-004	0.0000	3.2929
<b>Total</b>	<b>6.8600e-003</b>	<b>0.1887</b>	<b>0.0509</b>	<b>5.2000e-004</b>	<b>0.0140</b>	<b>7.1000e-004</b>	<b>0.0147</b>	<b>3.8200e-003</b>	<b>6.8000e-004</b>	<b>4.5000e-003</b>	<b>0.0000</b>	<b>50.0068</b>	<b>50.0068</b>	<b>3.5300e-003</b>	<b>0.0000</b>	<b>50.0952</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0594	0.0000	0.0594	8.9900e-003	0.0000	8.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9400e-003	0.0431	0.5005	8.3000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	74.4465	74.4465	0.0207	0.0000	74.9643
<b>Total</b>	<b>9.9400e-003</b>	<b>0.0431</b>	<b>0.5005</b>	<b>8.3000e-004</b>	<b>0.0594</b>	<b>1.3300e-003</b>	<b>0.0607</b>	<b>8.9900e-003</b>	<b>1.3300e-003</b>	<b>0.0103</b>	<b>0.0000</b>	<b>74.4465</b>	<b>74.4465</b>	<b>0.0207</b>	<b>0.0000</b>	<b>74.9643</b>

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**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.3100e-003	0.1875	0.0375	4.8000e-004	0.0105	6.8000e-004	0.0112	2.8800e-003	6.5000e-004	3.5300e-003	0.0000	46.7165	46.7165	3.4300e-003	0.0000	46.8023
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.2400e-003	0.0135	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.2903	3.2903	1.0000e-004	0.0000	3.2929
<b>Total</b>	<b>6.8600e-003</b>	<b>0.1887</b>	<b>0.0509</b>	<b>5.2000e-004</b>	<b>0.0140</b>	<b>7.1000e-004</b>	<b>0.0147</b>	<b>3.8200e-003</b>	<b>6.8000e-004</b>	<b>4.5000e-003</b>	<b>0.0000</b>	<b>50.0068</b>	<b>50.0068</b>	<b>3.5300e-003</b>	<b>0.0000</b>	<b>50.0952</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2891	0.0000	0.2891	0.1589	0.0000	0.1589	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0694	0.7292	0.3530	6.1000e-004		0.0383	0.0383		0.0352	0.0352	0.0000	54.6699	54.6699	0.0173	0.0000	55.1023
<b>Total</b>	<b>0.0694</b>	<b>0.7292</b>	<b>0.3530</b>	<b>6.1000e-004</b>	<b>0.2891</b>	<b>0.0383</b>	<b>0.3273</b>	<b>0.1589</b>	<b>0.0352</b>	<b>0.1941</b>	<b>0.0000</b>	<b>54.6699</b>	<b>54.6699</b>	<b>0.0173</b>	<b>0.0000</b>	<b>55.1023</b>

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**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	1.1100e-003	0.0120	3.0000e-005	3.1600e-003	3.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9383	2.9383	9.0000e-005	0.0000	2.9406
<b>Total</b>	<b>1.3900e-003</b>	<b>1.1100e-003</b>	<b>0.0120</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>3.0000e-005</b>	<b>3.1800e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.9383</b>	<b>2.9383</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.9406</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0715	0.0000	0.0715	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4500e-003	0.0323	0.3339	6.1000e-004		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	54.6698	54.6698	0.0173	0.0000	55.1023
<b>Total</b>	<b>7.4500e-003</b>	<b>0.0323</b>	<b>0.3339</b>	<b>6.1000e-004</b>	<b>0.1301</b>	<b>9.9000e-004</b>	<b>0.1311</b>	<b>0.0715</b>	<b>9.9000e-004</b>	<b>0.0725</b>	<b>0.0000</b>	<b>54.6698</b>	<b>54.6698</b>	<b>0.0173</b>	<b>0.0000</b>	<b>55.1023</b>

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**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	1.1100e-003	0.0120	3.0000e-005	3.1600e-003	3.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9383	2.9383	9.0000e-005	0.0000	2.9406
<b>Total</b>	<b>1.3900e-003</b>	<b>1.1100e-003</b>	<b>0.0120</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>3.0000e-005</b>	<b>3.1800e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.9383</b>	<b>2.9383</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.9406</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2249	0.0000	0.2249	0.1107	0.0000	0.1107	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e-003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
<b>Total</b>	<b>0.1540</b>	<b>1.7719</b>	<b>1.0847</b>	<b>2.0200e-003</b>	<b>0.2249</b>	<b>0.0774</b>	<b>0.3023</b>	<b>0.1107</b>	<b>0.0712</b>	<b>0.1820</b>	<b>0.0000</b>	<b>181.0293</b>	<b>181.0293</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4612</b>

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**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1300e-003	2.5000e-003	0.0271	7.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.6316	6.6316	2.1000e-004	0.0000	6.6368
<b>Total</b>	<b>3.1300e-003</b>	<b>2.5000e-003</b>	<b>0.0271</b>	<b>7.0000e-005</b>	<b>7.1300e-003</b>	<b>6.0000e-005</b>	<b>7.1900e-003</b>	<b>1.8900e-003</b>	<b>5.0000e-005</b>	<b>1.9500e-003</b>	<b>0.0000</b>	<b>6.6316</b>	<b>6.6316</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>6.6368</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1012	0.0000	0.1012	0.0498	0.0000	0.0498	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.1073	1.0725	2.0200e-003		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
<b>Total</b>	<b>0.0248</b>	<b>0.1073</b>	<b>1.0725</b>	<b>2.0200e-003</b>	<b>0.1012</b>	<b>3.3000e-003</b>	<b>0.1045</b>	<b>0.0498</b>	<b>3.3000e-003</b>	<b>0.0531</b>	<b>0.0000</b>	<b>181.0291</b>	<b>181.0291</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4610</b>

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**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1300e-003	2.5000e-003	0.0271	7.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.6316	6.6316	2.1000e-004	0.0000	6.6368
<b>Total</b>	<b>3.1300e-003</b>	<b>2.5000e-003</b>	<b>0.0271</b>	<b>7.0000e-005</b>	<b>7.1300e-003</b>	<b>6.0000e-005</b>	<b>7.1900e-003</b>	<b>1.8900e-003</b>	<b>5.0000e-005</b>	<b>1.9500e-003</b>	<b>0.0000</b>	<b>6.6316</b>	<b>6.6316</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>6.6368</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2319	0.1888	3.0000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	25.8615	25.8615	6.3000e-003	0.0000	26.0190
<b>Total</b>	<b>0.0260</b>	<b>0.2319</b>	<b>0.1888</b>	<b>3.0000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0133</b>	<b>0.0133</b>	<b>0.0000</b>	<b>25.8615</b>	<b>25.8615</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0190</b>



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**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4100e-003	0.1301	0.0332	2.8000e-004	7.0000e-003	8.5000e-004	7.8500e-003	2.0200e-003	8.1000e-004	2.8300e-003	0.0000	27.3555	27.3555	1.9200e-003	0.0000	27.4035
Worker	0.0233	0.0186	0.2021	5.5000e-004	0.0531	4.2000e-004	0.0535	0.0141	3.9000e-004	0.0145	0.0000	49.3801	49.3801	1.5500e-003	0.0000	49.4188
<b>Total</b>	<b>0.0277</b>	<b>0.1487</b>	<b>0.2353</b>	<b>8.3000e-004</b>	<b>0.0601</b>	<b>1.2700e-003</b>	<b>0.0614</b>	<b>0.0161</b>	<b>1.2000e-003</b>	<b>0.0173</b>	<b>0.0000</b>	<b>76.7356</b>	<b>76.7356</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.8223</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6100e-003	0.0246	0.1921	3.0000e-004		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	25.8614	25.8614	6.3000e-003	0.0000	26.0189
<b>Total</b>	<b>3.6100e-003</b>	<b>0.0246</b>	<b>0.1921</b>	<b>3.0000e-004</b>		<b>4.5000e-004</b>	<b>4.5000e-004</b>		<b>4.5000e-004</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>25.8614</b>	<b>25.8614</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0189</b>

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**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4100e-003	0.1301	0.0332	2.8000e-004	7.0000e-003	8.5000e-004	7.8500e-003	2.0200e-003	8.1000e-004	2.8300e-003	0.0000	27.3555	27.3555	1.9200e-003	0.0000	27.4035
Worker	0.0233	0.0186	0.2021	5.5000e-004	0.0531	4.2000e-004	0.0535	0.0141	3.9000e-004	0.0145	0.0000	49.3801	49.3801	1.5500e-003	0.0000	49.4188
<b>Total</b>	<b>0.0277</b>	<b>0.1487</b>	<b>0.2353</b>	<b>8.3000e-004</b>	<b>0.0601</b>	<b>1.2700e-003</b>	<b>0.0614</b>	<b>0.0161</b>	<b>1.2000e-003</b>	<b>0.0173</b>	<b>0.0000</b>	<b>76.7356</b>	<b>76.7356</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.8223</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
<b>Total</b>	<b>0.2777</b>	<b>2.5134</b>	<b>2.2072</b>	<b>3.5300e-003</b>		<b>0.1463</b>	<b>0.1463</b>		<b>0.1376</b>	<b>0.1376</b>	<b>0.0000</b>	<b>303.4091</b>	<b>303.4091</b>	<b>0.0740</b>	<b>0.0000</b>	<b>305.2596</b>

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**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0448	1.4187	0.3577	3.3400e-003	0.0834	6.9400e-003	0.0903	0.0241	6.6400e-003	0.0307	0.0000	323.6929	323.6929	0.0216	0.0000	324.2329
Worker	0.2566	0.1975	2.1867	6.3100e-003	0.6324	4.9100e-003	0.6373	0.1680	4.5300e-003	0.1725	0.0000	569.8460	569.8460	0.0164	0.0000	570.2563
<b>Total</b>	<b>0.3014</b>	<b>1.6162</b>	<b>2.5445</b>	<b>9.6500e-003</b>	<b>0.7158</b>	<b>0.0119</b>	<b>0.7276</b>	<b>0.1920</b>	<b>0.0112</b>	<b>0.2032</b>	<b>0.0000</b>	<b>893.5389</b>	<b>893.5389</b>	<b>0.0380</b>	<b>0.0000</b>	<b>894.4892</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.2928	2.2873	3.5300e-003		5.3400e-003	5.3400e-003		5.3400e-003	5.3400e-003	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
<b>Total</b>	<b>0.0429</b>	<b>0.2928</b>	<b>2.2873</b>	<b>3.5300e-003</b>		<b>5.3400e-003</b>	<b>5.3400e-003</b>		<b>5.3400e-003</b>	<b>5.3400e-003</b>	<b>0.0000</b>	<b>303.4087</b>	<b>303.4087</b>	<b>0.0740</b>	<b>0.0000</b>	<b>305.2592</b>

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**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0448	1.4187	0.3577	3.3400e-003	0.0834	6.9400e-003	0.0903	0.0241	6.6400e-003	0.0307	0.0000	323.6929	323.6929	0.0216	0.0000	324.2329
Worker	0.2566	0.1975	2.1867	6.3100e-003	0.6324	4.9100e-003	0.6373	0.1680	4.5300e-003	0.1725	0.0000	569.8460	569.8460	0.0164	0.0000	570.2563
<b>Total</b>	<b>0.3014</b>	<b>1.6162</b>	<b>2.5445</b>	<b>9.6500e-003</b>	<b>0.7158</b>	<b>0.0119</b>	<b>0.7276</b>	<b>0.1920</b>	<b>0.0112</b>	<b>0.2032</b>	<b>0.0000</b>	<b>893.5389</b>	<b>893.5389</b>	<b>0.0380</b>	<b>0.0000</b>	<b>894.4892</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0817	0.7496	0.7127	1.1600e-003		0.0412	0.0412		0.0388	0.0388	0.0000	99.6040	99.6040	0.0240	0.0000	100.2048
<b>Total</b>	<b>0.0817</b>	<b>0.7496</b>	<b>0.7127</b>	<b>1.1600e-003</b>		<b>0.0412</b>	<b>0.0412</b>		<b>0.0388</b>	<b>0.0388</b>	<b>0.0000</b>	<b>99.6040</b>	<b>99.6040</b>	<b>0.0240</b>	<b>0.0000</b>	<b>100.2048</b>

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**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.4224	0.1068	1.0900e-003	0.0274	8.6000e-004	0.0282	7.9000e-003	8.2000e-004	8.7200e-003	0.0000	105.4509	105.4509	6.8000e-003	0.0000	105.6208
Worker	0.0786	0.0584	0.6603	2.0000e-003	0.2076	1.5700e-003	0.2091	0.0551	1.4400e-003	0.0566	0.0000	180.9986	180.9986	4.8700e-003	0.0000	181.1203
<b>Total</b>	<b>0.0911</b>	<b>0.4808</b>	<b>0.7671</b>	<b>3.0900e-003</b>	<b>0.2350</b>	<b>2.4300e-003</b>	<b>0.2374</b>	<b>0.0630</b>	<b>2.2600e-003</b>	<b>0.0653</b>	<b>0.0000</b>	<b>286.4495</b>	<b>286.4495</b>	<b>0.0117</b>	<b>0.0000</b>	<b>286.7412</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.0961	0.7508	1.1600e-003		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	99.6039	99.6039	0.0240	0.0000	100.2047
<b>Total</b>	<b>0.0141</b>	<b>0.0961</b>	<b>0.7508</b>	<b>1.1600e-003</b>		<b>1.7500e-003</b>	<b>1.7500e-003</b>		<b>1.7500e-003</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>99.6039</b>	<b>99.6039</b>	<b>0.0240</b>	<b>0.0000</b>	<b>100.2047</b>

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**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.4224	0.1068	1.0900e-003	0.0274	8.6000e-004	0.0282	7.9000e-003	8.2000e-004	8.7200e-003	0.0000	105.4509	105.4509	6.8000e-003	0.0000	105.6208
Worker	0.0786	0.0584	0.6603	2.0000e-003	0.2076	1.5700e-003	0.2091	0.0551	1.4400e-003	0.0566	0.0000	180.9986	180.9986	4.8700e-003	0.0000	181.1203
<b>Total</b>	<b>0.0911</b>	<b>0.4808</b>	<b>0.7671</b>	<b>3.0900e-003</b>	<b>0.2350</b>	<b>2.4300e-003</b>	<b>0.2374</b>	<b>0.0630</b>	<b>2.2600e-003</b>	<b>0.0653</b>	<b>0.0000</b>	<b>286.4495</b>	<b>286.4495</b>	<b>0.0117</b>	<b>0.0000</b>	<b>286.7412</b>

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0691	0.7106	0.8059	1.2500e-003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1291	110.1291	0.0356	0.0000	111.0196
Paving	8.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0773</b>	<b>0.7106</b>	<b>0.8059</b>	<b>1.2500e-003</b>		<b>0.0373</b>	<b>0.0373</b>		<b>0.0343</b>	<b>0.0343</b>	<b>0.0000</b>	<b>110.1291</b>	<b>110.1291</b>	<b>0.0356</b>	<b>0.0000</b>	<b>111.0196</b>

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**3.6 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4300e-003	2.5400e-003	0.0288	9.0000e-005	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	6.0000e-005	2.4700e-003	0.0000	7.8924	7.8924	2.1000e-004	0.0000	7.8977
<b>Total</b>	<b>3.4300e-003</b>	<b>2.5400e-003</b>	<b>0.0288</b>	<b>9.0000e-005</b>	<b>9.0500e-003</b>	<b>7.0000e-005</b>	<b>9.1200e-003</b>	<b>2.4000e-003</b>	<b>6.0000e-005</b>	<b>2.4700e-003</b>	<b>0.0000</b>	<b>7.8924</b>	<b>7.8924</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>7.8977</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.0669	0.9513	1.2500e-003		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	110.1290	110.1290	0.0356	0.0000	111.0195
Paving	8.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0236</b>	<b>0.0669</b>	<b>0.9513</b>	<b>1.2500e-003</b>		<b>2.0600e-003</b>	<b>2.0600e-003</b>		<b>2.0600e-003</b>	<b>2.0600e-003</b>	<b>0.0000</b>	<b>110.1290</b>	<b>110.1290</b>	<b>0.0356</b>	<b>0.0000</b>	<b>111.0195</b>

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**3.6 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4300e-003	2.5400e-003	0.0288	9.0000e-005	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	6.0000e-005	2.4700e-003	0.0000	7.8924	7.8924	2.1000e-004	0.0000	7.8977
<b>Total</b>	<b>3.4300e-003</b>	<b>2.5400e-003</b>	<b>0.0288</b>	<b>9.0000e-005</b>	<b>9.0500e-003</b>	<b>7.0000e-005</b>	<b>9.1200e-003</b>	<b>2.4000e-003</b>	<b>6.0000e-005</b>	<b>2.4700e-003</b>	<b>0.0000</b>	<b>7.8924</b>	<b>7.8924</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>7.8977</b>

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7395					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0840	0.1000	1.6000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003	0.0000	14.0429	14.0429	9.6000e-004	0.0000	14.0670
<b>Total</b>	<b>1.7515</b>	<b>0.0840</b>	<b>0.1000</b>	<b>1.6000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>	<b>0.0000</b>	<b>14.0429</b>	<b>14.0429</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>14.0670</b>



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**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0201	0.0149	0.1689	5.1000e-004	0.0531	4.0000e-004	0.0535	0.0141	3.7000e-004	0.0145	0.0000	46.3020	46.3020	1.2500e-003	0.0000	46.3331
<b>Total</b>	<b>0.0201</b>	<b>0.0149</b>	<b>0.1689</b>	<b>5.1000e-004</b>	<b>0.0531</b>	<b>4.0000e-004</b>	<b>0.0535</b>	<b>0.0141</b>	<b>3.7000e-004</b>	<b>0.0145</b>	<b>0.0000</b>	<b>46.3020</b>	<b>46.3020</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>46.3331</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7395					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	7.0800e-003	0.1008	1.6000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	14.0429	14.0429	9.6000e-004	0.0000	14.0670
<b>Total</b>	<b>1.7411</b>	<b>7.0800e-003</b>	<b>0.1008</b>	<b>1.6000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>14.0429</b>	<b>14.0429</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>14.0670</b>

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**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0201	0.0149	0.1689	5.1000e-004	0.0531	4.0000e-004	0.0535	0.0141	3.7000e-004	0.0145	0.0000	46.3020	46.3020	1.2500e-003	0.0000	46.3331
<b>Total</b>	<b>0.0201</b>	<b>0.0149</b>	<b>0.1689</b>	<b>5.1000e-004</b>	<b>0.0531</b>	<b>4.0000e-004</b>	<b>0.0535</b>	<b>0.0141</b>	<b>3.7000e-004</b>	<b>0.0145</b>	<b>0.0000</b>	<b>46.3020</b>	<b>46.3020</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>46.3331</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9461	10.4855	26.5194	0.0953	7.8557	0.0779	7.9336	2.1049	0.0727	2.1776	0.0000	8,794.5479	8,794.5479	0.4334	0.0000	8,805.3832
Unmitigated	1.9461	10.4855	26.5194	0.0953	7.8557	0.0779	7.9336	2.1049	0.0727	2.1776	0.0000	8,794.5479	8,794.5479	0.4334	0.0000	8,805.3832

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,007.04	5,878.08	5387.20	20,161,431	20,161,431
General Light Industry	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	368.74	459.27	382.34	522,798	522,798
<b>Total</b>	<b>6,375.78</b>	<b>6,337.35</b>	<b>5,769.54</b>	<b>20,684,229</b>	<b>20,684,229</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
General Light Industry	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
Parking Lot	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
High Turnover (Sit Down Restaurant)	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,165.1102	2,165.1102	0.0474	9.8000e-003	2,169.2146
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,405.6780	2,405.6780	0.0526	0.0109	2,410.2384
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000





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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.00076e+006	2,405.6780	0.0526	0.0109	2,410.2384
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,405.6780</b>	<b>0.0526</b>	<b>0.0109</b>	<b>2,410.2384</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.60069e+006	2,165.1102	0.0474	9.8000e-003	2,169.2146
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,165.1102</b>	<b>0.0474</b>	<b>9.8000e-003</b>	<b>2,169.2146</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2958	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963
Unmitigated	2.2958	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1311	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963
<b>Total</b>	<b>2.2958</b>	<b>0.0497</b>	<b>4.3085</b>	<b>2.3000e-004</b>		<b>0.0237</b>	<b>0.0237</b>		<b>0.0237</b>	<b>0.0237</b>	<b>0.0000</b>	<b>7.0254</b>	<b>7.0254</b>	<b>6.8400e-003</b>	<b>0.0000</b>	<b>7.1963</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1311	0.0497	4.3085	2.3000e-004		0.0237	0.0237		0.0237	0.0237	0.0000	7.0254	7.0254	6.8400e-003	0.0000	7.1963
<b>Total</b>	<b>2.2958</b>	<b>0.0497</b>	<b>4.3085</b>	<b>2.3000e-004</b>		<b>0.0237</b>	<b>0.0237</b>		<b>0.0237</b>	<b>0.0237</b>	<b>0.0000</b>	<b>7.0254</b>	<b>7.0254</b>	<b>6.8400e-003</b>	<b>0.0000</b>	<b>7.1963</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	789.4975	3.1744	0.0780	892.0992
Unmitigated	789.4975	3.1744	0.0780	892.0992

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	96.9084 / 0	789.4975	3.1744	0.0780	892.0992
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>789.4975</b>	<b>3.1744</b>	<b>0.0780</b>	<b>892.0992</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	96.9084 / 0	789.4975	3.1744	0.0780	892.0992
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>789.4975</b>	<b>3.1744</b>	<b>0.0780</b>	<b>892.0992</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.5609	1.4515	0.0000	60.8486
Unmitigated	49.1218	2.9030	0.0000	121.6971

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	191.36	38.8444	2.2956	0.0000	96.2352
General Light Industry	16.12	3.2722	0.1934	0.0000	8.1068
High Turnover (Sit Down Restaurant)	34.51	7.0052	0.4140	0.0000	17.3551
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>49.1218</b>	<b>2.9030</b>	<b>0.0000</b>	<b>121.6971</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	95.68	19.4222	1.1478	0.0000	48.1176
General Light Industry	8.06	1.6361	0.0967	0.0000	4.0534
High Turnover (Sit Down Restaurant)	17.255	3.5026	0.2070	0.0000	8.6776
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>24.5609</b>	<b>1.4515</b>	<b>0.0000</b>	<b>60.8486</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Annual

Equipment Type	Number
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## 11.0 Vegetation

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UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**UCR North District Development Phase 1 ALL ELECTRIC**  
**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	13.00	1000sqft	0.30	13,000.00	0
Parking Lot	695.00	Space	6.25	278,000.00	0
High Turnover (Sit Down Restaurant)	2.90	1000sqft	0.07	2,900.00	0
Apartments Mid Rise	416.00	Dwelling Unit	10.95	529,242.00	1502

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Riverside Public Utilities				
<b>CO2 Intensity (lb/MWhr)</b>	1325.65	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

Project Characteristics -

Land Use - Estimates based on EIR Project Description.

Construction Phase - Schedule estimated based on information provided by the construction manager.

Trips and VMT -

Demolition - Assumes 268 units with each unit 1000 square feet.

Grading - Assumes re-grading entire site. Site has already been developed and should not require extensive grading.

Architectural Coating -

Vehicle Trips - Based on Phase 1 trip gen. 6006 daily trips. Sat/Sun uses default ratio.

Woodstoves - No woodstoves or fireplaces.

Area Coating -

Energy Use - All electric option is anticipated to use 4,000,764 kwh/year. No natural gas.

Water And Wastewater - Based on plumbing engineer calculations using plumbing code.

Solid Waste -

Construction Off-road Equipment Mitigation - Tier 4 engines to mitigate NOx emissions. Fugitive Dust mitigation reflect compliance with Rule 403.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Consistent with CEC mandatory measures and CalGreen code. UCR has a 9,600 panel, 4.3 megawatt solar array on-site. Assumes 10% of power would be generated on-site.

Water Mitigation - Consistent with CalGreen mandatory measures and PDFs.

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,950.00	5,700.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,850.00	17,100.00
tblArchitecturalCoating	ConstArea_Parking	16,680.00	20,256.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	357,238.00	353,768.00



## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	300.00	370.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	110.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	6.62	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	28.48	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	T24E	772.17	9,617.22
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	12.38	0.00
tblEnergyUse	T24NG	8,764.08	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	77.67	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00

## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

tblFireplaces	NumberGas	353.60	0.00
tblFireplaces	NumberNoFireplace	41.60	0.00
tblFireplaces	NumberWood	20.80	0.00
tblGrading	AcresOfGrading	162.50	55.00
tblLandUse	LandUseSquareFeet	416,000.00	529,242.00
tblLandUse	Population	1,190.00	1,502.00
tblTripsAndVMT	VendorTripNumber	93.00	101.00
tblTripsAndVMT	WorkerTripNumber	423.00	440.00
tblTripsAndVMT	WorkerTripNumber	85.00	88.00
tblVehicleTrips	ST_TR	6.39	14.13
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	5.86	12.95
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.65	14.44
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,104,074.66	96,908,400.00
tblWater	IndoorWaterUseRate	3,006,250.00	0.00
tblWater	IndoorWaterUseRate	880,247.77	0.00
tblWater	OutdoorWaterUseRate	17,087,351.42	0.00
tblWater	OutdoorWaterUseRate	56,186.03	0.00
tblWoodstoves	NumberCatalytic	20.80	0.00
tblWoodstoves	NumberNoncatalytic	20.80	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	9.2584	100.2220	57.1419	0.1050	25.4104	4.7763	30.1868	13.4505	4.3942	17.8447	0.0000	10,557.74 35	10,557.74 35	3.1484	0.0000	10,582.26 00
2020	4.4288	31.1578	37.3696	0.1032	5.5644	1.2072	6.7717	1.4904	1.1353	2.6256	0.0000	10,341.13 51	10,341.13 51	0.9443	0.0000	10,364.74 13
2021	37.7081	43.0328	55.7826	0.1386	6.7157	1.7951	8.5108	1.7957	1.6791	3.4748	0.0000	13,786.99 24	13,786.99 24	1.6803	0.0000	13,828.99 93
<b>Maximum</b>	<b>37.7081</b>	<b>100.2220</b>	<b>57.1419</b>	<b>0.1386</b>	<b>25.4104</b>	<b>4.7763</b>	<b>30.1868</b>	<b>13.4505</b>	<b>4.3942</b>	<b>17.8447</b>	<b>0.0000</b>	<b>13,786.99 24</b>	<b>13,786.99 24</b>	<b>3.1484</b>	<b>0.0000</b>	<b>13,828.99 93</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.8576	15.3237	55.5703	0.1050	11.6683	0.1669	11.8353	6.1147	0.1667	6.2813	0.0000	10,557.74 35	10,557.74 35	3.1484	0.0000	10,582.26 00
2020	2.6368	14.2064	37.9813	0.1032	5.5644	0.1310	5.6954	1.4904	0.1257	1.6161	0.0000	10,341.13 51	10,341.13 51	0.9443	0.0000	10,364.74 13
2021	34.9707	14.7336	59.3249	0.1386	6.7157	0.1468	6.8626	1.7957	0.1424	1.9381	0.0000	13,786.99 24	13,786.99 24	1.6803	0.0000	13,828.99 93
<b>Maximum</b>	<b>34.9707</b>	<b>15.3237</b>	<b>59.3249</b>	<b>0.1386</b>	<b>11.6683</b>	<b>0.1669</b>	<b>11.8353</b>	<b>6.1147</b>	<b>0.1667</b>	<b>6.2813</b>	<b>0.0000</b>	<b>13,786.99 24</b>	<b>13,786.99 24</b>	<b>3.1484</b>	<b>0.0000</b>	<b>13,828.99 93</b>

## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	21.27	74.62	-1.72	0.00	36.46	94.28	46.35	43.83	93.97	58.92	0.00	0.00	0.00	0.00	0.00	0.00

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.9101	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899	0.0000	61.9534	61.9534	0.0603	0.0000	63.4608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	11.7128	56.6879	156.1316	0.5574	44.9571	0.4372	45.3943	12.0277	0.4082	12.4359		56,667.24 94	56,667.24 94	2.7087		56,734.96 65
<b>Total</b>	<b>24.6228</b>	<b>57.0856</b>	<b>190.5995</b>	<b>0.5592</b>	<b>44.9571</b>	<b>0.6271</b>	<b>45.5841</b>	<b>12.0277</b>	<b>0.5981</b>	<b>12.6258</b>	<b>0.0000</b>	<b>56,729.20 28</b>	<b>56,729.20 28</b>	<b>2.7690</b>	<b>0.0000</b>	<b>56,798.42 73</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.9101	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899	0.0000	61.9534	61.9534	0.0603	0.0000	63.4608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	11.7128	56.6879	156.1316	0.5574	44.9571	0.4372	45.3943	12.0277	0.4082	12.4359		56,667.24 94	56,667.24 94	2.7087		56,734.96 65
<b>Total</b>	<b>24.6228</b>	<b>57.0856</b>	<b>190.5995</b>	<b>0.5592</b>	<b>44.9571</b>	<b>0.6271</b>	<b>45.5841</b>	<b>12.0277</b>	<b>0.5981</b>	<b>12.6258</b>	<b>0.0000</b>	<b>56,729.20 28</b>	<b>56,729.20 28</b>	<b>2.7690</b>	<b>0.0000</b>	<b>56,798.42 73</b>

## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	7/31/2019	5	43	
2	Site Preparation	Site Preparation	8/1/2019	9/14/2019	5	32	
3	Grading	Grading	9/1/2019	11/30/2019	5	65	
4	Building Construction	Building Construction	12/1/2019	4/30/2021	5	370	
5	Paving	Paving	3/1/2021	7/30/2021	5	110	
6	Architectural Coating	Architectural Coating	3/1/2021	7/31/2021	5	110	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 55

Acres of Paving: 6.25

Residential Indoor: 1,061,303; Residential Outdoor: 353,768; Non-Residential Indoor: 17,100; Non-Residential Outdoor: 5,700; Striped Parking Area: 20,256 (Architectural Coating – sqft)

#### OffRoad Equipment



## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	440.00	101.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	88.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1350	0.0000	6.1350	0.9289	0.0000	0.9289			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.899 4	3,816.899 4	1.0618		3,843.445 1
<b>Total</b>	<b>3.5134</b>	<b>35.7830</b>	<b>22.0600</b>	<b>0.0388</b>	<b>6.1350</b>	<b>1.7949</b>	<b>7.9299</b>	<b>0.9289</b>	<b>1.6697</b>	<b>2.5986</b>		<b>3,816.899 4</b>	<b>3,816.899 4</b>	<b>1.0618</b>		<b>3,843.445 1</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2441	8.4407	1.6885	0.0223	0.4952	0.0316	0.5267	0.1357	0.0302	0.1659		2,412.2017	2,412.2017	0.1730		2,416.5268
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
<b>Total</b>	<b>0.3169</b>	<b>8.4917</b>	<b>2.3604</b>	<b>0.0241</b>	<b>0.6628</b>	<b>0.0329</b>	<b>0.6957</b>	<b>0.1802</b>	<b>0.0314</b>	<b>0.2115</b>		<b>2,589.2560</b>	<b>2,589.2560</b>	<b>0.1786</b>		<b>2,593.7198</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7608	0.0000	2.7608	0.4180	0.0000	0.4180			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
<b>Total</b>	<b>0.4623</b>	<b>2.0032</b>	<b>23.2798</b>	<b>0.0388</b>	<b>2.7608</b>	<b>0.0616</b>	<b>2.8224</b>	<b>0.4180</b>	<b>0.0616</b>	<b>0.4797</b>	<b>0.0000</b>	<b>3,816.8994</b>	<b>3,816.8994</b>	<b>1.0618</b>		<b>3,843.4451</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2441	8.4407	1.6885	0.0223	0.4952	0.0316	0.5267	0.1357	0.0302	0.1659		2,412.2017	2,412.2017	0.1730		2,416.5268
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
<b>Total</b>	<b>0.3169</b>	<b>8.4917</b>	<b>2.3604</b>	<b>0.0241</b>	<b>0.6628</b>	<b>0.0329</b>	<b>0.6957</b>	<b>0.1802</b>	<b>0.0314</b>	<b>0.2115</b>		<b>2,589.2560</b>	<b>2,589.2560</b>	<b>0.1786</b>		<b>2,593.7198</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
<b>Total</b>	<b>0.0874</b>	<b>0.0612</b>	<b>0.8063</b>	<b>2.1300e-003</b>	<b>0.2012</b>	<b>1.5700e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.4500e-003</b>	<b>0.0548</b>		<b>212.4651</b>	<b>212.4651</b>	<b>6.6600e-003</b>		<b>212.6315</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.4656</b>	<b>2.0175</b>	<b>20.8690</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.0621</b>	<b>8.1919</b>	<b>4.4688</b>	<b>0.0621</b>	<b>4.5309</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
<b>Total</b>	<b>0.0874</b>	<b>0.0612</b>	<b>0.8063</b>	<b>2.1300e-003</b>	<b>0.2012</b>	<b>1.5700e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.4500e-003</b>	<b>0.0548</b>		<b>212.4651</b>	<b>212.4651</b>	<b>6.6600e-003</b>		<b>212.6315</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9194	0.0000	6.9194	3.4071	0.0000	3.4071			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>6.9194</b>	<b>2.3827</b>	<b>9.3021</b>	<b>3.4071</b>	<b>2.1920</b>	<b>5.5992</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573
<b>Total</b>	<b>0.0971</b>	<b>0.0680</b>	<b>0.8959</b>	<b>2.3700e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>236.0723</b>	<b>236.0723</b>	<b>7.4000e-003</b>		<b>236.2573</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1137	0.0000	3.1137	1.5332	0.0000	1.5332			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>0.7616</b>	<b>3.3000</b>	<b>32.9991</b>	<b>0.0620</b>	<b>3.1137</b>	<b>0.1015</b>	<b>3.2153</b>	<b>1.5332</b>	<b>0.1015</b>	<b>1.6347</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573
<b>Total</b>	<b>0.0971</b>	<b>0.0680</b>	<b>0.8959</b>	<b>2.3700e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>236.0723</b>	<b>236.0723</b>	<b>7.4000e-003</b>		<b>236.2573</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>



UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3936	11.5940	2.8590	0.0260	0.6463	0.0769	0.7231	0.1861	0.0735	0.2596		2,772.5729	2,772.5729	0.1866		2,777.2366
Worker	2.1362	1.4950	19.7090	0.0522	4.9182	0.0385	4.9567	1.3043	0.0355	1.3398		5,193.5905	5,193.5905	0.1628		5,197.6599
<b>Total</b>	<b>2.5298</b>	<b>13.0890</b>	<b>22.5680</b>	<b>0.0781</b>	<b>5.5644</b>	<b>0.1154</b>	<b>5.6798</b>	<b>1.4904</b>	<b>0.1090</b>	<b>1.5994</b>		<b>7,966.1634</b>	<b>7,966.1634</b>	<b>0.3493</b>		<b>7,974.8965</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3936	11.5940	2.8590	0.0260	0.6463	0.0769	0.7231	0.1861	0.0735	0.2596		2,772.5729	2,772.5729	0.1866		2,777.2366
Worker	2.1362	1.4950	19.7090	0.0522	4.9182	0.0385	4.9567	1.3043	0.0355	1.3398		5,193.5905	5,193.5905	0.1628		5,197.6599
<b>Total</b>	<b>2.5298</b>	<b>13.0890</b>	<b>22.5680</b>	<b>0.0781</b>	<b>5.5644</b>	<b>0.1154</b>	<b>5.6798</b>	<b>1.4904</b>	<b>0.1090</b>	<b>1.5994</b>		<b>7,966.1634</b>	<b>7,966.1634</b>	<b>0.3493</b>		<b>7,974.8965</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3353	10.6375	2.5876	0.0258	0.6463	0.0527	0.6989	0.1861	0.0504	0.2364		2,755.192 2	2,755.192 2	0.1764		2,759.601 0
Worker	1.9736	1.3342	17.9335	0.0505	4.9182	0.0375	4.9557	1.3043	0.0346	1.3389		5,032.879 8	5,032.879 8	0.1450		5,036.505 9
<b>Total</b>	<b>2.3089</b>	<b>11.9717</b>	<b>20.5211</b>	<b>0.0763</b>	<b>5.5644</b>	<b>0.0902</b>	<b>5.6546</b>	<b>1.4904</b>	<b>0.0849</b>	<b>1.5753</b>		<b>7,788.072 1</b>	<b>7,788.072 1</b>	<b>0.3214</b>		<b>7,796.106 8</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3353	10.6375	2.5876	0.0258	0.6463	0.0527	0.6989	0.1861	0.0504	0.2364		2,755.192 2	2,755.192 2	0.1764		2,759.601 0
Worker	1.9736	1.3342	17.9335	0.0505	4.9182	0.0375	4.9557	1.3043	0.0346	1.3389		5,032.879 8	5,032.879 8	0.1450		5,036.505 9
<b>Total</b>	<b>2.3089</b>	<b>11.9717</b>	<b>20.5211</b>	<b>0.0763</b>	<b>5.5644</b>	<b>0.0902</b>	<b>5.6546</b>	<b>1.4904</b>	<b>0.0849</b>	<b>1.5753</b>		<b>7,788.072 1</b>	<b>7,788.072 1</b>	<b>0.3214</b>		<b>7,796.106 8</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.363 9</b>	<b>2,553.363 9</b>	<b>0.6160</b>		<b>2,568.764 3</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2842	9.6725	2.3486	0.0256	0.6463	0.0198	0.6660	0.1861	0.0189	0.2049		2,734.5119	2,734.5119	0.1691		2,738.7393
Worker	1.8414	1.2011	16.5206	0.0489	4.9182	0.0364	4.9546	1.3043	0.0335	1.3378		4,870.3525	4,870.3525	0.1313		4,873.6342
<b>Total</b>	<b>2.1256</b>	<b>10.8736</b>	<b>18.8692</b>	<b>0.0744</b>	<b>5.5644</b>	<b>0.0562</b>	<b>5.6206</b>	<b>1.4904</b>	<b>0.0524</b>	<b>1.5428</b>		<b>7,604.8643</b>	<b>7,604.8643</b>	<b>0.3004</b>		<b>7,612.3734</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2842	9.6725	2.3486	0.0256	0.6463	0.0198	0.6660	0.1861	0.0189	0.2049		2,734.5119	2,734.5119	0.1691		2,738.7393
Worker	1.8414	1.2011	16.5206	0.0489	4.9182	0.0364	4.9546	1.3043	0.0335	1.3378		4,870.3525	4,870.3525	0.1313		4,873.6342
<b>Total</b>	<b>2.1256</b>	<b>10.8736</b>	<b>18.8692</b>	<b>0.0744</b>	<b>5.5644</b>	<b>0.0562</b>	<b>5.6206</b>	<b>1.4904</b>	<b>0.0524</b>	<b>1.5428</b>		<b>7,604.8643</b>	<b>7,604.8643</b>	<b>0.3004</b>		<b>7,612.3734</b>

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.1489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4044</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>		<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0410	0.5632	1.6700e-003	0.1677	1.2400e-003	0.1689	0.0445	1.1400e-003	0.0456		166.0347	166.0347	4.4800e-003		166.1466
<b>Total</b>	<b>0.0628</b>	<b>0.0410</b>	<b>0.5632</b>	<b>1.6700e-003</b>	<b>0.1677</b>	<b>1.2400e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1400e-003</b>	<b>0.0456</b>		<b>166.0347</b>	<b>166.0347</b>	<b>4.4800e-003</b>		<b>166.1466</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.1489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.4293</b>	<b>1.2154</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0374</b>	<b>0.0374</b>		<b>0.0374</b>	<b>0.0374</b>	<b>0.0000</b>	<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0410	0.5632	1.6700e-003	0.1677	1.2400e-003	0.1689	0.0445	1.1400e-003	0.0456		166.0347	166.0347	4.4800e-003		166.1466
<b>Total</b>	<b>0.0628</b>	<b>0.0410</b>	<b>0.5632</b>	<b>1.6700e-003</b>	<b>0.1677</b>	<b>1.2400e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1400e-003</b>	<b>0.0456</b>		<b>166.0347</b>	<b>166.0347</b>	<b>4.4800e-003</b>		<b>166.1466</b>

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.6272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>31.8461</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>



UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3683	0.2402	3.3041	9.7800e-003	0.9836	7.2800e-003	0.9909	0.2609	6.7000e-003	0.2676		974.0705	974.0705	0.0263		974.7268
<b>Total</b>	<b>0.3683</b>	<b>0.2402</b>	<b>3.3041</b>	<b>9.7800e-003</b>	<b>0.9836</b>	<b>7.2800e-003</b>	<b>0.9909</b>	<b>0.2609</b>	<b>6.7000e-003</b>	<b>0.2676</b>		<b>974.0705</b>	<b>974.0705</b>	<b>0.0263</b>		<b>974.7268</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.6272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>31.6569</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3683	0.2402	3.3041	9.7800e-003	0.9836	7.2800e-003	0.9909	0.2609	6.7000e-003	0.2676		974.0705	974.0705	0.0263		974.7268
<b>Total</b>	<b>0.3683</b>	<b>0.2402</b>	<b>3.3041</b>	<b>9.7800e-003</b>	<b>0.9836</b>	<b>7.2800e-003</b>	<b>0.9909</b>	<b>0.2609</b>	<b>6.7000e-003</b>	<b>0.2676</b>		<b>974.0705</b>	<b>974.0705</b>	<b>0.0263</b>		<b>974.7268</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.7128	56.6879	156.1316	0.5574	44.9571	0.4372	45.3943	12.0277	0.4082	12.4359		56,667.24 94	56,667.24 94	2.7087		56,734.96 65
Unmitigated	11.7128	56.6879	156.1316	0.5574	44.9571	0.4372	45.3943	12.0277	0.4082	12.4359		56,667.24 94	56,667.24 94	2.7087		56,734.96 65

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,007.04	5,878.08	5387.20	20,161,431	20,161,431
General Light Industry	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	368.74	459.27	382.34	522,798	522,798
<b>Total</b>	<b>6,375.78</b>	<b>6,337.35</b>	<b>5,769.54</b>	<b>20,684,229</b>	<b>20,684,229</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
General Light Industry	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
Parking Lot	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924
High Turnover (Sit Down Restaurant)	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000



UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.9101	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899	0.0000	61.9534	61.9534	0.0603	0.0000	63.4608
Unmitigated	12.9101	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899	0.0000	61.9534	61.9534	0.0603	0.0000	63.4608

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9689					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.8923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0489	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899		61.9534	61.9534	0.0603		63.4608
<b>Total</b>	<b>12.9101</b>	<b>0.3977</b>	<b>34.4680</b>	<b>1.8200e-003</b>		<b>0.1899</b>	<b>0.1899</b>		<b>0.1899</b>	<b>0.1899</b>	<b>0.0000</b>	<b>61.9534</b>	<b>61.9534</b>	<b>0.0603</b>	<b>0.0000</b>	<b>63.4608</b>

UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9689					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.8923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0489	0.3977	34.4680	1.8200e-003		0.1899	0.1899		0.1899	0.1899		61.9534	61.9534	0.0603		63.4608
<b>Total</b>	<b>12.9101</b>	<b>0.3977</b>	<b>34.4680</b>	<b>1.8200e-003</b>		<b>0.1899</b>	<b>0.1899</b>		<b>0.1899</b>	<b>0.1899</b>	<b>0.0000</b>	<b>61.9534</b>	<b>61.9534</b>	<b>0.0603</b>	<b>0.0000</b>	<b>63.4608</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**



## UCR North District Development Phase 1 ALL ELECTRIC - South Coast Air Basin, Summer

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**UCR North District Development Plan Future Phases ALL ELECTRIC**  
**South Coast Air Basin, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	2,100.00	Space	18.90	840,000.00	0
Arena	5.70	Acre	5.70	248,292.00	5000
Health Club	22.00	1000sqft	0.51	22,000.00	0
High Turnover (Sit Down Restaurant)	33.40	1000sqft	0.77	33,400.00	0
Apartments Mid Rise	1,250.00	Dwelling Unit	32.89	1,245,000.00	4500

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2025
<b>Utility Company</b>	Riverside Public Utilities				
<b>CO2 Intensity (lb/MWhr)</b>	1325.65	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics -

Land Use - Estimates based on the EIR Project Description.

Construction Phase - Full NDD construction buildout is not yet planned. Schedule is provided for illustrative purposes.

Demolition - Assumes 268 units with each unit approximately 1000 square feet.

Grading - Assumes re-grading entire site. Site has already been developed and should not require extensive grading.

Architectural Coating -

Vehicle Trips - Based on September 26 Trip Generation estimates.

Woodstoves - No woodstoves or fireplaces.

Energy Use - Engineer calculated electricity use to be 14,473,977 kwh/year NDD remaining phases.

Water And Wastewater - Based on plumbing engineer calculations using plumbing code. 249,318,000 GPY total use.

Solid Waste -

Construction Off-road Equipment Mitigation - Fugitive Dust mitigation reflect compliance with Rule 403.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Consistent with CEC mandatory measures and CalGreen code. UCR has a 9,600 panel, 4.3 megawatt solar array on-site. Assumes 10% of power would be generated on-site.

Water Mitigation - Consistent with CalGreen mandatory measures and PDFs.

Waste Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	70.00	64.00
tblConstructionPhase	NumDays	40.00	43.00
tblConstructionPhase	NumDays	110.00	109.00

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tblConstructionPhase	NumDays	1,110.00	567.00
tblConstructionPhase	NumDays	75.00	263.00
tblConstructionPhase	NumDays	75.00	176.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	6.62	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	28.48	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	T24E	772.17	11,579.18
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	12.38	0.00
tblEnergyUse	T24NG	8,764.08	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	77.67	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00

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tblFireplaces	NumberGas	1,062.50	0.00
tblFireplaces	NumberWood	62.50	0.00
tblGrading	AcresOfGrading	275.00	55.00
tblLandUse	LandUseSquareFeet	1,250,000.00	1,245,000.00
tblLandUse	Population	0.00	5,000.00
tblLandUse	Population	3,575.00	4,500.00
tblVehicleTrips	ST_TR	6.39	11.70
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	71.00
tblVehicleTrips	SU_TR	5.86	10.70
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	71.00
tblVehicleTrips	WD_TR	6.65	12.20
tblVehicleTrips	WD_TR	33.33	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	71.00
tblWater	IndoorWaterUseRate	81,442,532.03	249,318,000.00
tblWater	IndoorWaterUseRate	7,673,092.72	0.00
tblWater	IndoorWaterUseRate	1,301,149.17	0.00
tblWater	IndoorWaterUseRate	10,138,026.00	0.00
tblWater	OutdoorWaterUseRate	51,344,204.97	0.00
tblWater	OutdoorWaterUseRate	489,771.88	0.00
tblWater	OutdoorWaterUseRate	797,478.52	0.00
tblWater	OutdoorWaterUseRate	647,108.04	0.00
tblWoodstoves	NumberCatalytic	62.50	0.00
tblWoodstoves	NumberNoncatalytic	62.50	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

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**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.5373	4.8874	4.2666	0.0115	1.2632	0.1856	1.4487	0.5137	0.1716	0.6852	0.0000	1,042.093 1	1,042.093 1	0.1836	0.0000	1,046.682 4
2023	0.9473	5.2119	8.3129	0.0311	2.2312	0.1084	2.3396	0.5986	0.1017	0.7003	0.0000	2,867.725 5	2,867.725 5	0.1649	0.0000	2,871.846 9
2024	6.5296	6.4952	10.7763	0.0365	2.5349	0.1664	2.7013	0.6793	0.1553	0.8346	0.0000	3,342.232 2	3,342.232 2	0.2528	0.0000	3,348.551 8
2025	0.0351	0.0238	0.0409	1.4000e-004	0.0102	5.7000e-004	0.0108	2.7300e-003	5.4000e-004	3.2600e-003	0.0000	12.8896	12.8896	9.6000e-004	0.0000	12.9135
<b>Maximum</b>	<b>6.5296</b>	<b>6.4952</b>	<b>10.7763</b>	<b>0.0365</b>	<b>2.5349</b>	<b>0.1856</b>	<b>2.7013</b>	<b>0.6793</b>	<b>0.1716</b>	<b>0.8346</b>	<b>0.0000</b>	<b>3,342.232 2</b>	<b>3,342.232 2</b>	<b>0.2528</b>	<b>0.0000</b>	<b>3,348.551 8</b>

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**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2232	1.2291	4.6176	0.0115	0.7425	0.0140	0.7564	0.2674	0.0137	0.2811	0.0000	1,042.0924	1,042.0924	0.1836	0.0000	1,046.6817
2023	0.7854	3.6324	8.4710	0.0311	2.2312	0.0227	2.2539	0.5986	0.0214	0.6200	0.0000	2,867.7252	2,867.7252	0.1649	0.0000	2,871.8466
2024	6.2739	3.8430	11.2975	0.0365	2.5349	0.0299	2.5648	0.6793	0.0285	0.7078	0.0000	3,342.2315	3,342.2315	0.2528	0.0000	3,348.5510
2025	0.0342	0.0145	0.0430	1.4000e-004	0.0102	1.2000e-004	0.0103	2.7300e-003	1.1000e-004	2.8400e-003	0.0000	12.8896	12.8896	9.6000e-004	0.0000	12.9135
<b>Maximum</b>	<b>6.2739</b>	<b>3.8430</b>	<b>11.2975</b>	<b>0.0365</b>	<b>2.5349</b>	<b>0.0299</b>	<b>2.5648</b>	<b>0.6793</b>	<b>0.0285</b>	<b>0.7078</b>	<b>0.0000</b>	<b>3,342.2315</b>	<b>3,342.2315</b>	<b>0.2528</b>	<b>0.0000</b>	<b>3,348.5510</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>9.10</b>	<b>47.53</b>	<b>-4.41</b>	<b>0.00</b>	<b>8.62</b>	<b>85.53</b>	<b>14.07</b>	<b>13.73</b>	<b>85.15</b>	<b>27.51</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2022	3-31-2022	1.0681	0.2358
2	4-1-2022	6-30-2022	1.2487	0.1015
3	7-1-2022	9-30-2022	1.3996	0.1377
4	10-1-2022	12-31-2022	1.7145	0.9677
5	1-1-2023	3-31-2023	1.5280	1.0975
6	4-1-2023	6-30-2023	1.5201	1.0848
7	7-1-2023	9-30-2023	1.5368	1.0967
8	10-1-2023	12-31-2023	1.5620	1.1218



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9	1-1-2024	3-31-2024	1.8345	1.1400
10	4-1-2024	6-30-2024	3.2159	2.4944
11	7-1-2024	9-30-2024	3.9501	3.2071
12	10-1-2024	12-31-2024	3.9797	3.2367
13	1-1-2025	3-31-2025	0.0422	0.0349
		Highest	3.9797	3.2367

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.5817	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8,703.2708	8,703.2708	0.1904	0.0394	8,719.7693
Mobile	3.9958	19.6016	52.9992	0.2219	20.5519	0.1621	20.7140	5.5056	0.1505	5.6561	0.0000	20,551.0426	20,551.0426	0.8974	0.0000	20,573.4766
Waste						0.0000	0.0000		0.0000	0.0000	222.9551	0.0000	222.9551	13.1763	0.0000	552.3619
Water						0.0000	0.0000		0.0000	0.0000	79.0971	1,952.0574	2,031.1545	8.1667	0.2007	2,295.1199
<b>Total</b>	<b>10.5775</b>	<b>19.7502</b>	<b>65.9053</b>	<b>0.2226</b>	<b>20.5519</b>	<b>0.2336</b>	<b>20.7856</b>	<b>5.5056</b>	<b>0.2221</b>	<b>5.7277</b>	<b>302.0522</b>	<b>31,227.4814</b>	<b>31,529.5336</b>	<b>22.4511</b>	<b>0.2401</b>	<b>32,162.3458</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.5817	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7,832.9437	7,832.9437	0.1714	0.0355	7,847.7924
Mobile	3.9958	19.6016	52.9992	0.2219	20.5519	0.1621	20.7140	5.5056	0.1505	5.6561	0.0000	20,551.0426	20,551.0426	0.8974	0.0000	20,573.4766
Waste						0.0000	0.0000		0.0000	0.0000	111.4776	0.0000	111.4776	6.5881	0.0000	276.1809
Water						0.0000	0.0000		0.0000	0.0000	79.0971	1,952.0574	2,031.1545	8.1667	0.2007	2,295.1199
<b>Total</b>	<b>10.5775</b>	<b>19.7502</b>	<b>65.9053</b>	<b>0.2226</b>	<b>20.5519</b>	<b>0.2336</b>	<b>20.7856</b>	<b>5.5056</b>	<b>0.2221</b>	<b>5.7277</b>	<b>190.5747</b>	<b>30,357.1543</b>	<b>30,547.7290</b>	<b>15.8439</b>	<b>0.2361</b>	<b>31,014.1880</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>36.91</b>	<b>2.79</b>	<b>3.11</b>	<b>29.43</b>	<b>1.64</b>	<b>3.57</b>

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	3/31/2022	5	64	
2	Site Preparation	Site Preparation	4/1/2022	5/31/2022	5	43	
3	Grading	Grading	6/1/2022	10/31/2022	5	109	
4	Building Construction	Building Construction	11/1/2022	1/1/2025	5	567	
5	Paving	Paving	1/1/2024	1/1/2025	5	263	
6	Architectural Coating	Architectural Coating	5/1/2024	1/1/2025	5	176	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 55**

**Acres of Paving: 18.9**

**Residential Indoor: 2,521,125; Residential Outdoor: 840,375; Non-Residential Indoor: 455,538; Non-Residential Outdoor: 151,846; Striped Parking Area: 50,400 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,380.00	321.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	276.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1319	0.0000	0.1319	0.0200	0.0000	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0845	0.8230	0.6590	1.2400e-003		0.0398	0.0398		0.0370	0.0370	0.0000	108.7687	108.7687	0.0306	0.0000	109.5325
<b>Total</b>	<b>0.0845</b>	<b>0.8230</b>	<b>0.6590</b>	<b>1.2400e-003</b>	<b>0.1319</b>	<b>0.0398</b>	<b>0.1717</b>	<b>0.0200</b>	<b>0.0370</b>	<b>0.0569</b>	<b>0.0000</b>	<b>108.7687</b>	<b>108.7687</b>	<b>0.0306</b>	<b>0.0000</b>	<b>109.5325</b>

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**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4500e-003	0.1507	0.0355	4.6000e-004	0.0105	4.3000e-004	0.0109	2.8700e-003	4.1000e-004	3.2900e-003	0.0000	45.1935	45.1935	3.2500e-003	0.0000	45.2747
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8700e-003	1.3400e-003	0.0155	5.0000e-005	5.2700e-003	4.0000e-005	5.3000e-003	1.4000e-003	4.0000e-005	1.4300e-003	0.0000	4.4275	4.4275	1.1000e-004	0.0000	4.4303
<b>Total</b>	<b>6.3200e-003</b>	<b>0.1521</b>	<b>0.0510</b>	<b>5.1000e-004</b>	<b>0.0157</b>	<b>4.7000e-004</b>	<b>0.0162</b>	<b>4.2700e-003</b>	<b>4.5000e-004</b>	<b>4.7200e-003</b>	<b>0.0000</b>	<b>49.6210</b>	<b>49.6210</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>49.7049</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0514	0.0000	0.0514	7.7900e-003	0.0000	7.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0148	0.0641	0.7450	1.2400e-003		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	108.7686	108.7686	0.0306	0.0000	109.5324
<b>Total</b>	<b>0.0148</b>	<b>0.0641</b>	<b>0.7450</b>	<b>1.2400e-003</b>	<b>0.0514</b>	<b>1.9700e-003</b>	<b>0.0534</b>	<b>7.7900e-003</b>	<b>1.9700e-003</b>	<b>9.7600e-003</b>	<b>0.0000</b>	<b>108.7686</b>	<b>108.7686</b>	<b>0.0306</b>	<b>0.0000</b>	<b>109.5324</b>

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**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4500e-003	0.1507	0.0355	4.6000e-004	0.0105	4.3000e-004	0.0109	2.8700e-003	4.1000e-004	3.2900e-003	0.0000	45.1935	45.1935	3.2500e-003	0.0000	45.2747
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8700e-003	1.3400e-003	0.0155	5.0000e-005	5.2700e-003	4.0000e-005	5.3000e-003	1.4000e-003	4.0000e-005	1.4300e-003	0.0000	4.4275	4.4275	1.1000e-004	0.0000	4.4303
<b>Total</b>	<b>6.3200e-003</b>	<b>0.1521</b>	<b>0.0510</b>	<b>5.1000e-004</b>	<b>0.0157</b>	<b>4.7000e-004</b>	<b>0.0162</b>	<b>4.2700e-003</b>	<b>4.5000e-004</b>	<b>4.7200e-003</b>	<b>0.0000</b>	<b>49.6210</b>	<b>49.6210</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>49.7049</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0682	0.7113	0.4235	8.2000e-004		0.0347	0.0347		0.0319	0.0319	0.0000	71.8947	71.8947	0.0233	0.0000	72.4760
<b>Total</b>	<b>0.0682</b>	<b>0.7113</b>	<b>0.4235</b>	<b>8.2000e-004</b>	<b>0.3613</b>	<b>0.0347</b>	<b>0.3960</b>	<b>0.1986</b>	<b>0.0319</b>	<b>0.2305</b>	<b>0.0000</b>	<b>71.8947</b>	<b>71.8947</b>	<b>0.0233</b>	<b>0.0000</b>	<b>72.4760</b>

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**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0800e-003	0.0125	4.0000e-005	4.2500e-003	3.0000e-005	4.2800e-003	1.1300e-003	3.0000e-005	1.1600e-003	0.0000	3.5696	3.5696	9.0000e-005	0.0000	3.5719
<b>Total</b>	<b>1.5100e-003</b>	<b>1.0800e-003</b>	<b>0.0125</b>	<b>4.0000e-005</b>	<b>4.2500e-003</b>	<b>3.0000e-005</b>	<b>4.2800e-003</b>	<b>1.1300e-003</b>	<b>3.0000e-005</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>3.5696</b>	<b>3.5696</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>3.5719</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1409	0.0000	0.1409	0.0775	0.0000	0.0775	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0434	0.4487	8.2000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	71.8946	71.8946	0.0233	0.0000	72.4759
<b>Total</b>	<b>0.0100</b>	<b>0.0434</b>	<b>0.4487</b>	<b>8.2000e-004</b>	<b>0.1409</b>	<b>1.3300e-003</b>	<b>0.1423</b>	<b>0.0775</b>	<b>1.3300e-003</b>	<b>0.0788</b>	<b>0.0000</b>	<b>71.8946</b>	<b>71.8946</b>	<b>0.0233</b>	<b>0.0000</b>	<b>72.4759</b>



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**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0800e-003	0.0125	4.0000e-005	4.2500e-003	3.0000e-005	4.2800e-003	1.1300e-003	3.0000e-005	1.1600e-003	0.0000	3.5696	3.5696	9.0000e-005	0.0000	3.5719
<b>Total</b>	<b>1.5100e-003</b>	<b>1.0800e-003</b>	<b>0.0125</b>	<b>4.0000e-005</b>	<b>4.2500e-003</b>	<b>3.0000e-005</b>	<b>4.2800e-003</b>	<b>1.1300e-003</b>	<b>3.0000e-005</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>3.5696</b>	<b>3.5696</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>3.5719</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3604	0.0000	0.3604	0.1852	0.0000	0.1852	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1976	2.1170	1.5828	3.3800e-003		0.0891	0.0891		0.0820	0.0820	0.0000	297.2136	297.2136	0.0961	0.0000	299.6167
<b>Total</b>	<b>0.1976</b>	<b>2.1170</b>	<b>1.5828</b>	<b>3.3800e-003</b>	<b>0.3604</b>	<b>0.0891</b>	<b>0.4495</b>	<b>0.1852</b>	<b>0.0820</b>	<b>0.2672</b>	<b>0.0000</b>	<b>297.2136</b>	<b>297.2136</b>	<b>0.0961</b>	<b>0.0000</b>	<b>299.6167</b>

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**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2500e-003	3.0400e-003	0.0351	1.1000e-004	0.0120	9.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.0540	10.0540	2.5000e-004	0.0000	10.0604
<b>Total</b>	<b>4.2500e-003</b>	<b>3.0400e-003</b>	<b>0.0351</b>	<b>1.1000e-004</b>	<b>0.0120</b>	<b>9.0000e-005</b>	<b>0.0121</b>	<b>3.1800e-003</b>	<b>8.0000e-005</b>	<b>3.2600e-003</b>	<b>0.0000</b>	<b>10.0540</b>	<b>10.0540</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>10.0604</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1406	0.0000	0.1406	0.0722	0.0000	0.0722	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0415	0.1799	1.7985	3.3800e-003		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003	0.0000	297.2132	297.2132	0.0961	0.0000	299.6163
<b>Total</b>	<b>0.0415</b>	<b>0.1799</b>	<b>1.7985</b>	<b>3.3800e-003</b>	<b>0.1406</b>	<b>5.5300e-003</b>	<b>0.1461</b>	<b>0.0722</b>	<b>5.5300e-003</b>	<b>0.0778</b>	<b>0.0000</b>	<b>297.2132</b>	<b>297.2132</b>	<b>0.0961</b>	<b>0.0000</b>	<b>299.6163</b>

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**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2500e-003	3.0400e-003	0.0351	1.1000e-004	0.0120	9.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.0540	10.0540	2.5000e-004	0.0000	10.0604
<b>Total</b>	<b>4.2500e-003</b>	<b>3.0400e-003</b>	<b>0.0351</b>	<b>1.1000e-004</b>	<b>0.0120</b>	<b>9.0000e-005</b>	<b>0.0121</b>	<b>3.1800e-003</b>	<b>8.0000e-005</b>	<b>3.2600e-003</b>	<b>0.0000</b>	<b>10.0540</b>	<b>10.0540</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>10.0604</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0375	0.3435	0.3600	5.9000e-004		0.0178	0.0178		0.0168	0.0168	0.0000	50.9796	50.9796	0.0122	0.0000	51.2849
<b>Total</b>	<b>0.0375</b>	<b>0.3435</b>	<b>0.3600</b>	<b>5.9000e-004</b>		<b>0.0178</b>	<b>0.0178</b>		<b>0.0168</b>	<b>0.0168</b>	<b>0.0000</b>	<b>50.9796</b>	<b>50.9796</b>	<b>0.0122</b>	<b>0.0000</b>	<b>51.2849</b>

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**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.6518	0.1644	1.7500e-003	0.0445	1.2200e-003	0.0457	0.0128	1.1600e-003	0.0140	0.0000	169.9553	169.9553	0.0107	0.0000	170.2220
Worker	0.1185	0.0846	0.9784	3.1000e-003	0.3331	2.4400e-003	0.3355	0.0885	2.2500e-003	0.0907	0.0000	280.0366	280.0366	7.0600e-003	0.0000	280.2131
<b>Total</b>	<b>0.1376</b>	<b>0.7364</b>	<b>1.1428</b>	<b>4.8500e-003</b>	<b>0.3776</b>	<b>3.6600e-003</b>	<b>0.3813</b>	<b>0.1013</b>	<b>3.4100e-003</b>	<b>0.1047</b>	<b>0.0000</b>	<b>449.9919</b>	<b>449.9919</b>	<b>0.0177</b>	<b>0.0000</b>	<b>450.4351</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.2100e-003	0.0492	0.3841	5.9000e-004		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	50.9795	50.9795	0.0122	0.0000	51.2848
<b>Total</b>	<b>7.2100e-003</b>	<b>0.0492</b>	<b>0.3841</b>	<b>5.9000e-004</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>50.9795</b>	<b>50.9795</b>	<b>0.0122</b>	<b>0.0000</b>	<b>51.2848</b>

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**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.6518	0.1644	1.7500e-003	0.0445	1.2200e-003	0.0457	0.0128	1.1600e-003	0.0140	0.0000	169.9553	169.9553	0.0107	0.0000	170.2220
Worker	0.1185	0.0846	0.9784	3.1000e-003	0.3331	2.4400e-003	0.3355	0.0885	2.2500e-003	0.0907	0.0000	280.0366	280.0366	7.0600e-003	0.0000	280.2131
<b>Total</b>	<b>0.1376</b>	<b>0.7364</b>	<b>1.1428</b>	<b>4.8500e-003</b>	<b>0.3776</b>	<b>3.6600e-003</b>	<b>0.3813</b>	<b>0.1013</b>	<b>3.4100e-003</b>	<b>0.1047</b>	<b>0.0000</b>	<b>449.9919</b>	<b>449.9919</b>	<b>0.0177</b>	<b>0.0000</b>	<b>450.4351</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
<b>Total</b>	<b>0.2045</b>	<b>1.8700</b>	<b>2.1117</b>	<b>3.5000e-003</b>		<b>0.0910</b>	<b>0.0910</b>		<b>0.0856</b>	<b>0.0856</b>	<b>0.0000</b>	<b>301.3462</b>	<b>301.3462</b>	<b>0.0717</b>	<b>0.0000</b>	<b>303.1383</b>

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**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0836	2.8896	0.8704	0.0100	0.2630	3.3500e-003	0.2663	0.0759	3.2000e-003	0.0791	0.0000	973.2756	973.2756	0.0556	0.0000	974.6649
Worker	0.6592	0.4523	5.3308	0.0176	1.9683	0.0140	1.9823	0.5227	0.0129	0.5357	0.0000	1,593.1038	1,593.1038	0.0376	0.0000	1,594.0437
<b>Total</b>	<b>0.7428</b>	<b>3.3419</b>	<b>6.2012</b>	<b>0.0276</b>	<b>2.2312</b>	<b>0.0174</b>	<b>2.2486</b>	<b>0.5986</b>	<b>0.0161</b>	<b>0.6147</b>	<b>0.0000</b>	<b>2,566.3794</b>	<b>2,566.3794</b>	<b>0.0932</b>	<b>0.0000</b>	<b>2,568.7086</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2905	2.2698	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
<b>Total</b>	<b>0.0426</b>	<b>0.2905</b>	<b>2.2698</b>	<b>3.5000e-003</b>		<b>5.3000e-003</b>	<b>5.3000e-003</b>		<b>5.3000e-003</b>	<b>5.3000e-003</b>	<b>0.0000</b>	<b>301.3458</b>	<b>301.3458</b>	<b>0.0717</b>	<b>0.0000</b>	<b>303.1380</b>

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**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0836	2.8896	0.8704	0.0100	0.2630	3.3500e-003	0.2663	0.0759	3.2000e-003	0.0791	0.0000	973.2756	973.2756	0.0556	0.0000	974.6649
Worker	0.6592	0.4523	5.3308	0.0176	1.9683	0.0140	1.9823	0.5227	0.0129	0.5357	0.0000	1,593.1038	1,593.1038	0.0376	0.0000	1,594.0437
<b>Total</b>	<b>0.7428</b>	<b>3.3419</b>	<b>6.2012</b>	<b>0.0276</b>	<b>2.2312</b>	<b>0.0174</b>	<b>2.2486</b>	<b>0.5986</b>	<b>0.0161</b>	<b>0.6147</b>	<b>0.0000</b>	<b>2,566.3794</b>	<b>2,566.3794</b>	<b>0.0932</b>	<b>0.0000</b>	<b>2,568.7086</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
<b>Total</b>	<b>0.1928</b>	<b>1.7611</b>	<b>2.1179</b>	<b>3.5300e-003</b>		<b>0.0803</b>	<b>0.0803</b>		<b>0.0756</b>	<b>0.0756</b>	<b>0.0000</b>	<b>303.7223</b>	<b>303.7223</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5179</b>

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**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0824	2.9045	0.8519	0.0100	0.2650	3.3300e-003	0.2683	0.0765	3.1800e-003	0.0796	0.0000	977.2460	977.2460	0.0552	0.0000	978.6250
Worker	0.6295	0.4152	5.0087	0.0172	1.9834	0.0140	1.9974	0.5267	0.0129	0.5396	0.0000	1,552.3299	1,552.3299	0.0347	0.0000	1,553.1970
<b>Total</b>	<b>0.7119</b>	<b>3.3198</b>	<b>5.8606</b>	<b>0.0272</b>	<b>2.2484</b>	<b>0.0173</b>	<b>2.2657</b>	<b>0.6032</b>	<b>0.0160</b>	<b>0.6192</b>	<b>0.0000</b>	<b>2,529.5759</b>	<b>2,529.5759</b>	<b>0.0899</b>	<b>0.0000</b>	<b>2,531.8220</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.2928	2.2873	3.5300e-003		5.3400e-003	5.3400e-003		5.3400e-003	5.3400e-003	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
<b>Total</b>	<b>0.0429</b>	<b>0.2928</b>	<b>2.2873</b>	<b>3.5300e-003</b>		<b>5.3400e-003</b>	<b>5.3400e-003</b>		<b>5.3400e-003</b>	<b>5.3400e-003</b>	<b>0.0000</b>	<b>303.7220</b>	<b>303.7220</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5175</b>



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**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0824	2.9045	0.8519	0.0100	0.2650	3.3300e-003	0.2683	0.0765	3.1800e-003	0.0796	0.0000	977.2460	977.2460	0.0552	0.0000	978.6250
Worker	0.6295	0.4152	5.0087	0.0172	1.9834	0.0140	1.9974	0.5267	0.0129	0.5396	0.0000	1,552.3299	1,552.3299	0.0347	0.0000	1,553.1970
<b>Total</b>	<b>0.7119</b>	<b>3.3198</b>	<b>5.8606</b>	<b>0.0272</b>	<b>2.2484</b>	<b>0.0173</b>	<b>2.2657</b>	<b>0.6032</b>	<b>0.0160</b>	<b>0.6192</b>	<b>0.0000</b>	<b>2,529.5759</b>	<b>2,529.5759</b>	<b>0.0899</b>	<b>0.0000</b>	<b>2,531.8220</b>

**3.5 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8000e-004	6.2300e-003	8.0400e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.5000e-004	2.5000e-004	0.0000	1.1596	1.1596	2.7000e-004	0.0000	1.1664
<b>Total</b>	<b>6.8000e-004</b>	<b>6.2300e-003</b>	<b>8.0400e-003</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.5000e-004</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>1.1596</b>	<b>1.1596</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>1.1664</b>

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**3.5 Building Construction - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0110	3.1700e-003	4.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	3.7095	3.7095	2.1000e-004	0.0000	3.7147
Worker	2.2900e-003	1.4500e-003	0.0178	6.0000e-005	7.5700e-003	5.0000e-005	7.6200e-003	2.0100e-003	5.0000e-005	2.0600e-003	0.0000	5.6917	5.6917	1.2000e-004	0.0000	5.6947
<b>Total</b>	<b>2.6000e-003</b>	<b>0.0124</b>	<b>0.0209</b>	<b>1.0000e-004</b>	<b>8.5800e-003</b>	<b>6.0000e-005</b>	<b>8.6400e-003</b>	<b>2.3000e-003</b>	<b>6.0000e-005</b>	<b>2.3600e-003</b>	<b>0.0000</b>	<b>9.4012</b>	<b>9.4012</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>9.4094</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6000e-004	1.1200e-003	8.7300e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.1596	1.1596	2.7000e-004	0.0000	1.1664
<b>Total</b>	<b>1.6000e-004</b>	<b>1.1200e-003</b>	<b>8.7300e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.1596</b>	<b>1.1596</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>1.1664</b>

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**3.5 Building Construction - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0110	3.1700e-003	4.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	3.7095	3.7095	2.1000e-004	0.0000	3.7147
Worker	2.2900e-003	1.4500e-003	0.0178	6.0000e-005	7.5700e-003	5.0000e-005	7.6200e-003	2.0100e-003	5.0000e-005	2.0600e-003	0.0000	5.6917	5.6917	1.2000e-004	0.0000	5.6947
<b>Total</b>	<b>2.6000e-003</b>	<b>0.0124</b>	<b>0.0209</b>	<b>1.0000e-004</b>	<b>8.5800e-003</b>	<b>6.0000e-005</b>	<b>8.6400e-003</b>	<b>2.3000e-003</b>	<b>6.0000e-005</b>	<b>2.3600e-003</b>	<b>0.0000</b>	<b>9.4012</b>	<b>9.4012</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>9.4094</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1295	1.2477	1.9160	2.9900e-003		0.0614	0.0614		0.0565	0.0565	0.0000	262.3476	262.3476	0.0849	0.0000	264.4688
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1295</b>	<b>1.2477</b>	<b>1.9160</b>	<b>2.9900e-003</b>		<b>0.0614</b>	<b>0.0614</b>		<b>0.0565</b>	<b>0.0565</b>	<b>0.0000</b>	<b>262.3476</b>	<b>262.3476</b>	<b>0.0849</b>	<b>0.0000</b>	<b>264.4688</b>

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**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8400e-003	4.5100e-003	0.0544	1.9000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8700e-003	0.0000	16.8732	16.8732	3.8000e-004	0.0000	16.8826
<b>Total</b>	<b>6.8400e-003</b>	<b>4.5100e-003</b>	<b>0.0544</b>	<b>1.9000e-004</b>	<b>0.0216</b>	<b>1.5000e-004</b>	<b>0.0217</b>	<b>5.7300e-003</b>	<b>1.4000e-004</b>	<b>5.8700e-003</b>	<b>0.0000</b>	<b>16.8732</b>	<b>16.8732</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>16.8826</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.1592	2.2657	2.9900e-003		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003	0.0000	262.3473	262.3473	0.0849	0.0000	264.4685
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0367</b>	<b>0.1592</b>	<b>2.2657</b>	<b>2.9900e-003</b>		<b>4.9000e-003</b>	<b>4.9000e-003</b>		<b>4.9000e-003</b>	<b>4.9000e-003</b>	<b>0.0000</b>	<b>262.3473</b>	<b>262.3473</b>	<b>0.0849</b>	<b>0.0000</b>	<b>264.4685</b>

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**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8400e-003	4.5100e-003	0.0544	1.9000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8700e-003	0.0000	16.8732	16.8732	3.8000e-004	0.0000	16.8826
<b>Total</b>	<b>6.8400e-003</b>	<b>4.5100e-003</b>	<b>0.0544</b>	<b>1.9000e-004</b>	<b>0.0216</b>	<b>1.5000e-004</b>	<b>0.0217</b>	<b>5.7300e-003</b>	<b>1.4000e-004</b>	<b>5.8700e-003</b>	<b>0.0000</b>	<b>16.8732</b>	<b>16.8732</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>16.8826</b>

**3.6 Paving - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-004	4.2900e-003	7.2900e-003	1.0000e-005		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	1.0010	1.0010	3.2000e-004	0.0000	1.0091
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.6000e-004</b>	<b>4.2900e-003</b>	<b>7.2900e-003</b>	<b>1.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.0010</b>	<b>1.0010</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.0091</b>

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**3.6 Paving - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0619	0.0619	0.0000	0.0000	0.0619
<b>Total</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0619</b>	<b>0.0619</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0619</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4000e-004	6.1000e-004	8.6500e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0010	1.0010	3.2000e-004	0.0000	1.0091
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.4000e-004</b>	<b>6.1000e-004</b>	<b>8.6500e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.0010</b>	<b>1.0010</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.0091</b>

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**3.6 Paving - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0619	0.0619	0.0000	0.0000	0.0619
<b>Total</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0619</b>	<b>0.0619</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0619</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.3888					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1067	0.1584	2.6000e-004		5.3300e-003	5.3300e-003		5.3300e-003	5.3300e-003	0.0000	22.3410	22.3410	1.2600e-003	0.0000	22.3724
<b>Total</b>	<b>5.4046</b>	<b>0.1067</b>	<b>0.1584</b>	<b>2.6000e-004</b>		<b>5.3300e-003</b>	<b>5.3300e-003</b>		<b>5.3300e-003</b>	<b>5.3300e-003</b>	<b>0.0000</b>	<b>22.3410</b>	<b>22.3410</b>	<b>1.2600e-003</b>	<b>0.0000</b>	<b>22.3724</b>

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**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0841	0.0555	0.6691	2.2900e-003	0.2650	1.8600e-003	0.2668	0.0704	1.7200e-003	0.0721	0.0000	207.3723	207.3723	4.6300e-003	0.0000	207.4882
<b>Total</b>	<b>0.0841</b>	<b>0.0555</b>	<b>0.6691</b>	<b>2.2900e-003</b>	<b>0.2650</b>	<b>1.8600e-003</b>	<b>0.2668</b>	<b>0.0704</b>	<b>1.7200e-003</b>	<b>0.0721</b>	<b>0.0000</b>	<b>207.3723</b>	<b>207.3723</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>207.4882</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.3888					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e-003	0.0113	0.1603	2.6000e-004		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	22.3409	22.3409	1.2600e-003	0.0000	22.3724
<b>Total</b>	<b>5.3914</b>	<b>0.0113</b>	<b>0.1603</b>	<b>2.6000e-004</b>		<b>3.5000e-004</b>	<b>3.5000e-004</b>		<b>3.5000e-004</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>22.3409</b>	<b>22.3409</b>	<b>1.2600e-003</b>	<b>0.0000</b>	<b>22.3724</b>



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**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0841	0.0555	0.6691	2.2900e-003	0.2650	1.8600e-003	0.2668	0.0704	1.7200e-003	0.0721	0.0000	207.3723	207.3723	4.6300e-003	0.0000	207.4882
<b>Total</b>	<b>0.0841</b>	<b>0.0555</b>	<b>0.6691</b>	<b>2.2900e-003</b>	<b>0.2650</b>	<b>1.8600e-003</b>	<b>0.2668</b>	<b>0.0704</b>	<b>1.7200e-003</b>	<b>0.0721</b>	<b>0.0000</b>	<b>207.3723</b>	<b>207.3723</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>207.4882</b>

**3.7 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	5.7000e-004	9.0000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.0309</b>	<b>5.7000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</b>

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**3.7 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	2.9000e-004	3.5500e-003	1.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.1383	1.1383	2.0000e-005	0.0000	1.1390
<b>Total</b>	<b>4.6000e-004</b>	<b>2.9000e-004</b>	<b>3.5500e-003</b>	<b>1.0000e-005</b>	<b>1.5100e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>4.0000e-004</b>	<b>1.0000e-005</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.1383</b>	<b>1.1383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.1390</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-005	6.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.0308</b>	<b>6.0000e-005</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</b>

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**3.7 Architectural Coating - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	2.9000e-004	3.5500e-003	1.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.1383	1.1383	2.0000e-005	0.0000	1.1390
<b>Total</b>	<b>4.6000e-004</b>	<b>2.9000e-004</b>	<b>3.5500e-003</b>	<b>1.0000e-005</b>	<b>1.5100e-003</b>	<b>1.0000e-005</b>	<b>1.5200e-003</b>	<b>4.0000e-004</b>	<b>1.0000e-005</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.1383</b>	<b>1.1383</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.1390</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.9958	19.6016	52.9992	0.2219	20.5519	0.1621	20.7140	5.5056	0.1505	5.6561	0.0000	20,551.04 26	20,551.04 26	0.8974	0.0000	20,573.47 66
Unmitigated	3.9958	19.6016	52.9992	0.2219	20.5519	0.1621	20.7140	5.5056	0.1505	5.6561	0.0000	20,551.04 26	20,551.04 26	0.8974	0.0000	20,573.47 66

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	15,250.00	14,625.00	13375.00	50,891,155	50,891,155
Arena	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	2,371.40	2,371.40	2371.40	3,231,816	3,231,816
<b>Total</b>	<b>17,621.40</b>	<b>16,996.40</b>	<b>15,746.40</b>	<b>54,122,972</b>	<b>54,122,972</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Arena	16.60	8.40	6.90	0.00	81.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Arena	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Enclosed Parking with Elevator	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Health Club	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
High Turnover (Sit Down Restaurant)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

**5.0 Energy Detail**


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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

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## UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.4474e+007	8,703.2708	0.1904	0.0394	8,719.7693
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>8,703.2708</b>	<b>0.1904</b>	<b>0.0394</b>	<b>8,719.7693</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.30266e+007	7,832.9437	0.1714	0.0355	7,847.7924
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>7,832.9437</b>	<b>0.1714</b>	<b>0.0355</b>	<b>7,847.7924</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.5817	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182
Unmitigated	6.5817	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3892	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182
<b>Total</b>	<b>6.5817</b>	<b>0.1486</b>	<b>12.9061</b>	<b>6.8000e-004</b>		<b>0.0716</b>	<b>0.0716</b>		<b>0.0716</b>	<b>0.0716</b>	<b>0.0000</b>	<b>21.1106</b>	<b>21.1106</b>	<b>0.0203</b>	<b>0.0000</b>	<b>21.6182</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3892	0.1486	12.9061	6.8000e-004		0.0716	0.0716		0.0716	0.0716	0.0000	21.1106	21.1106	0.0203	0.0000	21.6182
<b>Total</b>	<b>6.5817</b>	<b>0.1486</b>	<b>12.9061</b>	<b>6.8000e-004</b>		<b>0.0716</b>	<b>0.0716</b>		<b>0.0716</b>	<b>0.0716</b>	<b>0.0000</b>	<b>21.1106</b>	<b>21.1106</b>	<b>0.0203</b>	<b>0.0000</b>	<b>21.6182</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,031.1545	8.1667	0.2007	2,295.1199
Unmitigated	2,031.1545	8.1667	0.2007	2,295.1199

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	249.318 / 0	2,031.1545	8.1667	0.2007	2,295.1199
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,031.1545</b>	<b>8.1667</b>	<b>0.2007</b>	<b>2,295.1199</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	249.318 / 0	2,031.1545	8.1667	0.2007	2,295.1199
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,031.1545</b>	<b>8.1667</b>	<b>0.2007</b>	<b>2,295.1199</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	111.4776	6.5881	0.0000	276.1809
Unmitigated	222.9551	13.1763	0.0000	552.3619

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	575	116.7198	6.8979	0.0000	289.1684
Arena	0.49	0.0995	5.8800e-003	0.0000	0.2464
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	125.4	25.4551	1.5044	0.0000	63.0639
High Turnover (Sit Down Restaurant)	397.46	80.6808	4.7681	0.0000	199.8832
<b>Total</b>		<b>222.9551</b>	<b>13.1763</b>	<b>0.0000</b>	<b>552.3619</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	287.5	58.3599	3.4490	0.0000	144.5842
Arena	0.245	0.0497	2.9400e-003	0.0000	0.1232
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	62.7	12.7275	0.7522	0.0000	31.5319
High Turnover (Sit Down Restaurant)	198.73	40.3404	2.3841	0.0000	99.9416
<b>Total</b>		<b>111.4776</b>	<b>6.5881</b>	<b>0.0000</b>	<b>276.1810</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Annual

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**UCR North District Development Plan Future Phases ALL ELECTRIC**  
**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	2,100.00	Space	18.90	840,000.00	0
Arena	5.70	Acre	5.70	248,292.00	5000
Health Club	22.00	1000sqft	0.51	22,000.00	0
High Turnover (Sit Down Restaurant)	33.40	1000sqft	0.77	33,400.00	0
Apartments Mid Rise	1,250.00	Dwelling Unit	32.89	1,245,000.00	4500

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2025
<b>Utility Company</b>	Riverside Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	1325.65	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

Project Characteristics -

Land Use - Estimates based on the EIR Project Description.

Construction Phase - Full NDD construction buildout is not yet planned. Schedule is provided for illustrative purposes.

Demolition - Assumes 268 units with each unit approximately 1000 square feet.

Grading - Assumes re-grading entire site. Site has already been developed and should not require extensive grading.

Architectural Coating -

Vehicle Trips - Based on September 26 Trip Generation estimates.

Woodstoves - No woodstoves or fireplaces.

Energy Use - Engineer calculated electricity use to be 14,473,977 kwh/year NDD remaining phases.

Water And Wastewater - Based on plumbing engineer calculations using plumbing code. 249,318,000 GPY total use.

Solid Waste -

Construction Off-road Equipment Mitigation - Fugitive Dust mitigation reflect compliance with Rule 403.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Consistent with CEC mandatory measures and CalGreen code. UCR has a 9,600 panel, 4.3 megawatt solar array on-site. Assumes 10% of power would be generated on-site.

Water Mitigation - Consistent with CalGreen mandatory measures and PDFs.

Waste Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	70.00	64.00
tblConstructionPhase	NumDays	40.00	43.00
tblConstructionPhase	NumDays	110.00	109.00

## UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

tblConstructionPhase	NumDays	1,110.00	567.00
tblConstructionPhase	NumDays	75.00	263.00
tblConstructionPhase	NumDays	75.00	176.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	6.62	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	28.48	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	T24E	772.17	11,579.18
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	12.38	0.00
tblEnergyUse	T24NG	8,764.08	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	77.67	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00

## UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

tblFireplaces	NumberGas	1,062.50	0.00
tblFireplaces	NumberWood	62.50	0.00
tblGrading	AcresOfGrading	275.00	55.00
tblLandUse	LandUseSquareFeet	1,250,000.00	1,245,000.00
tblLandUse	Population	0.00	5,000.00
tblLandUse	Population	3,575.00	4,500.00
tblVehicleTrips	ST_TR	6.39	11.70
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	71.00
tblVehicleTrips	SU_TR	5.86	10.70
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	71.00
tblVehicleTrips	WD_TR	6.65	12.20
tblVehicleTrips	WD_TR	33.33	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	71.00
tblWater	IndoorWaterUseRate	81,442,532.03	249,318,000.00
tblWater	IndoorWaterUseRate	7,673,092.72	0.00
tblWater	IndoorWaterUseRate	1,301,149.17	0.00
tblWater	IndoorWaterUseRate	10,138,026.00	0.00
tblWater	OutdoorWaterUseRate	51,344,204.97	0.00
tblWater	OutdoorWaterUseRate	489,771.88	0.00
tblWater	OutdoorWaterUseRate	797,478.52	0.00
tblWater	OutdoorWaterUseRate	647,108.04	0.00
tblWoodstoves	NumberCatalytic	62.50	0.00
tblWoodstoves	NumberNoncatalytic	62.50	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	7.9718	48.2181	71.3469	0.2551	17.4792	1.6365	18.6210	9.2912	1.5056	10.7761	0.0000	25,897.24 93	25,897.24 93	1.9496	0.0000	25,934.82 67
2023	7.2960	39.4769	66.8721	0.2470	17.4792	0.8330	18.3121	4.6821	0.7820	5.4641	0.0000	25,082.01 75	25,082.01 75	1.4024	0.0000	25,117.076 1
2024	70.6799	49.5396	88.8287	0.2967	20.7319	1.2967	22.0285	5.5448	1.2114	6.7562	0.0000	29,965.23 70	29,965.23 70	2.1588	0.0000	30,019.20 80
2025	70.1846	47.0676	85.0129	0.2897	20.7319	1.1487	21.8805	5.5448	1.0727	6.6175	0.0000	29,265.70 12	29,265.70 12	2.1152	0.0000	29,318.58 01
<b>Maximum</b>	<b>70.6799</b>	<b>49.5396</b>	<b>88.8287</b>	<b>0.2967</b>	<b>20.7319</b>	<b>1.6365</b>	<b>22.0285</b>	<b>9.2912</b>	<b>1.5056</b>	<b>10.7761</b>	<b>0.0000</b>	<b>29,965.23 70</b>	<b>29,965.23 70</b>	<b>2.1588</b>	<b>0.0000</b>	<b>30,019.20 80</b>





UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	37.0449	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725	0.0000	186.1633	186.1633	0.1791	0.0000	190.6396
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	24.0682	106.3067	312.2285	1.2958	117.6031	0.9100	118.5131	31.4562	0.8452	32.3014		132,207.4650	132,207.4650	5.5886		132,347.1796
<b>Total</b>	<b>61.1131</b>	<b>107.4955</b>	<b>415.4775</b>	<b>1.3013</b>	<b>117.6031</b>	<b>1.4825</b>	<b>119.0855</b>	<b>31.4562</b>	<b>1.4176</b>	<b>32.8739</b>	<b>0.0000</b>	<b>132,393.6283</b>	<b>132,393.6283</b>	<b>5.7676</b>	<b>0.0000</b>	<b>132,537.8192</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	37.0449	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725	0.0000	186.1633	186.1633	0.1791	0.0000	190.6396
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	24.0682	106.3067	312.2285	1.2958	117.6031	0.9100	118.5131	31.4562	0.8452	32.3014		132,207.4650	132,207.4650	5.5886		132,347.1796
<b>Total</b>	<b>61.1131</b>	<b>107.4955</b>	<b>415.4775</b>	<b>1.3013</b>	<b>117.6031</b>	<b>1.4825</b>	<b>119.0855</b>	<b>31.4562</b>	<b>1.4176</b>	<b>32.8739</b>	<b>0.0000</b>	<b>132,393.6283</b>	<b>132,393.6283</b>	<b>5.7676</b>	<b>0.0000</b>	<b>132,537.8192</b>

## UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	3/31/2022	5	64	
2	Site Preparation	Site Preparation	4/1/2022	5/31/2022	5	43	
3	Grading	Grading	6/1/2022	10/31/2022	5	109	
4	Building Construction	Building Construction	11/1/2022	1/1/2025	5	567	
5	Paving	Paving	1/1/2024	1/1/2025	5	263	
6	Architectural Coating	Architectural Coating	5/1/2024	1/1/2025	5	176	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 55**

**Acres of Paving: 18.9**

**Residential Indoor: 2,521,125; Residential Outdoor: 840,375; Non-Residential Indoor: 455,538; Non-Residential Outdoor: 151,846; Striped Parking Area: 50,400 (Architectural Coating – sqft)**

#### OffRoad Equipment

## UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,380.00	321.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	276.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1220	0.0000	4.1220	0.6241	0.0000	0.6241			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>4.1220</b>	<b>1.2427</b>	<b>5.3646</b>	<b>0.6241</b>	<b>1.1553</b>	<b>1.7794</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1376	4.5712	1.0793	0.0144	0.3327	0.0133	0.3460	0.0912	0.0127	0.1039		1,568.1971	1,568.1971	0.1101		1,570.9486
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906
<b>Total</b>	<b>0.1965</b>	<b>4.6082</b>	<b>1.6002</b>	<b>0.0160</b>	<b>0.5003</b>	<b>0.0145</b>	<b>0.5149</b>	<b>0.1356</b>	<b>0.0138</b>	<b>0.1495</b>		<b>1,728.2866</b>	<b>1,728.2866</b>	<b>0.1141</b>		<b>1,731.1392</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6076	0.0000	1.6076	0.2434	0.0000	0.2434			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>0.4623</b>	<b>2.0032</b>	<b>23.2798</b>	<b>0.0388</b>	<b>1.6076</b>	<b>0.0616</b>	<b>1.6692</b>	<b>0.2434</b>	<b>0.0616</b>	<b>0.3050</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1376	4.5712	1.0793	0.0144	0.3327	0.0133	0.3460	0.0912	0.0127	0.1039		1,568.1971	1,568.1971	0.1101		1,570.9486
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906
<b>Total</b>	<b>0.1965</b>	<b>4.6082</b>	<b>1.6002</b>	<b>0.0160</b>	<b>0.5003</b>	<b>0.0145</b>	<b>0.5149</b>	<b>0.1356</b>	<b>0.0138</b>	<b>0.1495</b>		<b>1,728.2866</b>	<b>1,728.2866</b>	<b>0.1141</b>		<b>1,731.1392</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					16.8058	0.0000	16.8058	9.2378	0.0000	9.2378			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>16.8058</b>	<b>1.6126</b>	<b>18.4184</b>	<b>9.2378</b>	<b>1.4836</b>	<b>10.7214</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0444	0.6250	1.9300e-003	0.2012	1.4500e-003	0.2026	0.0534	1.3300e-003	0.0547		192.1074	192.1074	4.8500e-003		192.2287
<b>Total</b>	<b>0.0707</b>	<b>0.0444</b>	<b>0.6250</b>	<b>1.9300e-003</b>	<b>0.2012</b>	<b>1.4500e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3300e-003</b>	<b>0.0547</b>		<b>192.1074</b>	<b>192.1074</b>	<b>4.8500e-003</b>		<b>192.2287</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5543	0.0000	6.5543	3.6028	0.0000	3.6028			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>0.4656</b>	<b>2.0175</b>	<b>20.8690</b>	<b>0.0380</b>	<b>6.5543</b>	<b>0.0621</b>	<b>6.6164</b>	<b>3.6028</b>	<b>0.0621</b>	<b>3.6648</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0444	0.6250	1.9300e-003	0.2012	1.4500e-003	0.2026	0.0534	1.3300e-003	0.0547		192.1074	192.1074	4.8500e-003		192.2287
<b>Total</b>	<b>0.0707</b>	<b>0.0444</b>	<b>0.6250</b>	<b>1.9300e-003</b>	<b>0.2012</b>	<b>1.4500e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3300e-003</b>	<b>0.0547</b>		<b>192.1074</b>	<b>192.1074</b>	<b>4.8500e-003</b>		<b>192.2287</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6125	0.0000	6.6125	3.3984	0.0000	3.3984			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>6.6125</b>	<b>1.6349</b>	<b>8.2473</b>	<b>3.3984</b>	<b>1.5041</b>	<b>4.9025</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>



UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0493	0.6944	2.1400e-003	0.2236	1.6100e-003	0.2252	0.0593	1.4800e-003	0.0608		213.4526	213.4526	5.3900e-003		213.5875
<b>Total</b>	<b>0.0785</b>	<b>0.0493</b>	<b>0.6944</b>	<b>2.1400e-003</b>	<b>0.2236</b>	<b>1.6100e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4800e-003</b>	<b>0.0608</b>		<b>213.4526</b>	<b>213.4526</b>	<b>5.3900e-003</b>		<b>213.5875</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5789	0.0000	2.5789	1.3254	0.0000	1.3254			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>0.7616</b>	<b>3.3000</b>	<b>32.9991</b>	<b>0.0621</b>	<b>2.5789</b>	<b>0.1015</b>	<b>2.6804</b>	<b>1.3254</b>	<b>0.1015</b>	<b>1.4269</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0493	0.6944	2.1400e-003	0.2236	1.6100e-003	0.2252	0.0593	1.4800e-003	0.0608		213.4526	213.4526	5.3900e-003		213.5875
<b>Total</b>	<b>0.0785</b>	<b>0.0493</b>	<b>0.6944</b>	<b>2.1400e-003</b>	<b>0.2236</b>	<b>1.6100e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4800e-003</b>	<b>0.0608</b>		<b>213.4526</b>	<b>213.4526</b>	<b>5.3900e-003</b>		<b>213.5875</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8475	29.1993	7.0675	0.0804	2.0540	0.0546	2.1086	0.5913	0.0522	0.6435		8,614.684 3	8,614.684 3	0.5190		8,627.658 3
Worker	5.4181	3.4032	47.9160	0.1478	15.4252	0.1109	15.5361	4.0908	0.1021	4.1930		14,728.23 14	14,728.23 14	0.3722		14,737.53 62
<b>Total</b>	<b>6.2656</b>	<b>32.6024</b>	<b>54.9835</b>	<b>0.2282</b>	<b>17.4792</b>	<b>0.1655</b>	<b>17.6447</b>	<b>4.6821</b>	<b>0.1544</b>	<b>4.8365</b>		<b>23,342.91 57</b>	<b>23,342.91 57</b>	<b>0.8912</b>		<b>23,365.19 45</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8475	29.1993	7.0675	0.0804	2.0540	0.0546	2.1086	0.5913	0.0522	0.6435		8,614.684 3	8,614.684 3	0.5190		8,627.658 3
Worker	5.4181	3.4032	47.9160	0.1478	15.4252	0.1109	15.5361	4.0908	0.1021	4.1930		14,728.23 14	14,728.23 14	0.3722		14,737.53 62
<b>Total</b>	<b>6.2656</b>	<b>32.6024</b>	<b>54.9835</b>	<b>0.2282</b>	<b>17.4792</b>	<b>0.1655</b>	<b>17.6447</b>	<b>4.6821</b>	<b>0.1544</b>	<b>4.8365</b>		<b>23,342.91 57</b>	<b>23,342.91 57</b>	<b>0.8912</b>		<b>23,365.19 45</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6286	22.0125	6.3796	0.0778	2.0540	0.0252	2.0792	0.5913	0.0241	0.6154		8,347.1705	8,347.1705	0.4588		8,358.6395
Worker	5.0947	3.0795	44.2485	0.1422	15.4252	0.1080	15.5332	4.0908	0.0995	4.1903		14,179.6370	14,179.6370	0.3357		14,188.0305
<b>Total</b>	<b>5.7233</b>	<b>25.0920</b>	<b>50.6281</b>	<b>0.2201</b>	<b>17.4792</b>	<b>0.1332</b>	<b>17.6124</b>	<b>4.6821</b>	<b>0.1236</b>	<b>4.8057</b>		<b>22,526.8075</b>	<b>22,526.8075</b>	<b>0.7945</b>		<b>22,546.6700</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6286	22.0125	6.3796	0.0778	2.0540	0.0252	2.0792	0.5913	0.0241	0.6154		8,347.1705	8,347.1705	0.4588		8,358.6395
Worker	5.0947	3.0795	44.2485	0.1422	15.4252	0.1080	15.5332	4.0908	0.0995	4.1903		14,179.6370	14,179.6370	0.3357		14,188.0305
<b>Total</b>	<b>5.7233</b>	<b>25.0920</b>	<b>50.6281</b>	<b>0.2201</b>	<b>17.4792</b>	<b>0.1332</b>	<b>17.6124</b>	<b>4.6821</b>	<b>0.1236</b>	<b>4.8057</b>		<b>22,526.8075</b>	<b>22,526.8075</b>	<b>0.7945</b>		<b>22,546.6700</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6150	21.9544	6.1984	0.0775	2.0540	0.0249	2.0789	0.5913	0.0238	0.6151		8,316.5660	8,316.5660	0.4521		8,327.8681
Worker	4.8218	2.8063	41.3154	0.1375	15.4252	0.1065	15.5317	4.0908	0.0981	4.1889		13,712.4405	13,712.4405	0.3077		13,720.1332
<b>Total</b>	<b>5.4368</b>	<b>24.7607</b>	<b>47.5138</b>	<b>0.2150</b>	<b>17.4792</b>	<b>0.1315</b>	<b>17.6106</b>	<b>4.6821</b>	<b>0.1219</b>	<b>4.8040</b>		<b>22,029.0065</b>	<b>22,029.0065</b>	<b>0.7598</b>		<b>22,048.0012</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0270</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6150	21.9544	6.1984	0.0775	2.0540	0.0249	2.0789	0.5913	0.0238	0.6151		8,316.5660	8,316.5660	0.4521		8,327.8681
Worker	4.8218	2.8063	41.3154	0.1375	15.4252	0.1065	15.5317	4.0908	0.0981	4.1889		13,712.4405	13,712.4405	0.3077		13,720.1332
<b>Total</b>	<b>5.4368</b>	<b>24.7607</b>	<b>47.5138</b>	<b>0.2150</b>	<b>17.4792</b>	<b>0.1315</b>	<b>17.6106</b>	<b>4.6821</b>	<b>0.1219</b>	<b>4.8040</b>		<b>22,029.0065</b>	<b>22,029.0065</b>	<b>0.7598</b>		<b>22,048.0012</b>

**3.5 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>



UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5994	21.7630	6.0404	0.0770	2.0540	0.0246	2.0786	0.5913	0.0235	0.6148		8,270.3776	8,270.3776	0.4455		8,281.5140
Worker	4.5801	2.5666	38.4027	0.1321	15.4252	0.1045	15.5297	4.0908	0.0962	4.1870		13,172.8937	13,172.8937	0.2805		13,179.9071
<b>Total</b>	<b>5.1795</b>	<b>24.3296</b>	<b>44.4431</b>	<b>0.2091</b>	<b>17.4792</b>	<b>0.1291</b>	<b>17.6082</b>	<b>4.6821</b>	<b>0.1197</b>	<b>4.8018</b>		<b>21,443.2713</b>	<b>21,443.2713</b>	<b>0.7260</b>		<b>21,461.4211</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0270</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.5 Building Construction - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5994	21.7630	6.0404	0.0770	2.0540	0.0246	2.0786	0.5913	0.0235	0.6148		8,270.3776	8,270.3776	0.4455		8,281.5140
Worker	4.5801	2.5666	38.4027	0.1321	15.4252	0.1045	15.5297	4.0908	0.0962	4.1870		13,172.8937	13,172.8937	0.2805		13,179.9071
<b>Total</b>	<b>5.1795</b>	<b>24.3296</b>	<b>44.4431</b>	<b>0.2091</b>	<b>17.4792</b>	<b>0.1291</b>	<b>17.6082</b>	<b>4.6821</b>	<b>0.1197</b>	<b>4.8018</b>		<b>21,443.2713</b>	<b>21,443.2713</b>	<b>0.7260</b>		<b>21,461.4211</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
<b>Total</b>	<b>0.0524</b>	<b>0.0305</b>	<b>0.4491</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>149.0483</b>	<b>149.0483</b>	<b>3.3400e-003</b>		<b>149.1319</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2805</b>	<b>1.2154</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0374</b>	<b>0.0374</b>		<b>0.0374</b>	<b>0.0374</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
<b>Total</b>	<b>0.0524</b>	<b>0.0305</b>	<b>0.4491</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>149.0483</b>	<b>149.0483</b>	<b>3.3400e-003</b>		<b>149.1319</b>

**3.6 Paving - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0498	0.0279	0.4174	1.4400e-003	0.1677	1.1400e-003	0.1688	0.0445	1.0500e-003	0.0455		143.1836	143.1836	3.0500e-003		143.2599
<b>Total</b>	<b>0.0498</b>	<b>0.0279</b>	<b>0.4174</b>	<b>1.4400e-003</b>	<b>0.1677</b>	<b>1.1400e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0500e-003</b>	<b>0.0455</b>		<b>143.1836</b>	<b>143.1836</b>	<b>3.0500e-003</b>		<b>143.2599</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2805</b>	<b>1.2154</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0374</b>	<b>0.0374</b>		<b>0.0374</b>	<b>0.0374</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.6 Paving - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0498	0.0279	0.4174	1.4400e-003	0.1677	1.1400e-003	0.1688	0.0445	1.0500e-003	0.0455		143.1836	143.1836	3.0500e-003		143.2599
<b>Total</b>	<b>0.0498</b>	<b>0.0279</b>	<b>0.4174</b>	<b>1.4400e-003</b>	<b>0.1677</b>	<b>1.1400e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0500e-003</b>	<b>0.0455</b>		<b>143.1836</b>	<b>143.1836</b>	<b>3.0500e-003</b>		<b>143.2599</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.5858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>61.7666</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9644	0.5613	8.2631	0.0275	3.0850	0.0213	3.1063	0.8182	0.0196	0.8378		2,742.488 1	2,742.488 1	0.0615		2,744.026 6
<b>Total</b>	<b>0.9644</b>	<b>0.5613</b>	<b>8.2631</b>	<b>0.0275</b>	<b>3.0850</b>	<b>0.0213</b>	<b>3.1063</b>	<b>0.8182</b>	<b>0.0196</b>	<b>0.8378</b>		<b>2,742.488 1</b>	<b>2,742.488 1</b>	<b>0.0615</b>		<b>2,744.026 6</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.5858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>61.6155</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9644	0.5613	8.2631	0.0275	3.0850	0.0213	3.1063	0.8182	0.0196	0.8378		2,742.4881	2,742.4881	0.0615		2,744.0266
<b>Total</b>	<b>0.9644</b>	<b>0.5613</b>	<b>8.2631</b>	<b>0.0275</b>	<b>3.0850</b>	<b>0.0213</b>	<b>3.1063</b>	<b>0.8182</b>	<b>0.0196</b>	<b>0.8378</b>		<b>2,742.4881</b>	<b>2,742.4881</b>	<b>0.0615</b>		<b>2,744.0266</b>

**3.7 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.5858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>61.7567</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>



UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9160	0.5133	7.6805	0.0264	3.0850	0.0209	3.1059	0.8182	0.0192	0.8374		2,634.5787	2,634.5787	0.0561		2,635.9814
<b>Total</b>	<b>0.9160</b>	<b>0.5133</b>	<b>7.6805</b>	<b>0.0264</b>	<b>3.0850</b>	<b>0.0209</b>	<b>3.1059</b>	<b>0.8182</b>	<b>0.0192</b>	<b>0.8374</b>		<b>2,634.5787</b>	<b>2,634.5787</b>	<b>0.0561</b>		<b>2,635.9814</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.5858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>61.6155</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**3.7 Architectural Coating - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9160	0.5133	7.6805	0.0264	3.0850	0.0209	3.1059	0.8182	0.0192	0.8374		2,634.578 7	2,634.578 7	0.0561		2,635.981 4
<b>Total</b>	<b>0.9160</b>	<b>0.5133</b>	<b>7.6805</b>	<b>0.0264</b>	<b>3.0850</b>	<b>0.0209</b>	<b>3.1059</b>	<b>0.8182</b>	<b>0.0192</b>	<b>0.8374</b>		<b>2,634.578 7</b>	<b>2,634.578 7</b>	<b>0.0561</b>		<b>2,635.981 4</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.0682	106.3067	312.2285	1.2958	117.6031	0.9100	118.5131	31.4562	0.8452	32.3014		132,207.4650	132,207.4650	5.5886		132,347.1796
Unmitigated	24.0682	106.3067	312.2285	1.2958	117.6031	0.9100	118.5131	31.4562	0.8452	32.3014		132,207.4650	132,207.4650	5.5886		132,347.1796

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	15,250.00	14,625.00	13375.00	50,891,155	50,891,155
Arena	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	2,371.40	2,371.40	2371.40	3,231,816	3,231,816
<b>Total</b>	<b>17,621.40</b>	<b>16,996.40</b>	<b>15,746.40</b>	<b>54,122,972</b>	<b>54,122,972</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Arena	16.60	8.40	6.90	0.00	81.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Arena	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Enclosed Parking with Elevator	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Health Club	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
High Turnover (Sit Down Restaurant)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Arena	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Arena	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	37.0449	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725	0.0000	186.1633	186.1633	0.1791	0.0000	190.6396
Unmitigated	37.0449	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725	0.0000	186.1633	186.1633	0.1791	0.0000	190.6396

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9616					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1137	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725		186.1633	186.1633	0.1791		190.6396
<b>Total</b>	<b>37.0449</b>	<b>1.1888</b>	<b>103.2490</b>	<b>5.4600e-003</b>		<b>0.5725</b>	<b>0.5725</b>		<b>0.5725</b>	<b>0.5725</b>	<b>0.0000</b>	<b>186.1633</b>	<b>186.1633</b>	<b>0.1791</b>	<b>0.0000</b>	<b>190.6396</b>

UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9616					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1137	1.1888	103.2490	5.4600e-003		0.5725	0.5725		0.5725	0.5725		186.1633	186.1633	0.1791		190.6396
<b>Total</b>	<b>37.0449</b>	<b>1.1888</b>	<b>103.2490</b>	<b>5.4600e-003</b>		<b>0.5725</b>	<b>0.5725</b>		<b>0.5725</b>	<b>0.5725</b>	<b>0.0000</b>	<b>186.1633</b>	<b>186.1633</b>	<b>0.1791</b>	<b>0.0000</b>	<b>190.6396</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**



UCR North District Development Plan Future Phases ALL ELECTRIC - South Coast Air Basin, Summer

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# EMERGENCY ACTION PLAN (EAP)

University of California Riverside Main Campus Emergency Action Plan (EAP) covers those designated actions employers and employees must take to ensure employee safety from emergencies that arise within the workplace as required by the California Code of Regulations (CCR) Title 8, Section 3220.

*University of  
California Riverside*

# Plan Overview

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## Introduction

The following elements are included in this plan

- Evacuation procedures and emergency escape routes
- Procedures for employees who remain to operate critical plant operations before they evacuate
- Procedures to account for all employees after an emergency evacuation is completed
- Rescue and medical duties for those employees who are to perform them
- The preferred means of reporting fires and other emergencies
- The names, job titles, and departments of persons who can be contacted for further information or explanation of duties under the plan
- Alerting and Notification
- Contacts
- Emergency Procedures

## Summary

It is the responsibility of the Campus Emergency Manager to create and maintain this campus-level Emergency Action Plan, which is intended to guide the emergency response actions of all campus personnel during an event that threatens life safety or daily operations. Nothing in this plan shall be construed in a manner that limits the use of good judgment and common sense in matters not foreseen or covered by the elements of the plan or any appendices. This plan also sets forth the operational fundamentals that will be used to manage response activities in the event of an emergency on the UC Riverside campus and at off-site facilities.

## Authority

The UC Riverside Emergency Action Plan is created and distributed in accordance with UCR Campus Policy 425-24.

## Purpose

The purpose of this plan is to establish the operational procedures necessary for campus personnel to respond to, and recover from, a significant emergency event in a timely and organized fashion. The University EAP also serves as the baseline by which all organizational and unit level Emergency Action Plans are developed. This plan and organization is subordinate to State and Federal plans during a disaster declaration by those authorities.

## Approvals

The University of California Riverside Emergency Action Plan has been reviewed and approved by:

**Lisa Martin**

*Campus Emergency Manager*

**Russell Vernon, Ph.D.**

*Director of Environmental Health & Safety*

*Implementation Date: **July 20, 2012***

*Date of last Revision: **February 9, 2016***

# Evacuation Procedures & Emergency Escape Routes

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## Actions to Take

Many incidents (e.g. building fires, chemical releases, and police responses) could require an evacuation of all or part of the campus. All employees must evacuate the building they are in when notified to do so.

## Prior to Exiting

When the building's fire alarm activates, or when notified to evacuate by UCPD, EH&S, Physical Plant, or a department representative:

- Stop all work activities
- If possible to do so without endangering yourself, shut down all operations that could produce hazards if left un-attended, and begin your evacuation immediately.
- Alert others around you that an evacuation is taking place and of their need to exit.
- Close doors behind you as you exit, but do not lock them
- Closed doors help contain fires, locked doors hamper rescue operations.

Unless it creates an unnecessary delay, gather your keys, purse or wallet as you evacuate, keeping in mind you may not be allowed back into the building for an extended time.

# Evacuation Procedures For Critical Plant Operations Employees

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Safety is a top priority at UCR, and there are no critical operations worth risking one's welfare to perform. If you believe your department has critical operations requiring one or more employees to remain in the building during an evacuation (this should be a rare occurrence), you must contact the Campus Emergency Manager to develop a specific plan of action.

If you are unable to leave a building that is being evacuated to maintain critical processes that will create an increased hazard if left unattended, or you are injured or trapped, attempt to alert someone evacuating the building of your inability to leave.

## Evacuation Routes / Exiting the Building

During a building evacuation, proceed to the nearest exit or stairwell if available. Use an alternate escape route if the stairwell is involved with fire, smoke, or otherwise obstructed. Each employee should be aware of at least two exit routes in their main building in the event one is compromised. **Walk, do not run, and do not use building elevators during an evacuation under any circumstances.**

Assist those who need assistance, especially physically challenged persons, to evacuate or in relocating them to an area of safe refuge. Do not move injured persons unless it is absolutely necessary. Persons involved with developing the local procedures need to address how to evacuate colleagues with special needs that are unable to evacuate on their own. Contact the Campus Emergency Manager for information and guidance on this topic.

## Emergency Assembly Areas (EAAs)

Once outside, move away from the building and towards the building's primary Emergency Assembly Area (EAA). If the primary EAA is unavailable, proceed to the alternate EAA.

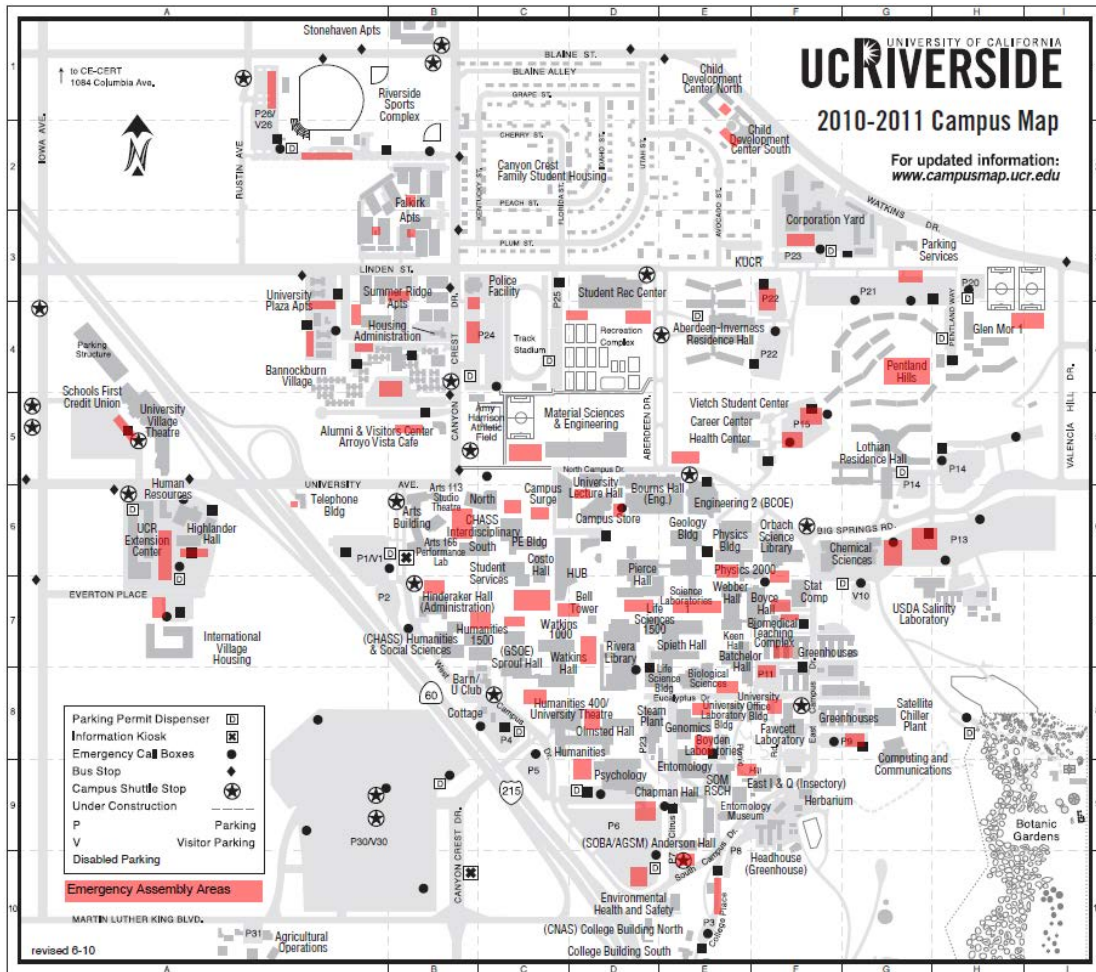
A map of UCR campus EAA's can be found at: <http://ehs.ucr.edu/emergency/aaa.pdf>.

Advise them of your name, department, and room number or location. Make sure they understand to advise the Building Supervisor for Emergency Conditions (BSEC) of the situation.

Take steps to reduce your exposure to additional risks posed by remaining in the building. If you are able to shut down or control critical processes, and subsequently evacuate, do so immediately. If you are injured or trapped remain where you are, unless in life threatening danger, so that rescue can be attempted by emergency responders alerted to your location.

No one can require anyone to remain inside a building that is being evacuated. Classes in session must evacuate as directed above. Your individual choice to remain in the building is only allowed for specific cases as indicated above.

## Campus Map Emergency Assembly Areas (EAAs)



(Click on map for full page view)

# Accounting for Employees after an Evacuation Procedures

Each campus EAA has a designated Building Supervisor for Emergency Conditions (BSEC) to act as the building's emergency point of contact and to manage EAA activities, along with trained Building Emergency Staff (BES) personnel to manage the evacuation process and assist with EAA activities.

Once you are safely at the EAA, be sure to notify the BSEC or BESs of the following:

- The name (if known) and location of persons you know are still in the building. Indicate the reason for their remaining, i.e. injuries, trapped, monitoring critical processes, etc., if known.
- Any information observed on your way out of the building regarding the emergency condition, e.g. visible flames, smoke, odors, spills, structural collapses, sounds, etc.
- Any existing conditions that remain in your work area that might endanger emergency responders or other personnel.

All evacuees are to remain at the EAA until directed otherwise by the BSEC, BES, UCPD, EH&S or other authorized personnel. Information related to the length of interruption or estimates of re-entry will generally be available from the BSEC once it is available from emergency responders regardless of the nature of the incident.

Do not re-enter the building for any reason, even if the alarm silences, until an all-clear is given by the UCPD, EH&S, the BSEC, BES, or other authorized personnel.

## Assigned Responsibilities

### Building Supervisor for Emergency Conditions (BSEC)

The BSECs are specific staff members from major campus buildings who serve as the lead contact for all emergency program activities within their buildings. The BSEC is responsible for coordinating and managing their building's emergency preparedness activities, participating in emergency preparedness training, initiating a roll call and accounting of building occupants in the Emergency Assembly Area (EAA) during emergency evacuations, and providing information to the campus Emergency Operations Center (EOC) in an emergency. Additionally, the BSEC is responsible for identifying and recruiting an alternate building BSEC (ABSEC) and Building Emergency Staff (BES) members in sufficient quantity for their building. The BSEC is also responsible for creating, updating, collecting, and maintaining building specific contact lists (calling trees), building specific accountability rosters, emergency equipment and supplies. Once the evacuation process is complete and building occupants have gathered at the EAA, the BSEC is responsible for taking a roll call. The BSEC should, prior to an emergency, ensure an updated building occupant roster sheet is available and accessible for this process at the time of the evacuation. The BSEC is also responsible for informing the Emergency Operations Center (EOC) by or on-scene Incident Commander of the status of faculty, staff, students, visitors, and guests gathered within the EAA.

#### ***If needed, the BSEC can recruit volunteers to help BESs direct and manage evacuees in the Assembly Area***

BSECs should be prepared to provide the following information:

- Nature of the emergency (e.g. fire)
- Location of the emergency
- Number of persons trapped
- Number of persons injured
- Number of persons unaccounted for

The BSEC should report any injuries in need of immediate care that are reported to them to the on-scene Incident Commander. Any other minor injuries should be documented and reported to the on-scene Incident Commander or the campus EOC by utilizing their assigned 800MHz radio, phone

### Rescue and Medical Duties

UCR relies on the City of Riverside Fire Department and partnering agencies to provide fire suppression, rescue, and medical response duties. It is recommended that departments document any employees that have specialized medical training in the Business Continuity Plan. These identified individuals should not practice outside the scope of their

call, or written notice. The BSEC ensures all important communication and information is exchanged between the on-scene Incident Commander or the EOC, and for sharing information as it becomes available with the evacuated personnel in the EAA.

***The BSEC should not leave the assembly area*** until the emergency is cleared or if directed to do so by UCPD, EH&S, or other authorized personnel. The BSEC may assign a BES, or volunteer(s) from the assembled evacuees, to act as liaisons and assist with the collection and dissemination of information.

### Building Emergency Staff (BES)

The role of the BES is to support the BSEC in his/her emergency preparedness activities before, during and after an incident. Each building on campus should have an adequate number of trained BES personnel to assist in these activities. BES members are responsible for initiating and managing the safe evacuation of their building. Additionally, BESs are responsible for participating in emergency preparedness training, assisting in emergency preparedness exercises, assisting in providing emergency preparedness information to faculty and staff within their building, communicating damage and victim information to the BSEC in an emergency, and assisting the BSEC at the Emergency Assembly Area (EAA). They accomplish this by:

- Directing occupants to the nearest building exit or stairwell
- Assisting personnel in exiting or relocation to an area of safe refuge
- Preventing personnel from using elevators during the evacuation process
- Conducting initial damage assessments during the evacuation process
- Identifying building conditions and hazards important to emergency responders
- Directing evacuated personnel to the building's assigned EAA

Upon arrival at the EAA, the BES is responsible for reporting to the BSEC that the evacuation of their designated area is complete, and reporting all physically challenged, trapped, or injured personnel remaining in the building. The BES is to assist the BSEC with completion of the Building Accountability Roster and any with any other assigned duties. The BES should also complete a Building Damage Assessment & Utility Status form.

training and are not required or expected to assist in any emergency or medical situation, but may come forth to offer or render aid and assistance as covered under "Good Samaritan" regulations.

# Fire and Emergency Reporting Procedures

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In the event of an emergency, contact University of California Police Department (UCPD) Dispatch by dialing **911** (from a landline phone) or (951) 827-5222 (from a cell phone).

## When to call:

- Report a medical emergency
- Report all fire incidents, even if the fire is extinguished
- Report criminal or suspicious behavior
- Report any possible situation that you believe may be serious, and that may result in injury, death, loss of property, apprehension of a suspected criminal or prevention of a crime that is about to occur. Call even if you are in doubt about the seriousness of the situation.

## What information to provide:

- Your Name
- The nature of the emergency
- The location of the emergency
- When the emergency happened
- How the emergency happened
- Whether or not you are in a safe location

Stay on the phone with the dispatcher until notified by the dispatcher to hang up, or emergency responders arrive on scene.

# Alerting and Notification

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## Emergency Communications

If an emergency requires an evacuation of the building or for employees to take action, there are systems in place to provide notification. UCR's emergency alert and notification of employees is multi-layered for the purpose of redundancy. A variety of methods is available, though not all systems are available within each building on the UCR campus, nor are all systems deployed for every incident.

These notification systems include:

- Building fire alarms
- Text messaging from Emergency Notification System
- Verbal notification from UCPD, EH&S, Physical Plant, or a department representative
- Email (e.g., Scotmail)
- Website (<http://campusstatus.ucr.edu>, <http://rspace.ucr.edu>, <http://rweb.ucr.edu>)
- Voicemail systems
- Campus Warning Siren
- 800 MHz Radio

Other examples of notification methods include: Loud verbal commands, handheld & vehicle PA systems, phone trees, bullhorns, even just flashing the lights can be a way to get people's attention so they know there is an emergency/evacuation taking place.

## Additional Information / Follow-up activities

Information concerning emergencies effecting UCR and the Riverside County region will be available to the campus community through the following resources:

- Campus Status website <http://campusstatus.ucr.edu>
- EH&S Emergency Management website <http://ehs.ucr.edu/emergency>
- Campus Radio KUCR: 88.3 FM or <http://kucr.org>
- Riverside Area News and Radio Stations  
[KFRG 95.1 FM](#) or [KGGI 99.1 FM](#)  
[KFI 640 AM](#) or [KNX 1070 AM](#)
- Emergency Alert System (EAS) Broadcasts

# Contacts

## Campus Responsibilities

The following are names, job titles, and departments of persons who can be contacted for further information or explanation of duties under the plan.

Department	Names / Job Title(s)	
<b>Environmental Health &amp; Safety</b> <a href="http://ehs.ucr.edu">http://ehs.ucr.edu</a> Phone: (951) 827-5528 Fax: (951) 827-5122 Email: <a href="mailto:ehs@ucr.edu">ehs@ucr.edu</a>	<b>Paul Walker</b> <i>Campus Emergency Manager</i> <a href="mailto:paul.walker@ucr.edu">paul.walker@ucr.edu</a> (951) 827-2609	<b>Beiwei Tu, CIH, CSP</b> <i>Safety / IH Manager</i> <a href="mailto:beiwei.tu@ucr.edu">beiwei.tu@ucr.edu</a> (951) 827-2964
	<b>Scott Corrin</b> <i>Campus Fire Marshal</i> <a href="mailto:scott.corrin@ucr.edu">scott.corrin@ucr.edu</a> (951) 827-6309	<b>Russell Vernon, Ph.D.</b> <i>Director</i> <a href="mailto:russell.vernon@ucr.edu">russell.vernon@ucr.edu</a> (951) 827-5119
<b>University of California Police Department (UCPD)</b> <a href="http://police.ucr.edu">http://police.ucr.edu</a> Phone: (951) 827-5222 Fax: (951) 827-1639 Email: <a href="mailto:ucpdgeneralmail@ucr.edu">ucpdgeneralmail@ucr.edu</a>	<b>Mike Lane</b> <i>Chief of Police</i> <a href="mailto:mike.lane@ucr.edu">mike.lane@ucr.edu</a>	<b>Jason Day</b> <i>Lieutenant of Police</i> <a href="mailto:jason.day@ucr.edu">jason.day@ucr.edu</a>
	<b>John Freese</b> <i>Asst. Chief of Police</i> <a href="mailto:john.freese@ucr.edu">john.freese@ucr.edu</a>	

## Department Head / Chair Director Responsibilities

The Department is responsible for implementing essential elements of the EAP; planning, employee awareness training, the assignment of department personnel responsibilities (BSEC & BES positions), and annual Department EAP evaluation and maintenance.

The following duties must be performed to maintain an effective EAP:

- Develop, review, and update the Department EAP annually or as needed.
- Train all employees on the location of all emergency exits, fire extinguishers, manual pull stations, first aid kits, and Automated External Defibrillators (where applicable) within their assigned building/workspace.
- Ensure each person assigned space by the department creates and updates the Emergency Contact information for each room placard at <http://econtact.ucr.edu>.

# Emergency Procedures

Emergency Procedures are available online at <http://ehs.ucr.edu> and <http://campusstatus.ucr.edu> for the following:

- Blood and Body Fluid exposure
- Bomb Threat
- Civil Disturbance or Demonstration
- Earthquakes
- Fire and Smoke Conditions
- Hazardous Material Exposure / Spill
- Homeland Security Incident
- Medical Emergencies and First Aid
- Radioactive Contamination / Spill
- Suspicious Mail or Packages
- Utility Failure
- Violence or Crime on Campus





# FIGURE 1. SITE LOCUS



### III. SITE HISTORY AND USE

1. Title History Researched: Yes \_\_\_\_\_ No  x
2. Zoning Classification:  Subject property is identified as "Educational Institutions"  
 use in Riverside's 2025 General Plan
3. Institutional Controls/Restrictions:  None known or reported
4. Current Uses of Site  
 \_\_\_\_\_ Industrial  
 Warehouse \_\_\_\_\_ Commercial  
 \_\_\_\_\_ Agricultural  
 Housing complex \_\_\_\_\_ Residential
5. Brief Description of Current Uses (Describe in terms of product line/crop, processes, chemicals and materials used, wastes generated, waste management and disposal, etc.):

The site is a partially occupied residential student housing complex. There are about nine internal paved streets throughout the complex with a children's playground south of Cherry St. A warehouse/shop and storage area with shipping containers is located at 3381 Kentucky St near the NW corner of the site. A grounds maintenance shop is also located at 3384 Avocado on the eastern side of the site. A community center building is located at 892 Plum St. in the SW corner of the site. The KUCR radio station and tower are located in the SE corner of the site off Linden St.

6. Brief Description of Former Uses of Site (Give dates and available information as requested above based on reasonably ascertainable information as far back in time as to when property was first developed or intensively used):

Citrus groves were the predominant land use in the vicinity of the subject property in the first half of the twentieth century. Historical topographic maps show orchards on the eastern portion of the site. It is likely that the entire site was developed with citrus groves prior to 1940, although the western half of the site may have been undeveloped. In 1940, the existing bungalow styles residences were built for military family housing. This use continued until 1955 when the University of California acquired the land and began using it for family student housing. This use continues until the present day, although residences are being vacating because the buildings and infrastructure have reached the end of their useful life.

Appendix I contains copies of historic topographic maps.

7. Current and Prior Uses of Adjacent Properties (based on reasonably ascertainable info):

*North:* 1901 – railroad; stream; scattered structures and roadways.

1942 – similar to 1901; addition of orchards (N) and residences (NW).

1953 – similar to 1942; addition of oil tanks.

1967 – urbanization including residential and commercial land uses.

2015 – similar to 1967 with additional urban infill.

2016 – commercial retail/services; apartment complexes.

*South:* 1901 – undeveloped with the exception of a roadway to the SW.

1942 – similar to 1901; addition of orchards, scattered structures, and the UC Citrus Experiment Station.

1953 – similar to 1942; some orchards removed.

1967 – UCR recreational and residential uses.

2015 – similar to 1967 with additional infill.

2016 – UCR campus recreational/residential areas.

*East:* 1901 – railroad; scattered structures and roadways.

1942 – similar to 1901; addition of orchards east of the railroad.

1953 – similar to 1942; addition of orchards between the site and the railroad.

1967 – urbanization including predominantly residential land uses; UCR-related uses immediately east of the site.

2015 – similar to 1967 with additional infill.

2016 – UCR day care center; fleet services complex; railroad tracks.

*West:* 1901 – undeveloped except for scattered buildings along the roadway to the NW; canal.

1942 – similar to 1901.

1953 – similar to 1942; addition of orchards between the site and the canal.

1967 – largely undeveloped; some scattered structures (SW).

2015 – recreational and residential uses.

2016 – recreational fields; apartment complexes.

Appendix I contains copies of historic topographic maps.

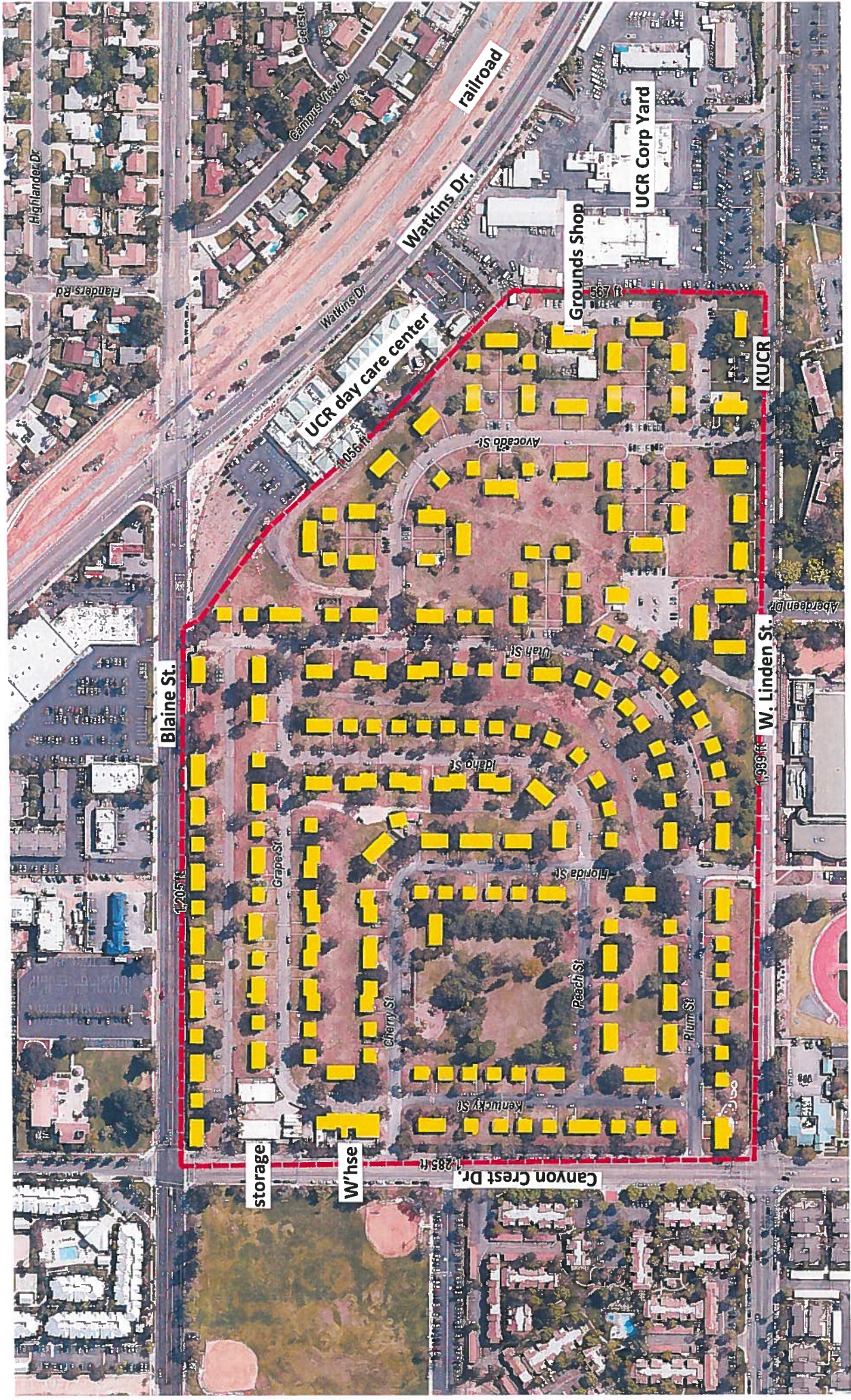
8. List of Regulatory Agency Permits/Violations/Liens for the Site (storage tanks; wastewater discharge; hazardous/flammable/radioactive material storage/use/disposal agricultural chemical application/mixing/disposal and other applicable permits):

None known or reported. UC Riverside conducts regular fire/hazmat inspections of the site including the warehouse/shop at 3381 Kentucky St.

9. References used in preparing this report and persons interviewed relative to site history and use (must include current owner and/or current operator(s) or major occupant(s) and past owners/operators if necessary):

<u>Name</u>	<u>Address</u>	<u>Tel. No.</u>
<hr/>		
Asbestos Removal Closeout Report – 690 Blaine St, UC Riverside –		
<hr/>		
Ambient Environmental Inc., 9/24/08		
<hr/>		
UCR Family Housing Hazardous Materials Summary memo – Humphrey Conant,		
<hr/>		
Assistant Superintendent – Housing Operations, 1/29/04		
<hr/>		
Craig Kasten, Canyon Crest Housing Facilities Manager (personal communication)		
<hr/>		
Amanda Grey, UCR Environmental Health & Safety Manager		(951) 827-2416
<hr/>		
USGS topographic maps (1901 – 1942 – 1953 – 1967 – 2015)		
<hr/>		
Aerial photos (1948 – 1959 – 1967 – 1978 – 1980 – 1994 – 2005)		
<hr/>		
<hr/>		

**FIGURE 2. SITE PLAN**



#### **IV. SITE ENVIRONMENTAL CHARACTERISTICS**

##### **1. Site Layout Information (see Figure 2 - Site Plan)**

###### *A. approximate property boundaries:*

North – Blaine St.

South – W. Linden St.

East – UCR Day Care facility/Fleet Services - Facilities Corporation Yard

West – Canyon Crest Dr.

###### *B. building and parking area locations:*

Approximately 185 buildings on site, nearly all of which are small one-story bungalow-style residences. Some storage areas also exist on site. Parking areas are scattered throughout the site on or adjacent to the internal streets.

###### *C. site utilities (types and locations):*

Electric and gas service. Water and sewer service.

###### *D. easements:*

Normal and customary right-of-way and utility easements.

###### *E. fencing:*

Cyclone fencing along Blaine St., Canyon Crest Dr., and eastern boundary with UCR day care facility and facilities/fleet services corporation yard. Partial fencing along W end of Linden St. (mainly hedge to east).

###### *F. high voltage power lines:*

Service distribution lines generally run through back yards and also down the middle of Blaine Alley along the northern side of the complex.

###### *G. ponds and floodplains:*

None on site. The property is not located in a flood hazard zone.

###### *H. streams:*

None on site.

###### *I. marshes or wetlands including any evidence of fill material:*

None on site.

J. wells:

None on site.

**2. Site Specific Waste/Wastewater Information** (Site Plan to show known or suspected conveyance, storage, or disposal areas):

A. catch basins:

None observed. Storm drainage appears to be overland street drainage.

B. septic tanks/cesspools/leaching fields:

None known or reported on site.

C. sanitary sewers:

The complex is served by campus sewer system tied to city system.

D. underground storage tanks and supply lines:

None known to exist.

E. above ground storage tanks:

None known or observed.

F. pits/ponds/lagoons:

None.

G. drainage lines:

None.

H. sumps:

None.

I. ditches:

None.

J. wells (capped or uncapped) and dry wells:

None.



*K. fill connections/vent pipes (suspected or identified):*

None observed on site.

*L. unidentified cover plates/pipes; mounds of soil/fill; or depressions/subsidence:*

None observed on site.

*M. other miscellaneous:*

KUCR radio tower in SE corner of site just N of Linden St.

### **3. Site Specific Characteristics (see Figure 2 - Site Plan)**

*A. topography and surface water drainage patterns:*

The topography of the site ranges from approximately 1100' - 1040', sloping down slightly to the west. Natural overland drainage is towards the west.

*B. hydrogeological conditions (soil type; depth to groundwater; probable gradient)*

Soils on site reportedly consist of the following types (per NRCS Soil Survey):

- Arlington fine sandy loam, 2-8% slopes (~19 acres or 47% of site area)
- Buren fine sandy loam, 2-8% slopes, eroded (~32 acres or 62%)
- Monserate sandy loam, shallow, 5-15% slopes, eroded (<1 acre or 1%)

Depth to groundwater is estimated as 100' bgs. Inferred gradient follows the topography of the area with gradient towards N/NW.

*C. surface soil or pavement staining/discoloration or disruption/texture change:*

None noted. No significant paint chips observed building perimeters.

*D. vegetation condition and signs of stress:*

The site contains mature landscaping including a central community park area located south of Cherry St. Mainly unirrigated dry grass lawns.

*E. drums or other chemical storage areas:*

Small quantities of equipment fuels and common household hazmats (paints, cleaners, etc) are stored in the warehouse area at 3381 Kentucky St. No signs of spillage or leakage were observed in the building or in metal flammables storage lockers. No reports of any significant spills or leaks. No bulk storage noted (no containers larger than 5-gallons observed).

*F. maintenance or shop/service areas:*

Warehouse/shop area located at 3381 Kentucky St. (NW corner of site).  
Grounds maintenance garage located at 3458 Avocado St. (E side of site).

*G. odors:*

None unusual noted.

*H. dead-end roads/paths or unexplained vehicle tracks (signs of illegal dumping):*

No signs of any illegal dumping on site.

#### **4. Building Inspection**

*A. number of buildings and their age, construction, and general condition:*

(185) one-story wood frame buildings were built in 1940 (76 years old).  
Approx (83) single units; (60) 2-BR duplexes; and (32) 3-BR duplexes.  
Most housing units have newer gable composition shingle roofs (replaced flat roofs); concrete foundations with crawl spaces; stucco exteriors; and plastered drywall interiors with vinyl flooring.

*B. previous disclosure of hazardous materials in building(s):* Yes  No

Asbestos-containing materials and lead-based paint.

*C. visible signs of corrosion or other evidence of solvent action:*

None noted in warehouse/shop or grounds maintenance garage.

*D. visible signs of any spillage or residues:*

None noted in warehouse/shop or grounds maintenance garage.

*E. solid waste or trash:*

None significant noted. Curbside trash pickup. Several dumpsters.

*F. visible signs of polychlorinated biphenyls [PCBs] (i.e. - check for transformers, capacitors, electrical switchgear, hydraulics, etc. and any signs of leakage):*

Several pole-mounted transformers observed. No spills/leakage noted.

G. *visible signs of asbestos* (check for thermal/electrical/acoustical insulation, sprayed-on fireproofing and plaster, asphalt roofing material, various tiles, transite panels, pipes/lagging, duct wrapping, hoods, drains, etc.):

Asbestos-containing building materials (ACBM) have been identified in vinyl floor tile and mastic; roofing materials including mastic and roof felt; and transite panels located on some building porches.

## 5. Neighborhood observations (0.5 mile radius drive-by survey)

### A. *land use*:

Commercial land uses to the north include a strip mall, car wash, tire shop, church, as well as apartments. Uses to the east consist of a UCR child care center, fleet services and corporation yard, and an Environmental Health and Safety facility, and railroad tracks. To the south are UCR-affiliated residential and recreational uses. Land uses to the west are residential and recreational.

### B. *hazardous waste generation or treatment/storage/disposal (TSD) facilities*:

RCRA waste generators: None in the immediate vicinity of the subject property.

### C. *summary of known or suspected hazmat release sites* (1-mile radius records search):

#### Cal-EPA SWRCB LUST (within 0.5 mile):

- T0606500022, E-Z Serve #070135, 811 Blaine St – Gasoline in soil Completed – Case Closed as of 1/14/92
- T0606500519, UC Riverside Fleet Services, 3401 Watkins Dr - Gasoline in soil; Completed – Case Closed as of 10/6/2000
- T0606500425, UC Riverside Steam Plant, 3401 Watkins Dr - Heating Oil/Fuel Oil in soil; Completed – Case Closed as of 7/29/98

SWRCB Cleanup Programs: No sites listed within 1-mile radius.

#### Cal-EPA DTSC (all programs):

- UC Riverside (#80001663), 900 University Avenue. Container storage unit and waste pile cleanup referred to SMBRP as of 6/3/1998.
- Meth lab cleanup site from 2/7/2004 is identified at 776 Blaine St, Riverside (#200402016)

Federal-EPA SEMS (formerly CERCLIS): No sites listed within 1-mile radius.

Refer to Appendix II for a summary of regulatory agency records reviewed.

*D. existing monitoring wells:*

None in immediate vicinity.

*E. landfills/junkyards:*

None in immediate vicinity.

*F. gas or service stations/automotive repair shops:*

None currently located in immediate vicinity.

USGS historical topo map from 1953 shows oil tanks immediately NE of the subject property at the site of the existing Hector's Tires tire shop at 681 W Blaine St, Riverside. No record exists of tank removals or any petroleum releases at that site.

The existing car wash at 811 Blaine St was formerly an EZ Serve gasoline station with a reported LUST with release to soil that was closed in 1992.

*G. drinking water supplies (surface or underground within 0.5 mile of site):*

Drinking water on site is supplied by the City of Riverside Public Utilities from water sources greater than 0.5 mile from the site. The Gage Canal is within 0.5 mile of the site; while the canal water is potable, it is used for irrigation of agricultural fields not drinking water.

## **V. FINDINGS AND CONCLUSIONS & RECOMMENDATIONS**

### **1. Findings:**

The following Recognized Environmental Condition (RECs) were identified:

- Asbestos-containing building materials (ACBM) have been identified in vinyl floor tile and mastic in multiple buildings; roofing materials including mastic and roof felt; and transite panels located on some porches; all of these ACBMs are considered non-friable and pose no problems unless disturbed.
- Lead-based paint is reportedly present in building exterior wood and metal surfaces as well as interior walls, ceilings, and woodwork. No significant deteriorated/peeling interior or exterior painted surfaces were observed based on a very limited number of structures inspected. Likewise, no significant paint chips were observed around building foundation driplines, based on a very limited number of structures inspected.

## **2. Conclusions & Recommendations:**

I have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of the property. Any exceptions to, or deletions from, this practice are described below.

This assessment has revealed no evidence of Recognized Environmental Conditions in connection with the property except for the following:

- Asbestos-containing building materials (ACBM) have been identified in some flooring, roofing, and exterior porch materials. All of these ACBMs are considered non-friable and pose no problems unless disturbed. ACBMs must be surveyed prior to demolition activity. Category I non-friable ACBMs (including those identified on site – vinyl flooring, roofing, and transite panels) generally do not have to be removed prior to demolition per Federal NESHAP regulations (40 CFR Part 61 Subpart M) and corresponding state regulations, and may be disposed of as non-hazardous construction and demolition debris. Consult with campus asbestos management personnel regarding available building ACBM survey information; regulatory agency notification and building inspection requirements; and disposal options.

The property was undeveloped agricultural land prior to construction of the housing complex in 1940 for military personnel. The complex has been used for student housing since UCR acquired the site. Historical and current residential uses of the site pose little risk to the subject property. There were no regulatory agency or campus records of any hazmat releases on the subject property. Leaking tank sites located in the immediate vicinity have all received regulatory agency case closure, so pose no significant risk to the subject property. Surrounding properties are commercial, apartments, or UCR-related uses that pose little risk to the subject property.

It appeared that lead-based painted exterior and interior surfaces were generally well adhered to underlying stucco or drywall surfaces with no peeling, based on a limited number of buildings inspected. Adhered (non-peeling) LBP materials particularly those encapsulated underneath newer coats of paint may potentially be disposed as non-hazardous construction and demolition (C&D) solid waste in permitted Class II or III landfills following mechanical demolition processes. Demolition should be conducted by approved contractors in accordance with Cal/OSHA Construction Stds (Title 8 CCR Section 1532.1).

## **3. Limitations:**

The contents of this Phase I report are based on review of University and publicly available records, and limited site reconnaissance. The University makes no warranty that the records reviewed were accurate or complete, or that all records pertaining to the subject property were reviewed. Maps of the property included in this report are

for general information purposes only. Any conclusions and recommendations expressed in this report are not to be relied upon.

There may be hidden subsurface conditions, or other environmental or physical conditions not readily obvious through visual inspection that may impact the subject property. Due to the large size of the site and number of structures, only a very small number of vacant units were actually inspected that may or may not be representative of conditions across the entire site. The University assumes no liability for misrepresentation of information contained in this report or otherwise for conditions at the property.

This report is not intended to replace buyer's own due diligence or other appropriate inquiry into the property. No warranties or representations, expressed or implied, are made for any of the contents, findings, or statements made in this report. The University takes no responsibility for any errors or omissions that may be contained in this report.

**4. Identification of environmental professional:**

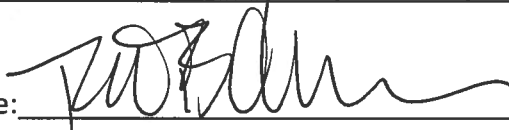
I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10 and have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Robert Charbonneau                      Director, Environmental Services

Alicia Jensen                              Risk Analyst, Environmental Services

University of California Office of the President – Risk Services

1111 Franklin St., 10<sup>th</sup> floor, Oakland, CA 94607-5200      (510) 987-9594

Signature: 

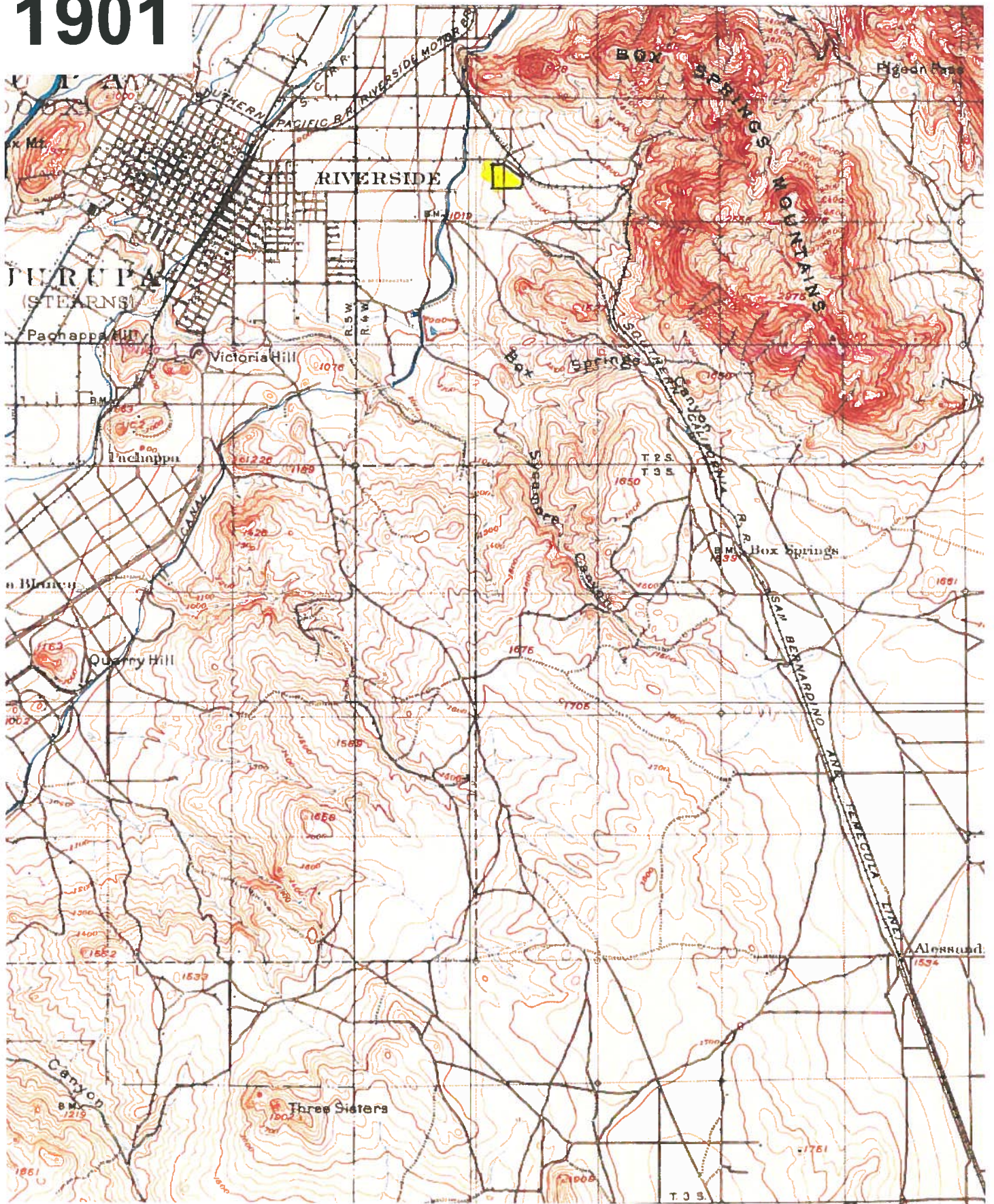
Date: September 20, 2016

# **APPENDIX I**

## **USGS TOPOGRAPHIC MAPS**

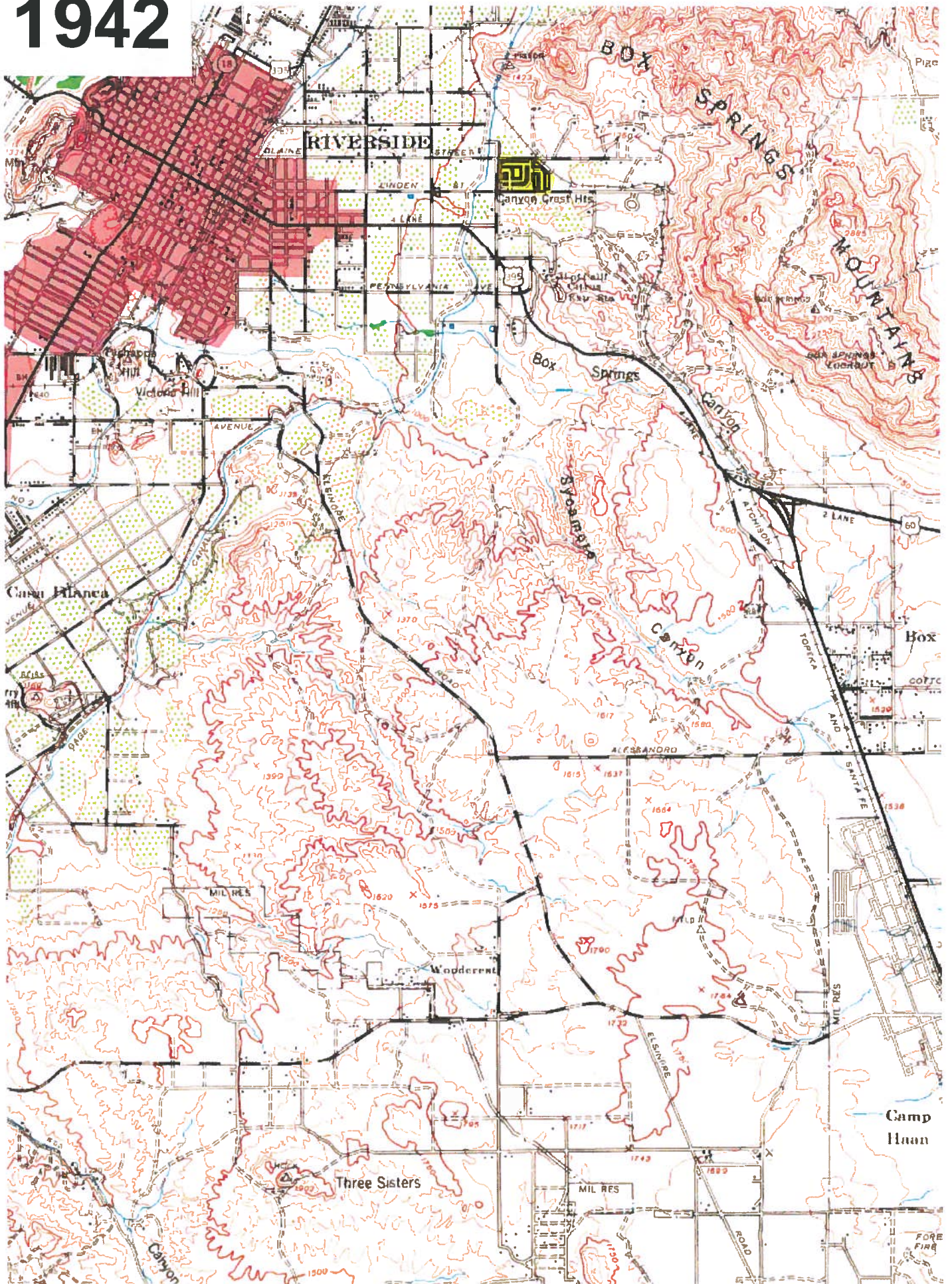
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# 1901

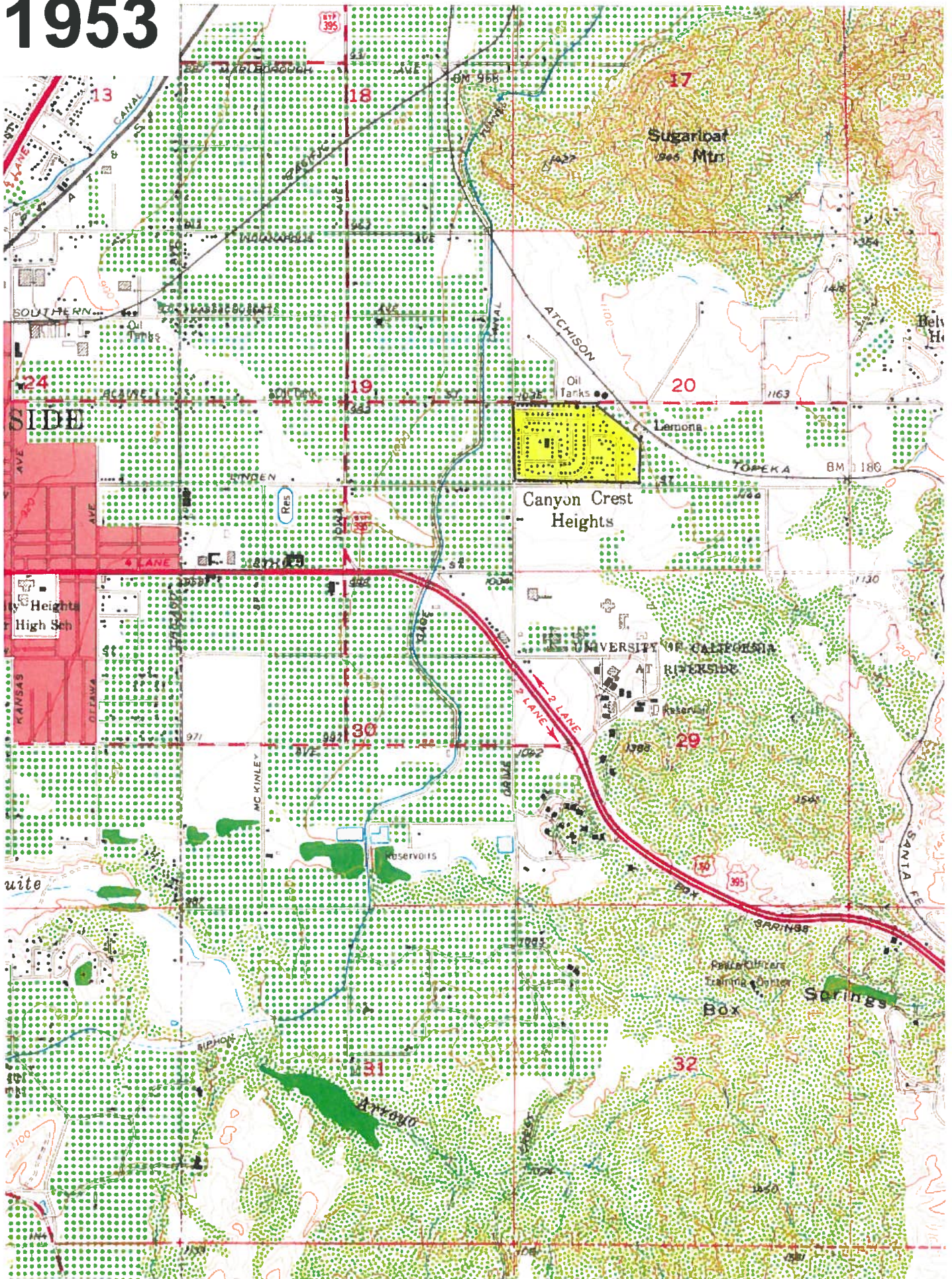




1942



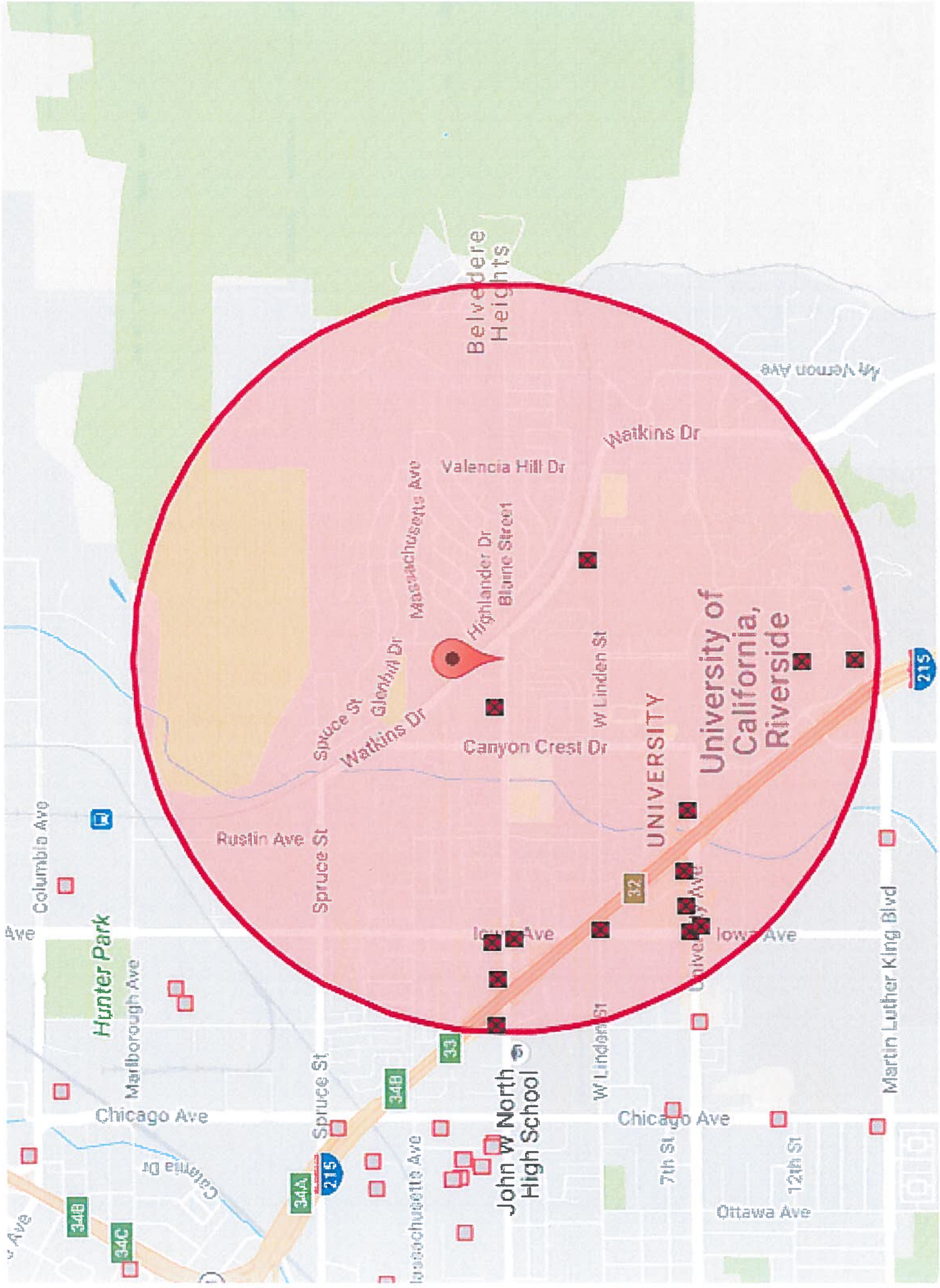
# 1953





## **APPENDIX II**

# **REGULATORY AGENCY RECORDS SEARCH RESULTS**



Belvedere Heights

University of California, Riverside

John W North High School

Hunter Park

UNIVERSITY



**REGULATORY AGENCY RECORDS SEARCH:**  
**Portion of parcel #251-180-005**  
**Canyon Crest Family Student Housing, UC Riverside**  
**Bounded by Blaine (N), Watkins (NE), Linden (S), and Canyon Crest (W)**  
**September 2016**

**CAL-EPA Databases:**

**State WRCB Leaking Underground Storage Tank (LUST) Cleanup Sites**

	GLOBAL ID	SITE / FACILITY NAME	SITE / FACILITY TYPE	STATUS	ADDRESS
<b>Within 0.5 mile of subject property:</b>					
1.	T0606500022	E-Z SERVE #070135	LUST CLEANUP SITE – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 1/14/1992	811 BLAINE ST
2.	T0606500519	U C RIVERSIDE FLEET SERVICES	LUST CLEANUP SITE – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 10/6/2000	3401 WATKINS DR
3.	T0606500425	U C RIVERSIDE STEAM PLANT	LUST CLEANUP SITE - HEATING OIL / FUEL OIL in SOIL	COMPLETED - CASE CLOSED AS OF 7/29/1998	3401 WATKINS DR
<b>Within 0.5 to 1.0 mile of subject property:</b>					
4.	T0606500520	MOBIL #18-D9M	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 3/18/2010	1360 BLAINE ST
5.	T0606599251	TEXACO Blaine	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 5/18/2005	1300 BLAINE STREET
6.	T0606500065	EXXON SERVICE STATION #2899	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 7/11/1988	1300 BLAINE ST RIVERSIDE
7.	T0606575445	SHELL IOWA AVENUE	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 4/7/2006	3261 IOWA AVE RIVERSIDE, CA
8.	T0606500371	SHELL BLAINE	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 5/16/1996	3261 IOWA AVE RIVERSIDE
9.	T0606505495	76 STATION 5856	LUST Cleanup Site – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF	1395 BLAINE STREET

				8/31/2011	
10.	T0606500586	MOBIL #18-402	LUST CLEANUP SITE – GASOLINE IN ACQUIFER USED FOR DRINKING WATER SUPPLY	COMPLETED - CASE CLOSED AS OF 1/13/2011	1147 UNIVERSITY AVE
11.	T0606500471	TEXACO	LUST CLEANUP SITE – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 7/28/1997	1221 UNIVERSITY AVE
12.	T0606500545	THRIFTY OIL #344 ARCO #9714	LUST CLEANUP SITE – GASOLINE IN ACQUIFER USED FOR DRINKING WATER SUPPLY	COMPLETED - CASE CLOSED AS OF 1/10/2014	1294 UNIVERSITY AVE
13.	T0606500058	EXXON SERVICE STATION #3645	LUST CLEANUP SITE – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 6/8/2005	1295 UNIVERSITY AVE
14.	T0606500089	CHEVRON #9-8260	LUST CLEANUP SITE – GASOLINE IN SOIL	COMPLETED - CASE CLOSED AS OF 5/1/1992	1011 UNIVERSITY AVE

**Miscellaneous State Water Resources Control Board (SWRCB) Cleanup Sites (Spills – Leaks – Above Ground Storage Tanks – Other Discharges)**

- None proximate to the subject property.

**Land Disposal/Landfill Sites**

- None proximate to the subject property.

**Military Sites (Active or Closed Military Bases)**

- None proximate to the subject property.

**WDR (Waste Discharge Requirements) Sites**

- None proximate to the subject property.

**Irrigated Lands Regulatory Program Sites**

- None proximate to the subject property.

**Permitted Underground Storage Tank (UST) Facilities within 0.5 mile of subject property**

- 613 QUIXTOP JR MARKET, 783 W BLAINE ST
- 784 UCR MAINTENANCE YARD, 3401 WATKINS DR

**CAL-EPA DTSC (Dept Toxic Substances Control) Deed/Land Use Restrictions Sites**

- None proximate to the subject property.

**(DTSC) Military Cleanup Sites**

- None proximate to the subject property.

**(DTSC) Military Evaluation Sites**

- None proximate to the subject property.

**(DTSC) Orphan Funded Sites**

- None proximate to the subject property.

**(DTSC) Responsible Party Funded Sites**

- None proximate to the subject property.

**(DTSC) Other Funded Sites**

- None proximate to the subject property.

**(DTSC) Voluntary Cleanup Sites**

- None proximate to the subject property.

**(DTSC) Statewide Evaluation Sites**

- None proximate to the subject property.

**(DTSC) School Cleanup Sites**

- None proximate to the subject property.

**(DTSC) School Evaluation Sites**

- None proximate to the subject property.

**(DTSC) Border Zone / Haz Waste Evaluation Sites**

- None proximate to the subject property.

**(DTSC) Calmortgage Sites**

- None proximate to the subject property.

**(DTSC) Historical Sites**

- None proximate to the subject property.

**(DTSC) Corrective Action Sites**

- UC Riverside (#80001663), 900 University Avenue. Container storage unit and waste pile cleanup referred to SMBRP as of 6/3/1998.

**(DTSC) Permitted Facilities**

- None proximate to the subject property.



**(DTSC) Enforcement Report**

- None proximate to the subject property.

**(DTSC) Inspection Report**

- None proximate to the subject property.

**(DTSC) Meth Lab Cleanups/Emergency Removal Actions**

- Meth lab cleanup site from 2/7/2004 is identified at 776 Blaine St, Riverside (#200402016)

**Integrated Waste Management Board**

- The nearest SWIS solid waste disposal sites is located one mile SW of the property:
  - Limited Volume Transfer Operation  
Max. Permitted Throughput: 60.00 Cu Yards/day  
Permitted Capacity: 15,600 Cu Yards/year  
Caltrans Riverside Maintenance Station (33-AA-0331)  
1091 Everton Place, Riverside, CA  
Waste type: Dead Animals, Inert, Metals, Mixed municipal, Tires, Tires, Shreds

**Federal EPA Databases:**

**ACRES - Office of Brownfields and Land Revitalization, Brownfields Properties**

- None proximate to the subject property.

**AIRS/AFS AIRS Facility Subsystem**

- None proximate to the subject property.

**BR Biennial Reporters**

- Within approx 0.5 mile of subject property:
  - TEXACO SERVICE STATION 120593, EPA ID#110012189023  
1300 BLAINE ST, RIVERSIDE, CA

**BRAC Base Realignment and Closure**

- None in 92507.

**CAMDBS Clean Air Markets Division Business System**

- None in 92507.

**Superfund Enterprise Management System (SEMS) (formerly CERLIS)**

- No “active” SEMS sites are within 1 miles of the subject property.
- One “archived” SEMS site is within 1 miles of the subject property:
  - Valerion Corp, 2180 Iowa Ave, Riverside CA  
EPA ID# CAD980884415  
Not a federal facility  
NFRAP-Site does not qualify for the NPL based on existing information

**CWNS Clean Watersheds Needs Survey**

- None in 92507.

**E-GGRT Electronic Greenhouse Gas Reporting Tool**

- None within 1 mile of the subject property.

**EGRID Emissions & Generation Resource Database**

- None within 1 mile of the subject property.

**EIA-860 Energy Information Administration-860 Database**

- None within 1 mile of the subject property.

**EIS Emission Inventory System**

- UCR Central Steam Plant, EPA Registry Id: 110012429899  
UCR Campus, near main UCR Library and Olmstead Hall

**FFDOCKET Federal Facility Hazardous Waste Compliance Docket**

- None in 92507.

**FTTS/NCDB National Compliance Data Base**

- None proximate to the subject property.

**ICIS Integrated Compliance Information System**

- None proximate to the subject property.

**LMOP Landfill Methane Outreach Program**

- None proximate to the subject property.

**LUST-ARRA Leaking Underground Storage Tank - American Recovery and Reinvestment Act**

- None proximate to the subject property.

**NPDES National Pollutant Discharge Elimination System**

- None proximate to the subject property.

**OIL Database**

- None within one mile of the subject property.

**OTAQREG Office of Transportation and Air Quality Fuels Registration**

- None within one mile of the subject property.

**RBLC RACT/BACT/LAER Clearinghouse**

- None within one mile of the subject property.

**RCRA Info Resource Conservation and Recovery Act Info**

Within approx 0.5 mile of subject property:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• TEXACO SERVICE STATION 120593<br/>EPA ID#110012189023<br/>1300 BLAINE ST, RIVERSIDE, CA<br/>SQG (Small Quantity Generator)</li> </ul> | <ul style="list-style-type: none"> <li>• RIVERSIDE COUNTY SHERIFF<br/>EPA Registry Id: 110002812378<br/>1111 SPRUCE ST<br/>RCRA Unspecified</li> </ul> |
| <ul style="list-style-type: none"> <li>• SHELL SERVICE STATION<br/>EPA ID#110012537638<br/>3261 IOWA<br/>SQG</li> </ul>  | <ul style="list-style-type: none"> <li>• JOYTECH INTERNATIONAL INC<br/>EPA Registry Id: 110002887029<br/>3421 GATO CT<br/>SQG</li> </ul>               |
| <ul style="list-style-type: none"> <li>• KMART #4432<br/>EPA ID#110055717176<br/>3001 IOWA AVENUE<br/>CESQG</li> </ul>   | <ul style="list-style-type: none"> <li>• UNITED PARCEL SERVICE<br/>EPA Registry Id: 110002732026<br/>1391 SPRUCE<br/>SQG</li> </ul>                    |
| <ul style="list-style-type: none"> <li>• UNIVERSITY HEIGHTS MIDDLE<br/>EPA Registry Id: 110021937225<br/>1155 MASSACHUSETTS AVE.<br/>SQG</li> </ul>                            | <ul style="list-style-type: none"> <li>• SHELL SERVICE STATION<br/>EPA Registry Id: 110018982528<br/>1308 UNIVERSITY<br/>SQG</li> </ul>                |
| <ul style="list-style-type: none"> <li>• ELECTROCOAT<br/>EPA Registry Id: 110002828806<br/>1525 3RD ST STE G<br/>SQG</li> </ul>  | <ul style="list-style-type: none"> <li>• ARCO FACILITY NO 09714<br/>EPA Registry Id: 110012221247<br/>1294 UNIVERSITY AVE<br/>SQG</li> </ul>           |
| <ul style="list-style-type: none"> <li>• NORTH (JOHN W.) HIGH<br/>EPA Registry Id: 110036931345<br/>1550 THIRD ST.<br/>SQG</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>• EMERALD MOLD<br/>EPA Registry Id: 110002901637<br/>1473 LINDEN ST UNIT J</li> </ul>   |  |

SQG

- RACEWAY FORD  
EPA Registry Id: 110002718177  
3600 IOWA AVE  
SQG
- CALTRANS  
EPA Registry Id: 110002714661  
1091 EVERTON PLACE  
SQG

**RFS Renewable Fuel Standard**

- None within one mile of the subject property.

**Risk Management Plan**

- None within one mile of the subject property.

**SFDW Safe Drinking Water Information System Federal Data Warehouse**

- None within one mile of the subject property.

**SSTS Section Seven Tracking System**

- AUTO-CHLOR SYSTEM OF RIVERSIDE  
EPA Registry Id: 110038232837  
1556 7TH ST  
Pesticide Producer

**STATE State Environmental Programs**

- None within one mile of the subject property.

**TRI Toxics Release Inventory**

- None within one mile of the subject property.

**TSCA Toxics Substances Control Act**

- None within one mile of the subject property.

**Drug Enforcement Administration (DEA) Meth Lab Registry**

No DEA registered meth lab sites are registered in the vicinity of the property.

## **ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS**

**ROBERT CHARBONNEAU**  
University of California  
Office of the President – Risk Services  
1111 Franklin Street  
Oakland, CA 94607  
(510) 987-9594

### **Work Experience**

#### **Environmental Services Director (1989-Present)**

*University of California - Office of the President (Systemwide Headquarters)  
Risk Services Office - Environmental Services*

- Over thirty (30) years experience in environmental science technical fields
- Manage UC systemwide environmental due diligence program and policies, procedures, and protocols for all University real estate transactions including acquisitions, sales, gifts and bequests, and leases of real property
- Conduct/oversee environmental site assessments on *six hundred (600)* properties, including a wide range of commercial, industrial, agricultural, medical, institutional, multi-residential, and undeveloped/wildlands properties across the Western United States (primarily in California)
- Served on original ASTM E-50 Committee that developed the first Standard Practice for Environmental Site Assessments (E-1527)
- Long-time certification as Registered Environmental Assessor (R.E.A. #01876) by Cal-EPA (state certification program disbanded in 2012)
- Provide expert advice to UC systemwide real estate personnel and General Counsel on technical and risk assessment and management aspects of due diligence investigations
- Manage and direct/coordinate environmental consultants and contractors working on UC site characterization/remediation activities and contracts
- Managed UC systemwide underground storage tank compliance program

#### **Associate EH&S Technologist / Consultant (1987-1989)**

*UC Berkeley Office of Environmental Health & Safety  
UC Berkeley Department of Facilities Management*

Perform Phase I site assessments of campus-related properties. Respond to hazardous materials spills and incidents. Conduct comprehensive environmental assessment of Strawberry Creek and its upper watershed. Design, implement, and manage both watershed and stream restoration strategies. Assist in engineering evaluation studies of campus water and sanitary/storm sewer systems.

**Environmental Scientist - Hydrologist / Biologist (1984-1986)**

*IEP Incorporated, Northborough MA*

Perform groundwater and surface water quality monitoring and assessment. Assist in groundwater protection and Federal Superfund contamination studies. Conduct Phase I due diligence site assessments. Perform surface water hydrology studies. Work as part of an interdisciplinary team on publicly and privately funded lakes and watershed diagnostic/feasibility studies.

**Senior Sanitary Engineer's Aide (1981)**

*Massachusetts Department of Environmental Quality Engineering (DEQE)  
Division of Water Pollution Control (DWPC) - Technical Services Branch*

As part of River Basin Planning Section, conduct water quality surveys and effluent compliance monitoring of selected industries and POTWs in eight major watersheds. Sample New Bedford Harbor to determine extent of sediment PCB contamination.

**Fire Marshal (1981-1983)**

*University of Massachusetts - Amherst  
Office of Environmental Health and Safety*

Conduct facility inspections to enforce fire regulations. Perform investigations of fire-related incidents on campus property. Serve as on-duty emergency responder.

**Firefighter/Lieutenant – Emergency Medical Technician/Ambulance (NREMT)**

*Northborough MA Fire Department (1978-1986, Acting Lieutenant - Engine Co. 6)  
Amherst MA Fire Department (1981-1983, Lieutenant – Engine Co. 3)*

Respond to fires, hazardous materials incidents, medical emergencies, hazardous conditions, and other emergencies. Perform fire suppression and rescue. Conduct fire safety inspections and fire investigations. Assess and mitigate wide range of hazardous conditions/situations. Oversee engine company crew and operations.

**Higher Education Degrees**

University of California at Berkeley:

Masters Degree (M.C.P. - Environmental Planning - 1988)

University of Massachusetts at Amherst:

Bachelor of Science Cum Laude (Environmental Sciences with Forestry Minor - 1983)

**ALICIA JENSEN**  
University of California  
Office of the President – Risk Services  
1111 Franklin Street  
Oakland, CA 94607  
(510) 987-9290

**Work Experience**

**Risk Analyst (2013-Present)**

*University of California - Office of the President (Systemwide Headquarters)  
Risk Services Office - Environmental Services*

Fifteen (15) years experience in environmental science and planning technical fields. Key duties include supporting the University's environmental due diligence program for real estate transactions by determining site environmental characteristics, conducting agency records reviews, researching site history, and assisting with site inspections, interviews, and report preparation.

**Associate Physical and Environmental Planner (2005-2013)**

*University of California - Office of the President (Systemwide Headquarters)  
Capital Resources Management - Environmental Planning*

Key responsibilities were advancing the land use and environmental planning directives of the University by facilitating implementation of long range visionary/land use plans, environmental laws, and related organizational policies in support of real estate transactions and large capital projects through advocacy, strategic planning, and teamwork with staff across multiple campus locations.

**Project Planner (2001-2004)**

*David Evans and Associates Inc., San Diego CA*

Achieved client goals for land use planning and compliance with the California Environmental Quality Act (CEQA) and other state and federal environmental laws.

**Higher Education Degrees**

California State University, San Diego:  
Master of Arts (Geography - 2005)

University of California at Davis:  
Bachelor of Science (Environmental Policy Analysis and Planning - 2000)

**REPORT ON  
PRELIMINARY LIMITED ENVIRONMENTAL SITE INVESTIGATION  
NORTH DISTRICT PREDEVELOPMENT STUDIES  
NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE  
RIVERSIDE, CALIFORNIA**

by Haley & Aldrich, Inc.  
Costa Mesa, California

for University of California, Riverside  
Riverside, California

File No. 128685-006  
May 2017

DRAFT







HALEY & ALDRICH, INC.  
2033 N. Main Street  
Suite 309  
Walnut Creek, CA 94596  
925.949.1012

May 8, 2017  
File No. 128685-006

University of California, Riverside  
900 University Avenue  
Environmental Health & Safety  
Riverside, California 92521

Attention: Mr. Drew Hecht

Subject: Preliminary Limited Environmental Site Investigation  
North District Predevelopment Studies  
North of West Linden Street and East of Canyon Crest Drive  
Riverside, California

Ladies and Gentlemen:

Enclosed is our preliminary limited environmental site investigation report for the proposed North District development located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California. The site is bounded by West Blaine Street to the north, Canyon Crest Drive to the west, West Linden Street to the south, and University of California Riverside (UCR) campus facilities to the east. The main UCR campus is located to the south of the site, across West Linden Street.

We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely yours,  
HALEY & ALDRICH, INC.

Mathew T. Raithel  
Senior Technical Specialist

Colleen Canfield, P.G. 8627 (CA)  
Associate Geologist | Senior Project Manager

\\\\cos\common\128685\_UC Riverside\006\_North District Pre-Development Studies\Deliverables\Environmental Report\2017\_0508 UCR Preliminary Environmental D1.docx

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2	Site Map with Sample Locations
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DRRAFT

# 1. Introduction

This report presents the results of our preliminary limited environmental site investigation for the proposed North District development (Site) located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California. The site is bounded by West Blaine Street to the north, Canyon Crest Drive to the west, West Linden Street to the south, and University of California Riverside (UCR) campus facilities to the east, as shown on Figures 1 and 2. The main UCR campus is located to the south of the site, across West Linden Street.

## 1.1 BACKGROUND AND EXISTING SITE CONDITIONS

Currently, the approximately 55-acre site is occupied by Canyon Crest Student Housing, a complex of single-story student housing units located north of the main UCR campus. Storage and maintenance facilities, including permanent structures and modular units, are present in the northwest and southeast portions of the site. Typical residential above and underground utilities are present throughout the development. A large park and playground is located in the western portion of the site, south of Cherry Street. There are nine asphalt-paved residential streets and several gravel roads. Based on our review of readily available historical information and aerial photographs, much of the existing development was constructed as military housing in 1940, before which time the Site was occupied by citrus groves.

## 1.2 PROJECT DESCRIPTION

The proposed project is still in the conceptual planning stage and details are still being developed. We understand that the proposed project is expected to include redevelopment of the existing housing complex with new multi-story housing units.

## 1.3 PURPOSE

Based on our review of the Phase I Environmental Site Assessment prepared for the Site, the following environmental concerns are identified at the Site:

- Previous potential use of lead-based paint at the site due to the age of the residences;
- Previous potential use of termiticides at the site due to the age of the residences; and
- Previous potential use of arsenic at the site due to previous agricultural activities dating back prior to the 1950s.

Soil sampling was conducted to evaluate whether these historical activities may have impacted soil. Soil sample analytical results were used to evaluate potential risk to human health.

## 2. Scope of Work

The scope of work was developed based on the following California Department of Toxic Substances Control (DTSC) guidance documents, collectively referred to as the DTSC Guidance:

- “Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers” dated 9 June 2006; and
- “Interim Guidance for Sampling Agricultural Properties (Third Revision)” dated 30 April 2008.

The DTSC Guidance recommends that a minimum of four soil samples be collected from around each residential structure. We recommended modifying this approach and collected soil samples from around 30 structures as a preliminary limited investigation, as described below.

The preliminary limited environmental site investigation consisted of collecting soil samples at depths 0.5 feet below ground surface (bgs) and 2.5 feet bgs using a hand auger at 30 residences at the Site, submitting soil samples for environmental analysis, evaluating soil sample analytical data, and preparing a preliminary limited site investigation report that summarizes our findings and preliminary recommendations.

DRAFT

### 3. Field Investigation

Soil sampling activities were conducted at the Site on March 27 through March 30, 2017. A total of 120 soil boring locations were hand augured at the Site by Interphase Environmental under the oversight of Haley & Aldrich. The locations of the soil borings are shown on Figure 2. 30 residences were selected for soil sampling activities; residences with both observed paint peeling and less visually observed paint peeling were selected. Four soil borings were advanced using a hand auger at each of the 30 selected residences (for a total of 120 soil boring locations). Soil borings were advanced within two feet of the residential structure. Locations were biased towards areas with visually peeling paint and areas of structural drainage. Soil samples were collected using the hand auger or slide hammer at 0-0.5 feet bgs and 2-2.5 feet bgs from each soil boring in laboratory-provided glass sample containers or acetate sleeves (for a total of 240 soil samples plus 14 duplicate samples). The soil samples were stored in a chilled ice chest and transported to a Eurofins Calscience, a California-certified environmental laboratory, under chain of custody protocol.

The soil samples were analyzed for the following based on the DTSC guidance:

- Each of the 0-0.5 foot samples, including 12 duplicate samples (total of 132 soil samples), were initially analyzed for lead by United States Environmental Protection Agency (USEPA) Method 6010. Based on the results of the 0-0.5 foot samples, 48 of the 2-2.5 foot samples were analyzed for lead (see Section 4.1).
- Twenty (20) of the 0-0.5 foot samples, including two duplicate samples (total of 22 soil samples), were analyzed for arsenic by USEPA Method 6010.
- Up to four discrete samples collected at similar depths from each residential property were composited into one composite soil sample (the discrete soil samples were composited into a total of 61 composite soil samples). The 61 composite soil samples (31 composite samples from 0-0.5 feet bgs and 30 composite samples from 2-2.5 feet bgs) and including six duplicate samples (total of 67 composite soil samples) were analyzed for organochlorine pesticides (OCP) following USEPA Method 8081. Based on the results of these samples, 152 discrete soil samples were also analyzed for OPCs (see Section 4.3).

The hand auger and slide hammer were decontaminated between sample collection by washing with a tri-sodium phosphate-based detergent and tap water, followed by successive rinses with tap water, and a final rinse in deionized water. Decontamination water was transferred into a 55-gallon Department of Transportation (DOT)-approved drum and stored on-Site pending offsite disposal. Soil borings were backfilled with the soil cuttings.

## 4. Soil Sample Results

Soil analytical results are summarized in Tables 1 and 2. Laboratory reports are included in Appendix A.

Soil results are summarized below.

### 4.1 LEAD RESULTS

Table 1 is a summary of lead results for the discrete soil samples. Detected lead concentrations ranged between 3.07 and 434 milligrams per kilogram (mg/kg). Lead was detected at a concentration greater than the DTSC modified screening level for residential soil of 80 mg/kg in 48 of the surface (0-0.5 feet bgs) soil samples. Therefore, the subsurface (2-2.5 feet bgs) for these 48 soil samples were analyzed for lead. The subsurface soil samples analyzed did not exhibit lead concentrations greater than 80 mg/kg. Therefore, it appears that lead concentrations greater than 80 mg/kg are limited to the upper two feet of soil based on the sampling and analysis performed.

Figure 3 shows the shallow (0-0.5 feet bgs) soil sample locations that exceed the lead screening level of 80 mg/kg.

### 4.2 ARSENIC RESULTS

Table 1 is a summary of arsenic results for the discrete soil samples. Detected arsenic concentrations ranged between 1.85 and 7.65 mg/kg. These concentrations are less than the DTSC Schools Program screening level of 12 mg/kg (DTSC, 2008). Based on these results, additional arsenic analysis was not performed.

### 4.3 ORGANOCHLORINE PESTICIDE RESULTS

Table 2 is a summary of OCP results for the composite soil samples. The detected concentrations of OCPs in the composite soil samples were compared to respective threshold screening values for composite samples in Table 8 of the DTSC Interim Guidance document (DTSC, 2006) to determine whether further analysis of discrete samples was required.

Composited OCP samples exceeding the DTSC screening values for the respective composite grouping were re-analyzed as discrete samples. Based on this comparison, the discrete samples were analyzed from 35 of the composite samples.

Table 1 is a summary of OCP results for the discrete soil samples. The following OCPs and maximum concentrations were detected in discrete soil samples:

- 4,4-DDD' = 520 mg/kg
- 4,4-DDE' = 1,400 mg/kg
- 4,4-DDT' = 1,200 mg/kg
- Chlordane = 11,000 mg/kg
- Dieldrin = 500 mg/kg
- Endrin Ketone = 5 mg/kg

- Heptachlor = 28 mg/kg
- Heptachlor epoxide = 1,300 mg/kg

The following OCPs exceed the DTSC modified screening level for residential soil: chlordane, dieldrin, and heptachlor epoxide. 50 discrete soil samples exceeded the DTSC modified screening levels for residential soil. Figure 3 shows the soil samples with OCP concentrations that exceed the DTSC modified screening levels for residential soil.

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## 5. Preliminary Human Health Screening Risk Evaluation

This section presents the results of a preliminary human health screening risk evaluation (HHSE) using the OCP concentrations measured in soil samples to estimate human health risk for resident at the Site. The HHSE was conducted using methodology presented in the “Preliminary Endangerment Assessment (PEA) Guidance Manual,” prepared by the California Department of Toxic Substance Control (DTSC) and dated January 1994 (revised October 2015; DTSC, 2015).

### 5.1 HAZARD IDENTIFICATION (CHEMICALS OF POTENTIAL CONCERN SELECTION)

Chemicals of potential concern (COPCs) were identified as any OPC detected above the laboratory detection limit.

### 5.2 EXPOSURE ASSESSMENT

The exposure assessment includes a description of the most sensitive receptors, their possible exposure pathways (i.e., how they may come into contact with the COPCs at the Site), derivation of exposure point concentrations, and estimation of chemical intakes by the receptors.

#### 5.2.1 Potential Receptors and Exposure Pathways

The receptor with the greatest potential exposure was evaluated, the future on-Site resident, from possible exposures to Site-related OCP impacts. The following potentially complete exposure pathways were evaluated:

- Incidental ingestion of soil;
- Inhalation of fugitive dust and VOCs in ambient air; and
- Dermal contact with soil.

It was conservatively assumed that resident would be present at the Site for 24 hours per day, 350 days per year, for 26 years (6 years as a child, and 20 years as an adult).

#### 5.2.2 Exposure Point Concentrations

The maximum detected OCPs in soil at the Site were used to estimate exposure point concentration concentrations (EPCs) for the on-Site resident.

#### 5.2.3 Estimation of Chemical Intakes and Exposure Concentrations

COPC intakes and exposure concentrations were estimated using the methodology in the PEA Guidance Manual (DTSC, 2015).

### 5.3 TOXICITY ASSESSMENT

The toxicity values used to identify the California toxicity values is based on the recommendations in the Preliminary Endangerment Assessment (PEA) Guidance Manual (DTSC, 2015).

## 5.4 SUMMARY OF RISK CHARACTERIZATION RESULTS

A summary of the estimated risk results is presented below; the associated risk calculations are presented in Appendix B.

The total non-cancer hazard for each receptor is presented as an estimated total hazard index (HI) and the total cancer risk for each receptor is presented as an estimated cumulative incremental lifetime cancer risk (ILCR).

### 5.4.1 Total Noncancer Hazard Index

An HI of less than 1 indicates that it is unlikely that adverse human health effects will occur during a lifetime in an exposed population, including sensitive subpopulations (USEPA, 1989). Most environmental programs employ an HI of unity (i.e., 1) as an acceptable target for risk decisions. The most explicit directive comes from the federal Superfund program (USEPA, 1990), which is also Cal/EPA policy. This directive specifies an HI of 1 as the acceptable target for risk management decisions. This noncancer risk threshold was used in this HHRA for each receptor as the acceptable total HI to assess whether exposure to COPCs at the Site may pose an adverse noncarcinogenic effect.

### 5.4.2 Cumulative Incremental Lifetime Cancer Risk

A total ILCR of  $10^{-6}$  and  $10^{-4}$  corresponds to theoretical probability of 1 chance in 1 million to 1 chance in ten thousand, which is in addition to or excess of the background cancer risk. Potential risk estimates between  $10^{-6}$  and  $10^{-4}$  require risk management decisions based on site-specific land use/exposure scenarios and may or may not require remediation or mitigation (USEPA, 1990). It is generally accepted in the regulatory community that risk estimates equal to or less than  $10^{-6}$  do not require remediation or mitigation measures.

California Proposition 65 (1986, Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65, Health and Safety Code Section 25249.5 et seq.) requires specific notification and warning for exposure to carcinogens above the “no significant risk level,” which is based on a  $10^{-5}$  excess lifetime cancer risk.

A cumulative ILCR threshold of  $10^{-6}$  was used in the HHSE to assess whether exposure to COPCs at the Site may pose an unacceptable cumulative ILCR for the residential receptors. These target cumulative ILCR values are within the range of ILCRs considered to be acceptable.

### 5.4.3 Summary of Risk Characterization Results

Based on the results of this HHSE and using DTSC default exposure assumptions for the future on-Site resident and maximum COPC concentrations in indoor air concentrations, the ILCR is  $6 \times 10^{-5}$  and the total HI is 2. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is greater than the acceptable total HI of 1. Therefore, mitigation is necessary to protect the future on-Site resident.

## 6. Conclusions and Preliminary Recommendations

Based on our review of the soil samples results for the Site, we present the following preliminary conclusions and recommendations.

- DTSC modified screening levels for residential soil were exceeded in soil collected from 27 of the 30 houses sampled.
- Lead was detected at a concentration greater than the DTSC modified screening level for residential soil of 80 mg/kg in 48 of the surface (0-0.5 feet bgs) soil samples. The subsurface (2-2.5 feet bgs) soil samples analyzed did not exhibit lead concentrations greater than 80 mg/kg. Therefore, it appears that lead concentrations greater than 80 mg/kg are limited to the upper two feet of soil based on the sampling and analysis performed. Lead concentrations exceeded the DTSC modified screening level for residential soil at 25 of the 30 houses sampled.
- Detected arsenic concentrations are less than the DTSC Schools Program screening level of 12 mg/kg (DTSC, 2008).
- OCPs were detected in discrete soil samples at concentrations greater than the DTSC modified screening levels for residential soil in 39 of the discrete surface soil samples and 11 of the discrete subsurface samples. OCP concentrations exceeded the DTSC modified screening level for residential soil at 22 of the 30 houses sampled. Based on the results of this HHSE for the future on-Site resident, the cumulative ILCR is greater than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is greater than the acceptable total HI of 1. Therefore, mitigation is necessary to protect the future on-Site resident.
- We recommend additional soil sampling and analysis prior to demolition and/or grading activities to identify the lateral extent of lead concentrations in soil and the lateral and vertical extent of OCP concentrations in soil greater than the DTSC modified screening levels.

## References

DTSC, 2006. Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers. June 9.

DTSC, 2008. Interim Guidance for Sampling Agricultural Properties (Third Revision). April 30.

DTSC, 2015. Preliminary Endangerment Assessment Guidance Manual. January 1994, revised October 2015.

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**TABLES**

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436
			03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 2.0-2.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		3.82	--	--	--	--	7.44	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	40.4	84.5	8.05	38.6	44.6	95.0	--	14.9	68.1	--	--	36.7	--	--	31.9	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	--	15	3.5 J	--	< 5.0	< 5.0	--	47	< 5.0	--	< 5.0	
4,4'-DDE	ug/kg	2000	--	--	--	--	--	5.3	< 5.0	--	14	< 5.0	--	78	< 5.0	--	< 5.0	
4,4'-DDT	ug/kg	1900	--	--	--	--	--	< 4.9	< 5.0	--	43	5.0	--	20	< 5.0	--	< 5.0	
Aldrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
alpha-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
beta-BHC	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Chlordane	ug/kg	440	--	--	--	--	--	120	< 50	--	690	57	--	420	< 50	--	77	
delta-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
Dieldrin	ug/kg	34	--	--	--	--	--	8.0	2.4 J	--	59	5.2	--	29	< 5.0	--	2.9 J	
Endosulfan I	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan II	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan sulfate	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin aldehyde	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin ketone	ug/kg	19000	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
gamma-BHC (Lindane)	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Heptachlor	ug/kg	130	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	2.2 J	< 5.0	--	< 5.0	
Heptachlor epoxide	ug/kg	70	--	--	--	--	--	< 9.9	< 9.9	--	7.9 J	< 10	--	11	< 10	--	< 9.9	
Methoxychlor	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Toxaphene	ug/kg		--	--	--	--	--	< 99	< 99	--	< 100	< 100	--	< 100	< 100	--	< 99	

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

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**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3436	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3477	
			03/29/2017 2.0-2.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft FD	03/27/2017 2.0-2.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft FD	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft FD	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft FD	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft FD	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 0.0-0.5 ft N	03/27/2017 2.0-2.5 ft N
<b>Inorganics</b>																			
Arsenic	mg/kg		--	3.45	3.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	--	32.8	150	3.50	70.6	55.9	42.1	56.5	28.5	36.0	119	5.51	63.7	35.8	10.3	68.1	
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	2300	< 4.9	--	--	--	--	--	--	--	--	--	2.8 J	--	3.3 J	< 4.9	14	21	
4,4'-DDE	ug/kg	2000	< 4.9	--	--	--	--	--	--	--	--	--	34	--	20	39	85	130	
4,4'-DDT	ug/kg	1900	< 4.9	--	--	--	--	--	--	--	--	--	61	--	40	5.6	19	87	
Aldrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
alpha-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10	
beta-BHC	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Chlordane	ug/kg	440	< 4.9	--	--	--	--	--	--	--	--	--	410	--	470	340	400	270	
delta-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10	
Dieldrin	ug/kg	34	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	9.1	13	< 5.0	< 5.0	
Endosulfan I	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Endosulfan II	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Endosulfan sulfate	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Endrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Endrin aldehyde	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Endrin ketone	ug/kg	19000	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
gamma-BHC (Lindane)	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Heptachlor	ug/kg	130	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Heptachlor epoxide	ug/kg	70	< 9.9	--	--	--	--	--	--	--	--	--	5.2 J	--	4.7 J	7.7 J	< 10	5.3 J	
Methoxychlor	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0	
Toxaphene	ug/kg		< 99	--	--	--	--	--	--	--	--	--	< 99	--	< 100	< 99	< 100	< 100	

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

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**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3477	AVOC3477	AVOC3477	AVOC3477	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0828	BLAI0828	BLAI0828	BLAI0828	BLAI0828
			AVOC3477-02-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-03-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-025-01 03/29/2017 2.0-2.5 ft N	BLAI0760-01-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-01-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-02-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-04-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-04-025-01 03/27/2017 2.0-2.5 ft N	BLAI0828-01-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-025-01 03/30/2017 2.0-2.5 ft N	BLAI0828-03-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-04-005-01 03/30/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	6.55	--	--	--	--	--	--	1.85	--	--	--	--
Lead	mg/kg	80	53.7	37.7	82.9	21.5	151	6.87	76.6	91.8	19.0	111	7.59	70.8	68.4	13.7	11.5	60.6
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 25	12	6.5	--	6.6	--	13	24 J	--	56	--	< 5.0	4.4 J	--	< 5.0	12
4,4'-DDE	ug/kg	2000	360	28	21	--	66	--	63	170	--	680	--	9.5	120	--	6.2	16
4,4'-DDT	ug/kg	1900	250	23	24	--	2.2 J	--	4.0 J	20	--	160	--	9.6	82	--	< 5.0	12
Aldrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
beta-BHC	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	380	35 J	110	--	230	--	520	360	--	890	--	79	190	--	< 5.0	88
delta-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
Dieldrin	ug/kg	34	< 25	< 5.0	< 4.9	--	7.1	--	4.1 J	10	--	9.2	--	< 5.0	3.6 J	--	< 5.0	< 5.0
Endosulfan I	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	6.3 J	--	< 10	< 10	--	< 9.9	< 10
Methoxychlor	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		< 500	< 99	< 99	--	< 100	--	< 99	< 99	--	< 100	--	< 100	< 100	--	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT



**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	CHERO803	CHERO803	CHERO803	CHERO803	CHERO803
			03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft FD	03/30/2017 2.0-2.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft FD	03/30/2017 2.0-2.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft FD	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft FD	03/30/2017 2.0-2.5 ft N	CHERO803-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-02-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-03-005-01 03/28/2017 0.0-0.5 ft N	
<b>Inorganics</b>																			
Arsenic	mg/kg		2.78	--	--	--	--	--	--	--	--	--	--	6.19	--	--	--	--	--
Lead	mg/kg	80	434	--	5.90	90.4	--	8.10	63.3	--	107	--	8.33	218	6.00	163	26.7	80.5	
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	2300	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
4,4'-DDE	ug/kg	2000	--	13	--	--	10	--	--	42	--	100	--	38	--	18	--	--	2.3 J
4,4'-DDT	ug/kg	1900	--	42	--	--	41	--	--	56	--	92	--	30	--	11	--	--	2.5 J
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
alpha-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	--	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	420	--	--	120	--	680	--	430	--	890	--	--	280
delta-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	--	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	2.9 J	--	--	< 5.0	--	< 5.0	--	< 5.0	--	8.6	--	--	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	5.1 J	--	7.6 J	--	--	7.5 J
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Toxaphene	ug/kg		--	< 100	--	--	< 99	--	--	< 100	--	< 100	--	< 100	--	< 100	--	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	CHERO803	CHERO803	CHERO803	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	FLOR3415	FLOR3415
			CHERO803-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-04-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-01-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-02-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-03-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-04-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-04-025-01 03/28/2017 2.0-2.5 ft N	FLOR3415-01-005-01 03/28/2017 0.0-0.5 ft N	FLOR3415-02-005-01 03/28/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	2.99	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	5.93	84.0	5.01	83.5	73.7	5.65	46.1	45.0	177	51.8	7.80	90.6	106	6.88	53.9	58.5
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	3.2 J	--	--	5.4	--	--	6.5	--	6.7	--	--	< 5.0	--	< 5.0	< 5.0
4,4'-DDE	ug/kg	2000	--	53	--	--	52	--	--	35	--	15	--	--	24	--	6.9	< 5.0
4,4'-DDT	ug/kg	1900	--	7.3	--	--	12	--	--	7.9	--	25	--	--	13	--	2.7 J	10
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	< 50	--	--	< 50	--	37 J	--	--	< 50	--	96	< 50
delta-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	3.3 J	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	--	6.0 J	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	4.4 J	< 10
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		--	< 99	--	--	< 100	--	--	< 100	--	< 100	--	--	< 99	--	< 100	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	FLOR3415	FLOR3415	FLOR3415	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766
			FLOR3415-03-005-01 03/28/2017 0.0-0.5 ft N	FLOR3415-03-025-01 03/28/2017 2.0-2.5 ft N	FLOR3415-04-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-01-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-01-025-01 03/28/2017 2.0-2.5 ft N	FLOR3475-02-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-02-025-01 03/28/2017 2.0-2.5 ft N	FLOR3475-03-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-04-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-04-025-01 03/28/2017 2.0-2.5 ft N	GRAP0766-01-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-02-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-02-025-01 03/30/2017 2.0-2.5 ft N	GRAP0766-03-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-04-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-04-025-01 03/30/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	4.75	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	90.7	6.70	63.4	109	6.56	88.5	6.51	69.1	89.0	3.95	52.8	121	6.03	49.5	14.7	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	5.5	--	35	--	23	2.4 J	--	35	66	--	11	2.5 J	< 5.0
4,4'-DDE	ug/kg	2000	2.7 J	--	80	24	--	240	--	46	12	--	700	270	--	110	38	< 5.0
4,4'-DDT	ug/kg	1900	< 5.0	--	40	7.1	--	160	--	120	7.9	--	270	400	--	54	6.6	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	--	540	140	--	400	--	260	45 J	--	240	920	--	430	< 50	< 50
delta-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
Dieldrin	ug/kg	34	< 5.0	--	< 5.0	< 5.0	--	6.1	--	< 5.0	< 5.0	--	2.3 J	4.4 J	--	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	7.5	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	3.0 J	--	2.2 J	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	--	56	< 10	--	14	--	< 10	< 10	--	5.6 J	7.7 J	--	< 9.9	< 10	< 9.9
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	--	< 100	< 100	--	< 100	--	< 100	< 100	--	< 99	< 100	--	< 99	< 100	< 99

Yellow shading indicates the soil sample results exceeded the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	IDAH3339	IDAH3339	IDAH3339	IDAH3339	KENT3433	KENT3433	KENT3433	KENT3433
			GRAP0828-01-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-01-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-02-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-02-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-03-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-03-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-04-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-04-025-01 03/30/2017 2.0-2.5 ft N	IDAH3339-01-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-02-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-03-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-04-005-01 03/30/2017 0.0-0.5 ft N	KENT3433-01-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-02-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-025-01 03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		3.95	--	--	--	--	--	--	--	--	--	--	--	2.91	--	--	--
Lead	mg/kg	80	51.3	--	98.3	--	80.0	--	57.5	--	25.2	24.1	15.2	64.4	43.5	40.3	295	4.95
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	15	< 5.0	4.5 J	< 5.0	20	< 5.0	3.1 J	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
4,4'-DDE	ug/kg	2000	9.6	< 5.0	120	28	95	11	22	5.4	--	--	--	--	7.6	6.2	13	--
4,4'-DDT	ug/kg	1900	18	< 5.0	75	16	38	6.1	5.1	3.3 J	--	--	--	--	6.7	6.7	15	--
Aldrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
alpha-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
beta-BHC	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Chlordane	ug/kg	440	120	< 5.0	240	47 J	210	27 J	120	28 J	--	--	--	--	68	810	350	--
delta-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
Dieldrin	ug/kg	34	2.8 J	< 5.0	51	9.7	7.1	< 5.0	120	40	--	--	--	--	< 5.0	3.5 J	76	--
Endosulfan I	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan II	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan sulfate	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin aldehyde	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin ketone	ug/kg	19000	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
gamma-BHC (Lindane)	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor	ug/kg	130	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor epoxide	ug/kg	70	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	3.8 J	< 9.9	--	--	--	--	< 10	17	< 10	--
Methoxychlor	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Toxaphene	ug/kg		< 99	< 99	< 99	< 100	< 99	< 100	< 99	< 99	--	--	--	--	< 100	< 100	< 100	--

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	KENT3433	KENT3433	LIND0687	LIND0687	LIND0687	LIND0687	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	PEAC0880	PEAC0880
			KENT3433-04-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-04-025-01 03/28/2017 2.0-2.5 ft N	LIND0687-01-005-01 03/27/2017 0.0-0.5 ft N	LIND0687-02-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-03-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-04-005-01 03/27/2017 0.0-0.5 ft N	LIND0741-01-005-01 03/29/2017 0.0-0.5 N	LIND0741-01-025-01 03/29/2017 2.0-2.5 N	LIND0741-02-005-01 03/29/2017 0.0-0.5 N	LIND0741-02-025-01 03/29/2017 2.0-2.5 N	LIND0741-03-005-01 03/29/2017 0.0-0.5 N	LIND0741-03-025-01 03/29/2017 2.0-2.5 N	LIND0741-04-005-01 03/29/2017 0.0-0.5 N	LIND0741-04-025-01 03/29/2017 2.0-2.5 N	PEAC0880-01-005-01 03/29/2017 0.0-0.5 ft N	PEAC0880-01-025-01 03/29/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	2.49	--	--	--	3.31	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	121	5.02	31.6	54.2	28.6	45.8	39.1	--	45.4	--	44.7	--	105	41.2	66.0	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	< 5.0	90	88	15	< 4.9	21	8.9	110	< 25	< 5.0	< 4.9	< 4.9	< 5.0
4,4'-DDE	ug/kg	2000	73	--	< 5.0	18	6.9	24	120	< 4.9	620	140	1,200	380	180	130	6.1	< 5.0
4,4'-DDT	ug/kg	1900	27	--	5.8	16	2.4 J	< 4.9	26	< 4.9	370	82	640	190	49	22	3.5 J	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
alpha-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Chlordane	ug/kg	440	310	--	190	600	490 J	970	100	< 49	1,200	260	980	220 J	630	480	57	< 50
delta-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
Dieldrin	ug/kg	34	19	--	2.6 J	< 5.0	< 5.0	6.3	< 5.0	< 4.9	5.6	4.0 J	< 50	< 25	6.2	2.9 J	8.5	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	2.6 J	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	6.2	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	--	< 10	5.1 J	11	6.0 J	6.7 J	< 9.9	37	25	170	< 50	15	12	< 9.9	< 10
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Toxaphene	ug/kg		< 100	--	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99	< 990	< 500	< 99	< 99	< 99	< 100

Yellow shading indicates the soil sample results exceeded the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3392	PEAC3392	PEAC3392	PEAC3392	PEAC3392
			03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	7.65	--	--	--	--	2.77	--	--	--	--
Lead	mg/kg	80	15.3	--	333	34.6	110	8.69	141	21.6	70.3	72.6	48.9	56.8	--	73.7	--	89.1
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	< 5.0	12	3.7 J	3.8 J	< 5.0	49	--	59	18	17	11	< 5.0	18 J	< 5.0	110
4,4'-DDE	ug/kg	2000	< 5.0	9.5	110	20	15	< 5.0	18	--	21	5.9	32	2.8 J	< 5.0	< 5.0	< 5.0	9.2
4,4'-DDT	ug/kg	1900	< 5.0	3.6 J	59	8.0	10	< 5.0	4.2 J	--	4.3 J	5.3	< 5.0	4.8 J	< 5.0	4.4 J	< 5.0	< 5.0
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	83	920	130	180	< 50	760	--	380	200	63	75	< 50	380	41 J	700
delta-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 9.9	< 10	< 10
Dieldrin	ug/kg	34	2.8 J	29	180	34	18	< 5.0	4.2 J	--	5.3	< 5.0	< 5.0	< 5.0	< 5.0	4.8 J	< 5.0	3.5 J
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	< 10	11	< 9.9	< 10	< 10	9.0 J	--	8.4 J	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	5.2 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	< 100	< 100	< 99	< 100	< 100	< 100	--	< 100	< 99	< 99	< 100	< 100	< 100	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC3392	PEAC3392	PEAC3392	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PLUM0850	PLUM0850	PLUM0850	PLUM0850	PLUM0850
			03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	--	5.53	--	--	--	--
Lead	mg/kg	80	20.6	137	25.2	136	13.8	169	34.2	194	32.1	302	10.7	111	3.88	94.2	3.07	72.0
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	130	54	39	--	81	--	54	--	52	--	32	--	16	--	< 5.0
4,4'-DDE	ug/kg	2000	< 5.0	26	7.3	22	--	120	--	43	--	38 J	--	15	--	400	--	17
4,4'-DDT	ug/kg	1900	< 5.0	4.6 J	< 5.0	36	--	55	--	200	--	170	--	16	--	210	--	8.5
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
alpha-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Chlordane	ug/kg	440	120	1,500	540	380	--	880	--	930	--	250	--	310	--	530	--	900
delta-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
Dieldrin	ug/kg	34	< 5.0	4.1 J	< 5.0	25	--	15	--	55	--	22	--	41	--	16	--	11
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	3.4 J	--	< 5.0	--	< 5.0	--	3.3 J	--	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	14	< 10	5.9 J	--	10	--	21	--	< 10	--	5.9 J	--	36	--	8.7 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Toxaphene	ug/kg		< 100	< 99	< 100	< 99	--	< 100	--	< 100	--	< 100	--	< 99	--	< 100	--	< 100

Yellow shading indicates the soil sample results exceeded the DTSC Modified Screening Level for residential soil.

DRAFT





**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323
			UTAH3315-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-04-025-01 03/29/2017 2.0-2.5 ft N	UTAH3318-01-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-025-01 03/27/2017 2.0-2.5 ft N	UTAH3318-03-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-04-005-01 03/27/2017 0.0-0.5 ft N	UTAH3323-01-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-01-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-02-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-04-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	4.08	--	--	--	--	--
Lead	mg/kg	80	--	27.6	--	103	8.27	61.8	144	14.5	65.0	37.7	169	69.1	240	4.67	31.4	54.9
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	190	< 4.9	520	< 5.0	< 5.0	6.6	--	4.4 J	< 5.0	< 5.0	--	26	--	4.0 J	< 5.0
4,4'-DDE	ug/kg	2000	9.9	76	< 4.9	74	2.8 J	28	17	--	13	10	21	--	440	--	28	130
4,4'-DDT	ug/kg	1900	< 5.0	87	< 4.9	19 J	< 5.0	8.9	14	--	6.6	< 5.0	38	--	190	--	16	150
Aldrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
alpha-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
beta-BHC	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Chlordane	ug/kg	440	560	3,500	56	9,500	160	150	390	--	44 J	43 J	330	--	210	--	110	660
delta-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
Dieldrin	ug/kg	34	5.0	< 50	< 4.9	14 J	< 5.0	< 5.0	5.3	--	< 5.0	< 5.0	< 5.0	--	5.6	--	2.4 J	< 5.0
Endosulfan I	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 50	< 4.9	28	< 5.0	< 5.0	< 5.0	--	< 5.0	2.8 J	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	4.0 J	69 J	< 9.9	86	< 9.9	9.7 J	7.4 J	--	< 10	20	6.5 J	--	< 10	--	< 9.9	8.9 J
Methoxychlor	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Toxaphene	ug/kg		< 99	< 1,000	< 99	< 500	< 99	< 100	< 100	--	< 100	< 100	< 100	--	< 100	--	< 99	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3334	UTAH3334	UTAH3334	UTAH3334	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3384	UTAH3384	UTAH3384	UTAH3384
			03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	2.20	--	--	--	--	--	--	--	2.99	--	--	--
Lead	mg/kg	80	56.7	46.8	7.89	47.2	37.6	--	95.0	57.7	25.9	--	143	21.4	54.6	--	133	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	< 5.0	< 5.0	< 5.0	3.9 J	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
4,4'-DDE	ug/kg	2000	--	--	--	--	5.2	17	14	2.3 J	20	2.8 J	20	22	--	22	--	120
4,4'-DDT	ug/kg	1900	--	--	--	--	< 5.0	< 5.0	9.9	6.8	< 5.0	< 5.0	22	14	--	25	--	81
Aldrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
alpha-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
beta-BHC	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Chlordane	ug/kg	440	--	--	--	--	490	740	1,000	230	4,600	980	11,000	9,200	--	98	--	300
delta-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
Dieldrin	ug/kg	34	--	--	--	--	< 5.0	2.7 J	9.3	4.7 J	20	2.2 J	20	12	--	< 5.0	--	9.9
Endosulfan I	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan II	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan sulfate	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin aldehyde	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin ketone	ug/kg	19000	--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
gamma-BHC (Lindane)	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Heptachlor	ug/kg	130	--	--	--	--	< 5.0	< 5.0	4.2 J	< 5.0	23	< 5.0	14	7.9	--	< 5.0	--	< 4.9
Heptachlor epoxide	ug/kg	70	--	--	--	--	6.5 J	19	5.9 J	< 10	44 J	29	29	16	--	4.0 J	--	32
Methoxychlor	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Toxaphene	ug/kg		--	--	--	--	< 99	< 99	< 99	< 100	< 99	< 100	< 100	< 100	--	< 99	--	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384
			UTAH3384-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-03-005-02 03/29/2017 0.0-0.5 ft FD	UTAH3384-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-04-005-02 03/29/2017 0.0-0.5 ft FD
<b>Inorganics</b>								
Arsenic	mg/kg		--	--	--	--	--	--
Lead	mg/kg	80	7.35	82.3	--	3.54	64.5	--
<b>Pesticides</b>								
4,4'-DDD	ug/kg	2300	--	--	29 J	--	--	5.6
4,4'-DDE	ug/kg	2000	--	--	110	--	--	14
4,4'-DDT	ug/kg	1900	--	--	69	--	--	3.7 J
Aldrin	ug/kg		--	--	< 50	--	--	< 5.0
alpha-BHC	ug/kg		--	--	< 99	--	--	< 10
beta-BHC	ug/kg		--	--	< 50	--	--	< 5.0
Chlordane	ug/kg	440	--	--	< 500	--	--	98
delta-BHC	ug/kg		--	--	< 99	--	--	< 10
Dieldrin	ug/kg	34	--	--	< 50	--	--	< 5.0
Endosulfan I	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan II	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan sulfate	ug/kg		--	--	< 50	--	--	< 5.0
Endrin	ug/kg		--	--	< 50	--	--	< 5.0
Endrin aldehyde	ug/kg		--	--	< 50	--	--	< 5.0
Endrin ketone	ug/kg	19000	--	--	< 50	--	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	--	< 50	--	--	< 5.0
Heptachlor	ug/kg	130	--	--	< 50	--	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	--	1,300	--	--	13
Methoxychlor	ug/kg		--	--	< 50	--	--	< 5.0
Toxaphene	ug/kg		--	--	< 990	--	--	< 100

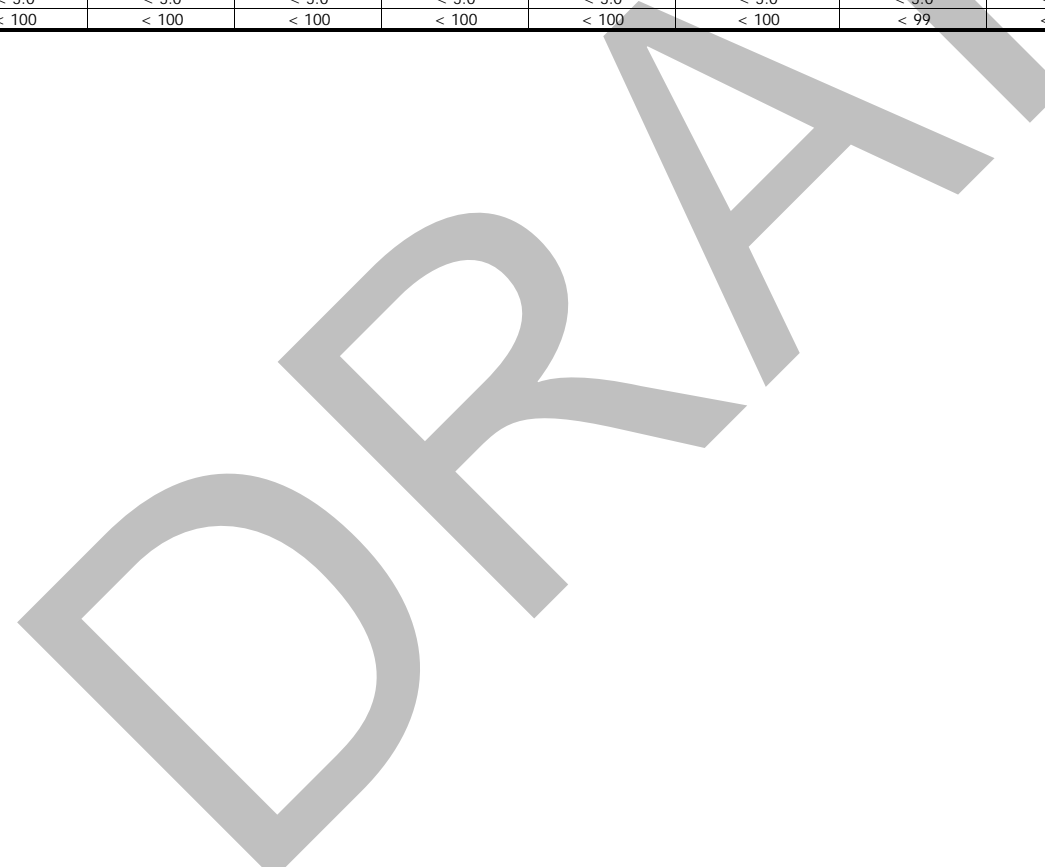
Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

DRAFT

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-01	COMPOSITE-02	COMPOSITE-03	COMPOSITE-04	COMPOSITE-05	COMPOSITE-05-dup	COMPOSITE-06	COMPOSITE-07	COMPOSITE-08	COMPOSITE-09	COMPOSITE-10	COMPOSITE-11	COMPOSITE-12-Dup	COMPOSITE-13	COMPOSITE-14
					03/27/2017 Lind0687-01-005-01 Lind0687-04-005-01	03/27/2017 Lind0687-01-025-01 Lind0687-02-025-01 Lind0687-03-025-01 Lind0687-04-025-01	03/27/2017 Avoc3472-01-005-01 Avoc3472-02-005-01 Avoc3472-03-005-01 Avoc3472-04-005-01	03/27/2017 Avoc3472-01-025-01 Avoc3472-02-025-01 Avoc3472-03-025-01 Avoc3472-04-025-01	03/27/2017 Avoc3461-01-005-01 Avoc3461-02-005-01 Avoc3461-03-005-01 Avoc3461-04-005-01	03/27/2017 Avoc3461-01-005-02 Avoc3461-02-005-02 Avoc3461-03-005-02 Avoc3461-04-005-02	03/27/2017 Avoc3461-01-025-01 Avoc3461-02-025-01 Avoc3461-03-025-01 Avoc3461-04-025-01	03/27/2017 Avoc3408-01-005-01 Avoc3408-02-005-01 Avoc3408-03-005-01 Avoc3408-04-005-01	03/27/2017 Avoc3408-01-025-01 Avoc3408-02-025-01 Avoc3408-03-025-01 Avoc3408-04-025-01	03/27/2017 Utah3318-01-005-01 Utah3318-02-005-01 Utah3318-03-025-01 Utah3318-04-005-01	03/27/2017 Utah3318-01-025-01 Utah3318-02-025-01 Utah3318-03-025-01 Utah3318-04-025-01	03/27/2017 Utah3304-01-005-01 Utah3304-02-005-01 Utah3304-03-005-01 Utah3304-04-005-01	03/27/2017 Utah3304-01-005-02 Utah3304-02-005-02 Utah3304-03-005-02 Utah3304-04-005-02	03/27/2017 Utah3304-01-025-01 Utah3304-02-025-01 Utah3304-03-025-01 Utah3304-04-025-01	03/27/2017 Blai0760-01-005-01 Blai0760-02-005-01 Blai0760-03-005-01 Blai0760-04-005-01
N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	FD	N	N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.7 J	4.4 J	< 5.0	7.7	< 5.0	< 5.0	< 5.0	89	61	13	< 5.0
4,4'-DDE	ug/kg	800	530	400	7.1	< 5.0	42	< 5.0	29	34	6.3	97	14	10	2.7 J	920	890	32	140
4,4'-DDT	ug/kg	800	530	400	8.0	< 5.0	30	< 5.0	13	12	3.6 J	35	< 5.0	9.9	< 5.0	470	370	46	57
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	320	< 5.0	340	< 5.0	40 J	47 J	34 J	66	< 5.0	390	< 5.0	200	370	< 5.0	680
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	< 5.0	6.1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	270	340	11	2.7 J
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.



**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-15	COMPOSITE-16	COMPOSITE-17	COMPOSITE-18	COMPOSITE-18-Dup	COMPOSITE-19	COMPOSITE-20	COMPOSITE-21	COMPOSITE-22	COMPOSITE-23	COMPOSITE-24	COMPOSITE-25	COMPOSITE-26	COMPOSITE-27	COMPOSITE-28	
					03/27/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017	03/28/2017
Unit	Unit	Unit	Unit	Unit	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N
<b>Pesticides</b>																				
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.5 J	< 5.0	< 5.0	< 5.0	2.6 J	< 5.0	< 25	< 5.0	28	3.6 J	< 5.0	
4,4'-DDE	ug/kg	800	530	400	9.4	45	3.0 J	55	55	< 5.0	37	< 5.0	9.0	4.6 J	180	4.3 J	57	4.7 J	7.3	
4,4'-DDT	ug/kg	800	530	400	4.5 J	25	< 5.0	34	45	< 5.0	13	< 5.0	18	5.5	140	< 5.0	71	2.2 J	3.0 J	
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
alpha-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9	
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Chlordane	ug/kg	215	140	105	< 50	440	34 J	55	63	< 50	780	64	99	< 50	360	< 50	730	64	850	
delta-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9	
Dieldrin	ug/kg	16	10	5	< 5.0	22	2.2 J	< 5.0	< 5.0	< 5.0	2.8 J	< 5.0	< 5.0	< 5.0	11 J	< 5.0	33	4.3 J	14	
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Heptachlor epoxide	ug/kg				< 9.9	7.7 J	< 10	5.9 J	24	< 10	11	< 10	27	< 10	< 50	< 10	8.1 J	< 10	5.0 J	
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	
Toxaphene	ug/kg				< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 99	

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

DRAFT

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-29 03/28/2017	COMPOSITE-30 03/28/2017	COMPOSITE-31 03/28/2017	COMPOSITE-32 03/28/2017	COMPOSITE-33 03/29/2017	COMPOSITE-33-Dup 03/29/2017	COMPOSITE-34 03/29/2017	COMPOSITE-35 03/29/2017	COMPOSITE-36 03/29/2017	COMPOSITE-37 03/29/2017	COMPOSITE-38 03/29/2017	COMPOSITE-39 03/29/2017	COMPOSITE-40 03/29/2017	COMPOSITE-41 03/29/2017	COMPOSITE-42 03/29/2017
					Peac3392-01-025-01 Peac3392-02-025-01 Peac3392-03-025-01 Peac3392-04-025-01 N	Peac3371-01-005-01 Peac3371-02-005-01 Peac3371-03-005-01 Peac3371-04-005-01 N	Peac3371-01-025-01 Peac3371-02-025-01 Peac3371-03-025-01 Peac3371-04-025-01 N	Lind0687-02-005-01 Lind0687-03-005-01 N	Avoc3436-01-005-01 Avoc3436-02-005-01 Avoc3436-03-005-01 Avoc3436-04-005-01 N	Avoc3436-01-005-02 Avoc3436-02-005-02 Avoc3436-03-005-02 Avoc3436-04-005-02 FD	Avoc3436-01-025-01 Avoc3436-02-025-01 Avoc3436-03-025-01 Avoc3436-04-025-01 N	Utah3323-01-005-01 Utah3323-02-005-01 Utah3323-03-005-01 Utah3323-04-005-01 N	Utah3323-01-025-01 Utah3323-02-025-01 Utah3323-03-025-01 Utah3323-04-025-01 N	Utah3315-01-005-01 Utah3315-02-005-01 Utah3315-03-005-01 Utah3315-04-005-01 N	Utah3315-01-025-01 Utah3315-02-025-01 Utah3315-03-025-01 Utah3315-04-025-01 N	Utah3348-01-005-01 Utah3348-02-005-01 Utah3348-03-005-01 Utah3348-04-005-01 N	Utah3348-01-025-01 Utah3348-02-025-01 Utah3348-03-025-01 Utah3348-04-025-01 N	Avoc3477-01-005-01 Avoc3477-02-005-01 Avoc3477-03-005-01 Avoc3477-04-005-01 N	Avoc3477-01-025-01 Avoc3477-02-025-01 Avoc3477-03-025-01 Avoc3477-04-025-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	<b>8.7</b>	< 5.0	< 5.0	< 5.0	<b>9.2</b>	< 5.0	<b>74</b>	<b>10</b>	<b>420</b>	<b>30</b>	<b>320</b>	<b>410</b>	<b>37</b>	< 5.0
4,4'-DDE	ug/kg	800	530	400	< 5.0	<b>33</b>	<b>2.6 J</b>	<b>16</b>	<b>3.1 J</b>	<b>37</b>	<b>2.4 J</b>	<b>380</b>	<b>34</b>	<b>190</b>	<b>9.1</b>	<b>32</b>	<b>21</b>	<b>100</b>	<b>11</b>
4,4'-DDT	ug/kg	800	530	400	< 5.0	<b>4.3 J</b>	<b>2.6 J</b>	<b>33</b>	<b>20</b>	<b>29</b>	<b>5.2</b>	<b>250</b>	<b>11</b>	<b>65</b>	< 5.0	<b>4.2 J</b>	<b>12</b>	<b>51</b>	<b>3.1 J</b>
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	<b>210</b>	<b>430</b>	<b>57</b>	<b>1,300</b>	<b>330</b>	<b>580</b>	<b>58</b>	<b>910</b>	<b>100</b>	<b>6,700</b>	<b>470</b>	<b>7,700</b>	<b>15,000</b>	<b>210</b>	< 50
delta-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	<b>2.2 J</b>	< 5.0	<b>13</b>	<b>31</b>	<b>44</b>	<b>5.2</b>	<b>4.3 J</b>	< 5.0	<b>26</b>	< 5.0	<b>7.6</b>	<b>11</b>	<b>2.5 J</b>	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<b>83</b>	<b>64</b>	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	<b>4.6 J</b>	< 9.9	<b>10</b>	<b>4.7 J</b>	<b>8.5 J</b>	< 10	<b>21</b>	<b>5.0 J</b>	<b>120</b>	<b>6.5 J</b>	<b>93</b>	<b>44 J</b>	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 99	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

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**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-43	COMPOSITE-44	COMPOSITE-45	COMPOSITE-45-Dup	COMPOSITE-46	COMPOSITE-47	COMPOSITE-48	COMPOSITE-49	COMPOSITE-50	COMPOSITE-51	COMPOSITE-51-Dup	COMPOSITE-52	COMPOSITE-53	COMPOSITE-54	COMPOSITE-55
					03/29/2017 Lind0741-01-005-01 Lind0741-02-005-01 Lind0741-03-005-01 Lind0741-04-005-01 N	03/29/2017 Lind0741-01-025-01 Lind0741-02-025-01 Lind0741-03-025-01 Lind0741-04-025-01 N	03/29/2017 Utah3384-01-005-01 Utah3384-02-005-01 Utah3384-03-005-01 Utah3384-04-005-01 N	03/29/2017 Utah3384-01-005-02 Utah3384-02-005-02 Utah3384-03-005-02 Utah3384-04-005-02 FD	03/29/2017 Utah3384-01-025-01 Utah3384-02-025-01 Utah3384-03-025-01 Utah3384-04-025-01 N	03/29/2017 Plum0850-01-005-01 Plum0850-02-005-01 Plum0850-03-005-01 Plum0850-04-005-01 N	03/29/2017 Plum0850-01-025-01 Plum0850-02-025-01 Plum0850-03-025-01 Plum0850-04-025-01 N	03/29/2017 Peac0880-01-005-01 Peac0880-02-005-01 Peac0880-03-005-01 Peac0880-04-005-01 N	03/29/2017 Peac0880-01-025-01 Peac0880-02-025-01 Peac0880-03-025-01 Peac0880-04-025-01 N	03/30/2017 Blai0890-01-005-01 Blai0890-02-005-01 Blai0890-03-005-01 Blai0890-04-005-01 N	03/30/2017 Blai0890-01-005-02 Blai0890-02-005-02 Blai0890-03-005-02 Blai0890-04-005-02 FD	03/30/2017 Blai0890-01-025-01 Blai0890-02-025-01 Blai0890-03-025-01 Blai0890-04-025-01 N	03/30/2017 Blai0828-01-005-01 Blai0828-02-005-01 Blai0828-03-005-01 Blai0828-04-005-01 N	03/30/2017 Blai0828-01-025-01 Blai0828-02-025-01 Blai0828-03-025-01 Blai0828-04-025-01 N	03/30/2017 Grap0828-01-005-01 Grap0828-02-005-01 Grap0828-03-005-01 Grap0828-04-005-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	<b>7.4</b>	<b>11</b>	<b>5.0</b>	<b>7.5</b>	< 5.0	<b>17</b>	< 5.0	<b>5.8</b>	< 5.0	<b>25</b>	<b>14</b>	< 5.0	<b>12</b>	<b>9.4</b>	<b>22</b>
4,4'-DDE	ug/kg	800	530	400	<b>180</b>	<b>48</b>	<b>37</b>	<b>37</b>	< 5.0	<b>110</b>	< 5.0	<b>32</b>	<b>5.0</b>	<b>38</b>	<b>32</b>	<b>4.2 J</b>	<b>49</b>	<b>29</b>	<b>61</b>
4,4'-DDT	ug/kg	800	530	400	<b>11</b>	<b>14</b>	<b>13</b>	<b>13</b>	< 5.0	<b>19</b>	< 5.0	<b>12</b>	< 5.0	<b>30</b>	<b>17</b>	< 5.0	<b>6.7</b>	<b>3.5 J</b>	<b>8.6</b>
Aldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
beta-BHC	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	<b>500</b>	<b>150</b>	<b>92</b>	<b>110</b>	< 5.0	<b>650</b>	< 5.0	<b>340</b>	<b>42 J</b>	<b>510</b>	<b>670</b>	<b>30 J</b>	<b>130</b>	<b>46 J</b>	<b>240</b>
delta-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
Dieldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	<b>27</b>	< 5.0	<b>62</b>	<b>11</b>	<b>2.2 J</b>	<b>5.1</b>	< 5.0	<b>2.8 J</b>	< 5.0	<b>46</b>
Endosulfan I	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				<b>5.9 J</b>	<b>13</b>	< 10	< 10	< 9.9	<b>12</b>	< 10	<b>3.7 J</b>	< 9.9	<b>15</b>	<b>20</b>	< 9.9	< 10	< 10	<b>5.8 J</b>
Methoxychlor	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100

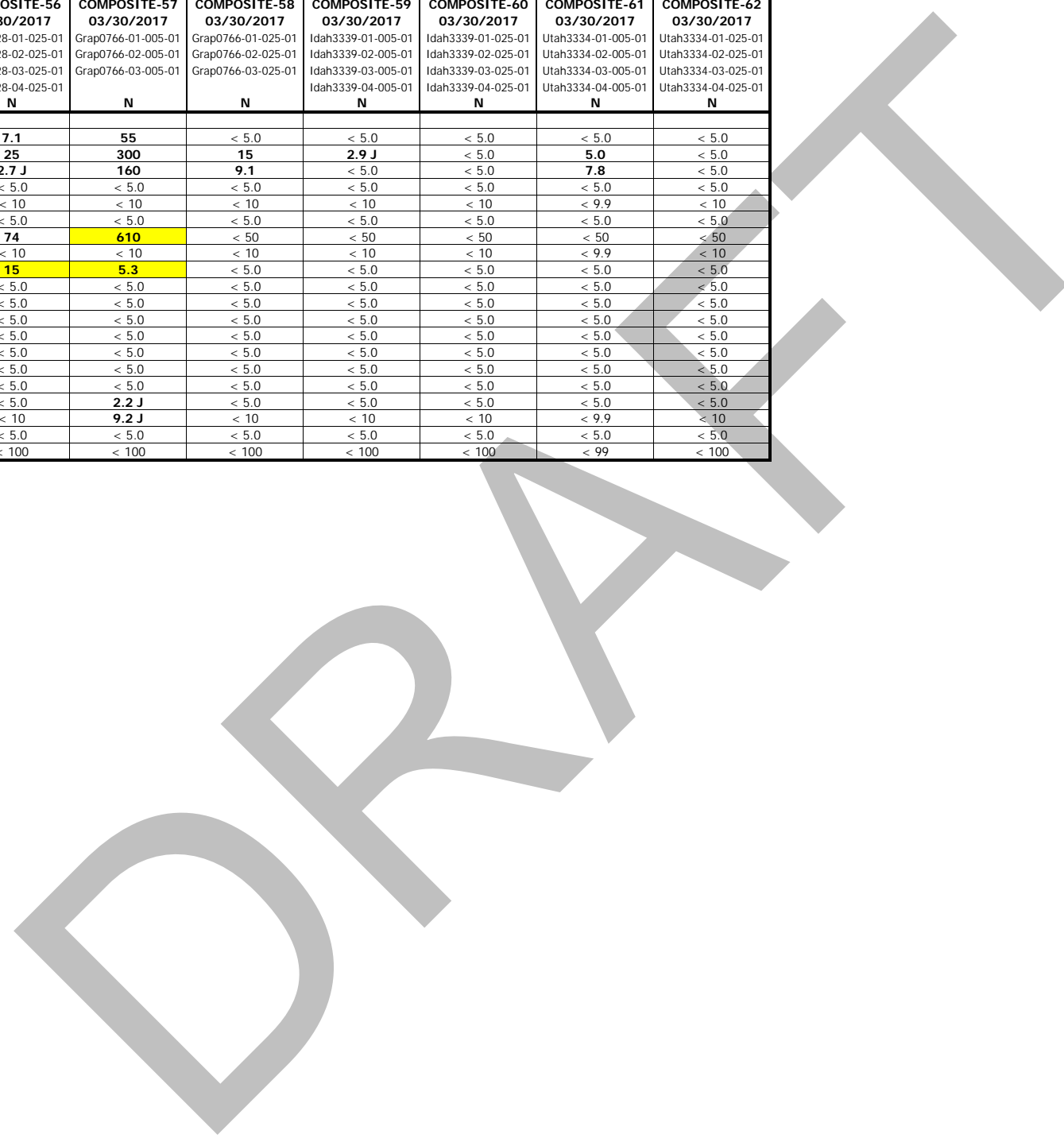
Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.



**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-56	COMPOSITE-57	COMPOSITE-58	COMPOSITE-59	COMPOSITE-60	COMPOSITE-61	COMPOSITE-62
					03/30/2017 Grap0828-01-025-01 Grap0828-02-025-01 Grap0828-03-025-01 Grap0828-04-025-01 N	03/30/2017 Grap0766-01-005-01 Grap0766-02-005-01 Grap0766-03-005-01 N	03/30/2017 Grap0766-01-025-01 Grap0766-02-025-01 Grap0766-03-025-01 N	03/30/2017 Idah3339-01-005-01 Idah3339-02-005-01 Idah3339-03-005-01 Idah3339-04-005-01 N	03/30/2017 Idah3339-01-025-01 Idah3339-02-025-01 Idah3339-03-025-01 Idah3339-04-025-01 N	03/30/2017 Utah3334-01-005-01 Utah3334-02-005-01 Utah3334-03-005-01 Utah3334-04-005-01 N	03/30/2017 Utah3334-01-025-01 Utah3334-02-025-01 Utah3334-03-025-01 Utah3334-04-025-01 N
<b>Pesticides</b>											
4,4'-DDD	ug/kg	1150	760	575	7.1	55	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4,4'-DDE	ug/kg	800	530	400	25	300	15	2.9 J	< 5.0	5.0	< 5.0
4,4'-DDT	ug/kg	800	530	400	2.7 J	160	9.1	< 5.0	< 5.0	7.8	< 5.0
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	74	610	< 50	< 50	< 50	< 50	< 50
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
Dieldrin	ug/kg	16	10	5	15	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	2.2 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	9.2 J	< 10	< 10	< 10	< 9.9	< 10
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 99	< 100

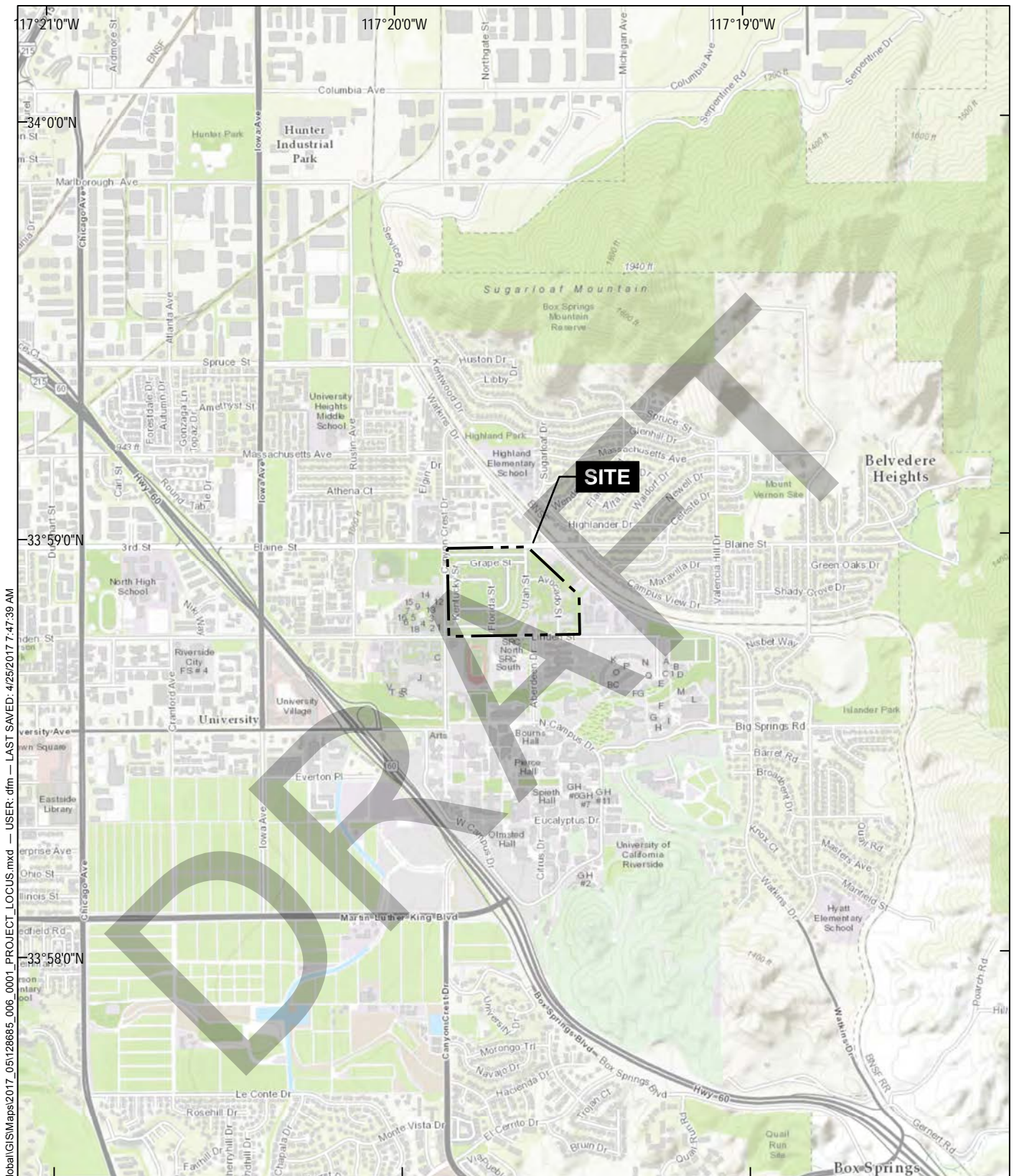
Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.





**FIGURES**

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GIS FILE PATH: G:\128685\_UC Riverside\Global\GIS\Maps\2017\_05\128685\_006\_0001\_PROJECT\_LOCUS.mxd — USER: dfm — LAST SAVED: 4/25/2017 7:47:39 AM



MAP SOURCE: ESRI  
 SITE COORDINATES: 33°58'52"N 117°19'41"W

**HALEY  
ALDRICH**

PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 MAY 2017

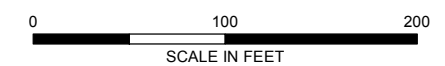
**FIGURE 1**



GIS FILE PATH: G:\128885 UC Riverside\Gis\Map\2017 US128885\_006\_002 SITE PLAN.mxd - USER: dlm - LAST SAVED: 5/20/17 6:40:42 AM

**LEGEND**  
 ◆ SAMPLE LOCATION  
 [---] SITE BOUNDARY (APPROXIMATE)

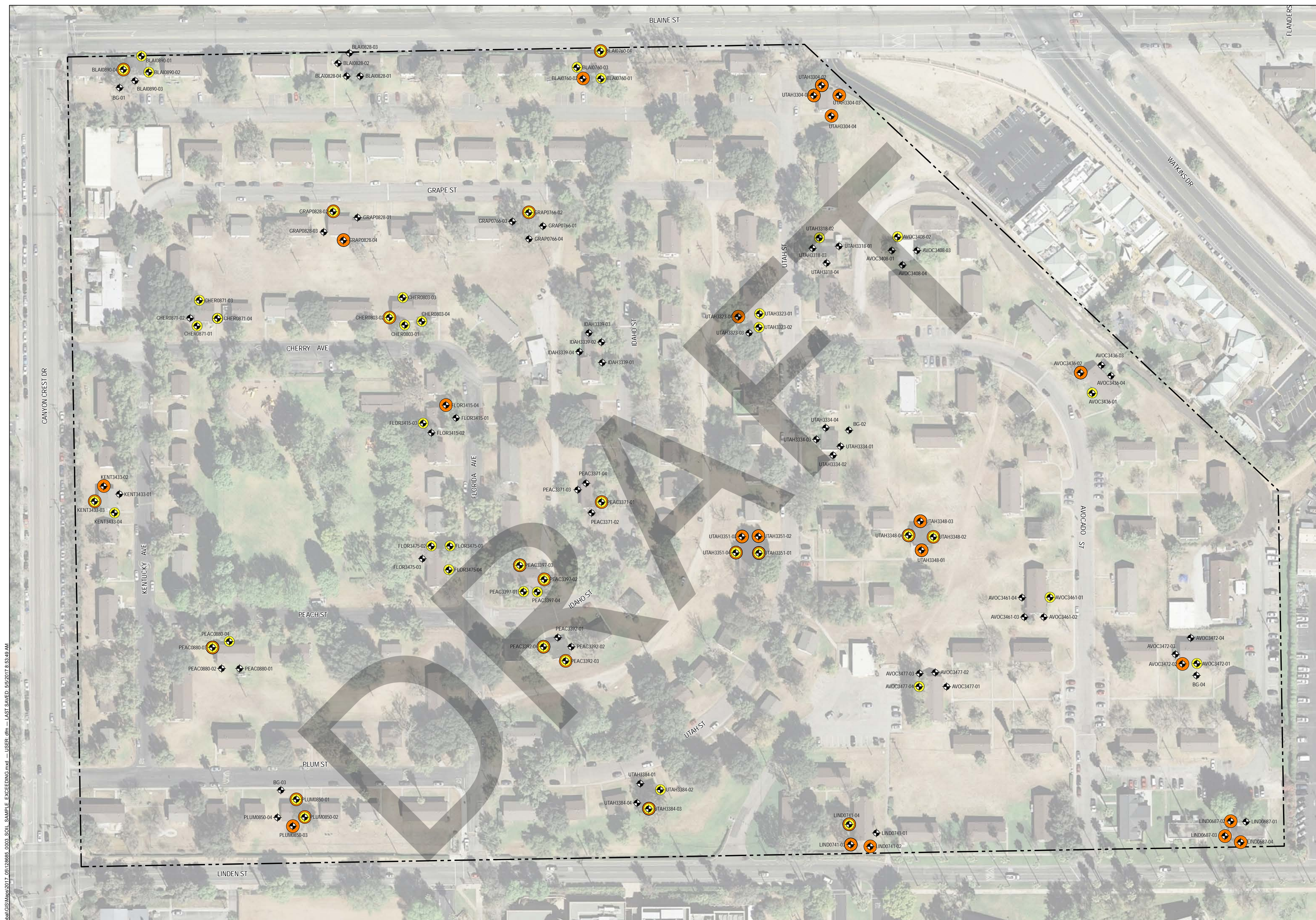
**NOTES**  
 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE



**HALEY ALDRICH**  
 PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA  
**SITE MAP AND  
 SOIL SAMPLE LOCATIONS**

MAY 2017

FIGURE 2



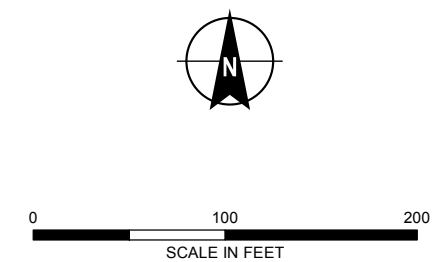
GIS FILE PATH: G:\128685\_LUC Riverside\Gis\Map\2017\_0512\28685\_0003\_SOIL\_SAMPLE\_LOC\_EXCEEDING.mxd -- USER: dlm -- LAST SAVED: 5/5/2017 8:58:49 AM

- LEGEND**
- SOIL SAMPLE LOCATION EXCEEDS ORGANOCHLORINE PESTICIDE DTSC MODIFIED SCREENING LEVELS
  - SOIL SAMPLE LOCATION EXCEEDS LEAD DTSC MODIFIED SCREENING LEVEL
  - ⊕ SAMPLE LOCATION
  - SITE BOUNDARY (APPROXIMATE)

**NOTES**

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

Chemical	Unit	DTSC Modified Screening Level
Lead	mg/kg	80
4,4'-DDD	ug/kg	2,300
4,4'-DDE	ug/kg	2,000
4,4'-DDT	ug/kg	1,900
Chlordane	ug/kg	440
Dieldrin	ug/kg	34
Endrin ketone	ug/kg	19,000
Heptachlor	ug/kg	130
Heptachlor epoxide	ug/kg	70



**HALEY ALDRICH**

PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**SOIL SAMPLES LOCATIONS EXCEEDING  
 DTSC MODIFIED SCREENING LEVELS**

MAY 2017 FIGURE 3

ADDENDUM TO THE PRELIMINARY LIMITED  
ENVIRONMENTAL SITE INVESTIGATION  
UC RIVERSIDE – NORTH DISTRICT DEVELOPMENT  
NORTH OF WEST LINDEN STREET, EAST OF CANYON CREST DRIVE  
RIVERSIDE, CALIFORNIA

by Haley & Aldrich, Inc.  
Costa Mesa, California

for American Campus Communities  
Austin, Texas

File No. 131648-002  
August 2018





HALEY & ALDRICH, INC.  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626  
714.371.1800

August 22, 2018  
File No. 131648-002

American Campus Communities  
12700 Hill Country Boulevard, Suite T-200  
Austin, Texas 78738

Attention: Mr. Kyle McDonald

Subject: Addendum to the Preliminary Limited Environmental Site Investigation  
UC Riverside – North District Development  
North of West Linden Street and East of Canyon Crest Drive  
Riverside, California

Ladies and Gentlemen:

Haley & Aldrich, Inc. (Haley & Aldrich) prepared this Addendum to the Preliminary Limited Environmental Site Investigation Report for the proposed North District Development (Site). The Site is located at the University of California, Riverside and is northeast of the intersection of Canyon Crest Drive and West Linden Street in Riverside, California. The supplemental investigation presented herein was conducted to provide additional information regarding the lateral and vertical extent of lead- and organochlorine pesticide-impacted soil identified at the Site during the Preliminary Limited Environmental Site Investigation conducted by Haley & Aldrich in 2017.

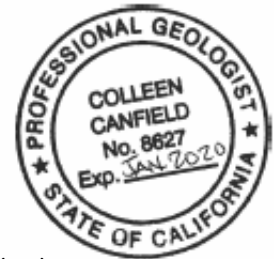
We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely yours,  
HALEY & ALDRICH, INC.

Mathew T. Raithel  
Senior Technical Specialist

Anita Broughton  
Principal Consultant

Colleen Canfield, P.G. 8627 (CA)  
Associate Geologist | Senior Project Manager



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# 1. Introduction

This report presents the results of our Addendum to the Preliminary Limited Environmental Site Investigation for the proposed North District Residential Development (Site) located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California. The Site is bounded by West Blaine Street to the north, Canyon Crest Drive to the west, West Linden Street to the south, and University of California Riverside (UCR) campus facilities to the east, as shown on Figure 1. Most of the main UCR campus is located to the south of the Site.

## 1.1 BACKGROUND AND EXISTING SITE CONDITIONS

Currently, the approximately 55-acre site is occupied by Canyon Crest Student Housing, a complex of single-story student housing units located north of the main UCR campus. Storage and maintenance facilities, including permanent structures and modular units, are present in the northwest and southeast portions of the Site. Typical residential above and underground utilities are present throughout the development. A large park and playground is located in the western portion of the Site, south of Cherry Street. There are nine asphalt-paved residential streets and several gravel roads. Based on our review of readily available historical information and aerial photographs, much of the existing development was constructed as military housing in 1940, before which time the Site was occupied by citrus groves.

## 1.2 PROJECT DESCRIPTION

The proposed development project is based on “Master Plan Option 6 Phase I” prepared by Solomon Cordwell Buenz. We understand that the proposed project includes demolition of the existing Canyon Crest development and construction of four seven-story, L-shaped and C-shaped residence halls each to be used for multi-student housing, parking lots, and landscaping and hardscaping. The structures are planned with ground levels at or near existing grades. It is our understanding that children will not be residing in the residence halls.

The proposed multi-student residence halls are located within an approximately 7.9-acre rectangular area north of the intersection of Aberdeen Drive and West Linden Street. A proposed parking lot is located east of the residence hall site, spanning an area of approximately 3.5 acres, with driveways connecting the lot to West Linden Street and Watkins Drive. A second parking lot is proposed adjacent to Blaine Street and Watkins Avenue and spans approximately 5.5 acres at the northeast area of the site. A square-shaped, 3-acre landscape area is proposed, separating this northern parking lot from the residence halls. Two additional parking areas are proposed to the east and west of the landscaped area; however, the conceptual drawing does not depict a specific layout of these improvements.

## 1.3 PURPOSE

Based on our review of the Phase I Environmental Site Assessment prepared for the Site by the University of California Office of the President – Risk Services dated September 20, 2016, and the Phase I Environmental Site Assessment prepared for the Site by Haley & Aldrich dated May 11, 2018, the following environmental concerns were identified at the Site:

- Previous potential use of lead-based paint at the Site due to the age of the residences (constructed prior to 1979);

- Previous potential use of termiticides at the Site due to the age of the residences (constructed prior to 1989); and
- Previous potential use of arsenic at the Site due to previous agricultural activities dating prior to the 1950s.

Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017. Soil samples were collected at the Site and analyzed for lead, organochlorine pesticides (OCPs), and arsenic to evaluate whether the potential presence of lead-based paint, potential historical termiticide application, and historical agricultural activities, respectively, may have impacted soil. Soil sample analytical results were used to evaluate potential risk to human health. Soil sample results from the 2017 investigation are presented in Appendix A.

Based on the findings of the 2017 preliminary environmental investigation, arsenic concentrations in soil samples ranged between 1.85 and 7.65 milligrams per kilogram (mg/kg) and were less than the California Department of Toxic Substances Control (DTSC) Schools Program screening level of 12 mg/kg (DTSC, 2008). Therefore, additional assessment of arsenic was not conducted for this investigation.

Based on the findings of the 2017 investigation, DTSC residential land use screening levels as identified in the “Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number 3: DTSC-modified Screening Levels (DTSC-SLs)” (HHRA Note 3) prepared by the Cal/EPA DTSC and dated June 2018 (DTSC, 2018) for lead (at 0.5 feet below ground surface [bgs]) and OCPs (both at 0.5 and 2 feet bgs) in soil were exceeded in soil samples collected at the Site. Therefore, additional assessment was proposed to assess the extent of lead (laterally) and OCPs (vertically and laterally) at the Site near select structures that were previously assessed that exhibited lead and OCP concentrations greater than DTSC residential land use screening levels.

## 2. Field Investigation

The scope of work was developed based on the DTSC guidance document titled “Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers” dated June 9, 2006. Soil sampling was conducted at select locations that exceeded DTSC residential land use screening levels for lead and OCPs during the 2017 preliminary environmental investigation.

Soil sampling activities were conducted at the Site on March 29 and 30, 2018. Soil sample locations are shown on Figure 2. A total of 41 soil boring locations were hand augured at the Site by Interphase Environmental under the oversight of Haley & Aldrich. Following is a description of soil sampling activities conducted to provide additional information for to assess the vertical and lateral extent of lead and OCPs at the Site.

- Vertical Assessment: Eleven (11) locations that previously exceeded OCP DTSC screening levels at 2 to 2.5 bgs during the 2017 preliminary environmental investigation were selected for vertical assessment. These boring locations are identified with a green highlight on Figure 2. Soil samples were collected using a hand auger and slide hammer at 3 to 3.5 feet bgs and 4 to 4.5 feet bgs from each soil boring in six-inch acetate sleeves (for a total of 22 soil samples plus ten percent duplicates). The soil samples were stored in a chilled ice chest and transported to Eurofins Calscience, a California-certified environmental laboratory, under chain of custody protocol. The 3 to 3.5 feet bgs soil samples were analyzed for OCPs by United States Environmental Protection Agency (EPA) Method 8081; the 4 to 4.5 feet bgs samples were placed on hold pending results of the 3 to 3.5 feet soil samples.
- Lateral Assessment: Ten (10) locations that previously exceeded lead and OCP DTSC residential land use screening levels at 0.5 feet bgs during the 2017 preliminary environmental investigation were selected for lateral assessment. These boring locations are identified with a pink highlight on Figure 2. Step-out soil borings were advanced at approximately 2, 4, and 6 feet laterally from these original locations (for a total of 30 step-out borings). Soil samples were collected using a hand auger and slide hammer at 0 to 0.5 feet bgs and 2 to 2.5 feet bgs from each soil boring in six-inch acetate sleeves (for a total of 57 soil samples plus ten percent duplicates). The 2 to 2.5 feet bgs samples attempted to be collected at 880 Peach Street were not collected due to auger refusal, and refusal was also encountered at another location on Avocado Street at 5 feet bgs during the geotechnical investigation performed by Haley & Aldrich in 2018; the cause of the refusal is unknown. The soil samples were stored in a chilled ice chest and transported to Eurofins Calscience, a California-certified environmental laboratory, under chain of custody protocol. The 2-foot step out samples were analyzed for OCPs by EPA Method 8081 and lead by EPA Method 6010. The step-out samples collected at 4 and 6 feet laterally from the original borings were placed on hold at the laboratory pending results of the 2-foot step-out boring samples.

The hand auger and slide hammer were decontaminated between the collection of each sample by washing with a tri-sodium phosphate-based detergent and tap water, followed by successive rinses with tap water, and a final rinse in deionized water. Decontamination water was transferred into a 55-gallon Department of Transportation (DOT)-approved drum and stored on-Site pending off-Site disposal. Soil borings were backfilled with the soil cuttings.

### 3. Soil Sample Results

Soil analytical results are summarized below and in Table 1. Laboratory reports are included in Appendix B.

#### 3.1 LEAD RESULTS

Lead concentrations were less than the DTSC residential land use screening level with the exception of two step out locations which contained lead concentrations of 94 and 89.1 mg/kg at 0.5 feet bgs, just slightly above the DTSC residential land use screening level of 80 mg/kg. These two samples were collected 2 and 4 feet away from the original sample location in this area (which was collected one foot away from the structure during the 2017 investigation) that exhibited a concentration of 333 mg/kg at 0.5 feet bgs, demonstrating decreasing concentrations with lateral distance. Therefore, it appears that lead is generally delineated at the Site at a depth of 2 feet bgs and a distance of 3 feet from each structure.

#### 3.2 ORGANOCHLORINE PESTICIDE RESULTS

With the exception of chlordane and dieldrin, the detected concentrations of OCPs in the soil samples did not exceed DTSC residential land use screening levels. Chlordane or dieldrin concentrations exceeded DTSC residential land use screening levels in only three of the initial 2-foot lateral step out samples (identified with a "B" in the sample name on Table 1). At these three locations, chlordane and dieldrin concentrations were either less than the DTSC residential land use screening levels or showed decreasing concentrations when comparing the original soil sample (collected one foot away from the structure during the 2017 investigation) to the 4- and 6- foot lateral step out samples analyzed (identified with a "C" and "D" in the sample name on Table 1). Vertical delineation of OCPs was generally observed at a depth of 3 feet bgs. Therefore, it appears the OCPs are generally delineated at the Site at a depth of 3 feet bgs and a distance of 3 feet from the structures.

## 4. Human Health Risk Evaluation

This section presents the results of a human health risk evaluation (HHRE) using the lead and OCP concentrations measured in soil samples to estimate human health risks for a future on-Site student resident at the Site. The HHRE was conducted in a manner generally consistent with the “Preliminary Endangerment Assessment (” prepared by the California Department of Toxic Substance Control (DTSC) and dated January 1994 (revised October 2015; DTSC, 2015), the “Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final” (RAGS Part A) prepared by EPA and dated December 1989 (EPA, 1989), and Site-specific exposure characteristics. The HHRE calculations are presented in Appendix C.

### 4.1 HAZARD IDENTIFICATION (CHEMICALS OF POTENTIAL CONCERN SELECTION)

Chemicals of potential concern (COPCs) were identified as lead and any OPC detected in vadose zone soil above the laboratory detection limit during both the 2017 and 2018 soil sampling events at the Site. Arsenic concentrations in soil were less than the DTSC Schools Program screening level of 12 mg/kg and were not further evaluated.

### 4.2 EXPOSURE ASSESSMENT

The exposure assessment includes a description of the most sensitive receptors, their possible exposure pathways (i.e., how they may come into contact with the COPCs at the Site), derivation of exposure point concentrations, and estimation of chemical intakes by the receptors.

#### 4.2.1 Potential Receptors and Exposure Pathways

It was assumed that the receptor with the greatest potential exposure, the future on-Site student resident, may be exposed to COPCs in soil at the Site. The following potentially complete exposure pathways were evaluated:

- Incidental ingestion of soil;
- Dermal contact with soil; and
- Inhalation of fugitive dust in ambient air.

It was conservatively assumed that a student resident would be present at the Site for 24 hours per day, 350 days per year, for 4 years as an adult. This is conservative, because a student would likely reside at the residence hall for less than 4 years and less than 350 days per year.

#### 4.2.2 Exposure Point Concentrations

The concentrations soil used to estimate exposure point concentrations (EPCs) for the future on-Site student resident were identified as either the maximum detected concentrations or 95% upper confidence levels (95% UCLs) concentrations in soil at the Site (collected during the 2017 and 2018 investigations). The 95% UCL concentrations were calculated using the EPA ProUCL Version 5.1.002 statistical software (ProUCL). The 95% UCL calculations are presented in Appendix C. EPCs are presented in Table 2.

### 4.2.3 Estimation of Chemical Intakes and Exposure Concentrations

COPC intakes and exposure concentrations were estimated using the methodology in the PEA Guidance Manual (DTSC, 2015) and RAGS Part A (EPA, 1989).

## 4.3 TOXICITY ASSESSMENT

The toxicity values used in the HHRE were selected using the methodology described in the “Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number 3: DTSC-modified Screening Levels (DTSC-SLs)” (HHRA Note 3) prepared by the Cal/EPA DTSC and dated June 2018 (DTSC, 2018). The selected toxicity values are listed in the calculations presented in Appendix C.

## 4.4 SUMMARY OF RISK CHARACTERIZATION RESULTS

A summary of the estimated risk results is presented below; the associated risk calculations are presented in Appendix C.

The total non-cancer hazard for each receptor is presented as an estimated total hazard index (HI) and the total cancer risk for each receptor is presented as an estimated cumulative incremental lifetime cancer risk (ILCR).

### 4.4.1 Total Noncancer Hazard Index

Most environmental programs employ an HI of unity (i.e., 1) as an acceptable target for risk decisions. The most explicit directive comes from the federal Superfund program (EPA, 1990), which is also Cal/EPA policy. This directive specifies an HI of 1 as the acceptable target for risk management decisions. This noncancer risk threshold was used in this HHRE for the future on-Site student resident as the acceptable total HI to assess whether exposure to COPCs at the Site may pose an adverse noncarcinogenic effect.

### 4.4.2 Cumulative Incremental Lifetime Cancer Risk

A total ILCR of  $10^{-6}$  and  $10^{-4}$  corresponds to theoretical probability of 1 chance in 1 million to 1 chance in ten thousand, which is in addition to or excess of the background cancer risk. Potential risk estimates between  $10^{-6}$  and  $10^{-4}$  require risk management decisions based on site-specific land use/exposure scenarios and may or may not require remediation or mitigation (EPA, 1990). It is generally accepted in the regulatory community that risk estimates equal to or less than  $10^{-6}$  are de minimus and, therefore, do not require remediation or mitigation measures.

California Proposition 65 (1986, Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65, Health and Safety Code Section 25249.5 et seq.) requires specific notification and warning for exposure to carcinogens above a chemical-specific “no significant risk level,” which is based on a  $10^{-5}$  excess lifetime cancer risk. A cumulative ILCR threshold of  $10^{-6}$  was used in the HHRE to assess whether exposure to COPCs at the Site may pose an unacceptable cumulative ILCR for the future on-Site student resident.

#### 4.4.3 Lead

Potential human health effects from exposure to lead are typically inferred from blood lead levels, rather than intake and, as such, are not amenable to the above risk estimation approach. Therefore, the EPC for lead was compared to the DTSC residential land use screening level as identified by HHRA Note 3 (DTSC, 2018) of 80 mg/kg. This comparison is conservative because the residential DTSC screening level is based on a child receptor and children will not be residing at the Site.

#### 4.4.4 Summary of Risk Characterization Results

Based on the results of this HHRE for the future on-Site student resident, the ILCR is  $3 \times 10^{-7}$  and the total HI is 0.02. The cumulative ILCR is less than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is less than the acceptable total HI of 1. The lead EPC at the Site is 79 mg/kg, which is less than the residential DTSC screening level of 80 mg/kg. Therefore, mitigation is not necessary to protect the future on-Site student resident.

## 5. Conclusions

Based on our review of the soil samples results for the Site, we present the following conclusions:

- Soil samples were collected from around 30 of the 185 structures located at the Site.
- Over 200 soil samples were collected and analyzed for arsenic, lead, and/or OCPs.
- The U.S. Department of Housing and Urban Development “Guidelines for the Evaluation and Controls of Lead-Based Paint Hazards in Housing” (HUD, 2012) recommends that soil should be sampled from around 20 structures for developments with 176-225 similar dwellings. Therefore, since soil was sampled from around 30 structures at the Site and over 200 samples were collected and analyzed, adequate soil sampling and analysis was conducted to evaluate the Site for future redevelopment as student housing.
- Detected arsenic concentrations are less than the DTSC Schools Program screening level of 12 mg/kg (DTSC, 2008).
- Step-out soil samples were collected at 10 of the structures that exhibited elevated concentrations of lead and OCPs. Based on the results of the step out sampling, elevated lead and OCP soil concentrations are generally delineated at a depth of 3 feet bgs and a distance of 3 feet from the structures.
- Based on the results of this HHSE for the future on-Site student resident, the ILCR is  $3 \times 10^{-7}$  and the total HI is 0.02. The cumulative ILCR is less than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is less than the acceptable total HI of 1. The lead EPC at the Site is 79 mg/kg, which is less than the residential DTSC screening level of 80 mg/kg. Therefore, mitigation is not necessary to protect the future on-Site student resident.



## References

1. California Department of Toxic Substances Control, 2006. Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers. June 9.
2. California Department of Toxic Substances Control, 2008. Interim Guidance for Sampling Agricultural Properties (Third Revision). April 30.
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6. United States Environmental Protection Agency, 1989. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final. December

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## **TABLES**

**TABLE 1**  
SOIL SAMPLE RESULTS  
NORTH DISTRICT DEVELOPMENT  
RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			BLAI0890 BLAI0890-01B-005-01 03/29/2018 0.0-0.5 ft	BLAI0890 BLAI0890-01B-005-02 03/29/2018 0.0-0.5 ft	BLAI0890 BLAI0890-01B-025-01 03/29/2018 2.0-2.5 ft	CHERO803 CHERO803-02B-005-01 03/29/2018 0.0-0.5 ft	CHERO803 CHERO803-02B-025-01 03/29/2018 2.0-2.5 ft	GRAP0828 GRAP0828-04A-035-01 03/29/2018 3.0-3.5 ft	LIND0741 LIND0741-04A-035-01 03/30/2018 3.0-3.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N	N	N	N	N
<b>Inorganics</b>									
Arsenic	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	80	<b>30.7</b>	<b>11.6</b>	<b>6.38</b>	<b>6.65</b>	<b>6.46</b>	--	--
<b>Pesticides</b>									
4,4'-DDD	µg/kg	1900	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
4,4'-DDE	µg/kg	2000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<b>85</b>
4,4'-DDT	µg/kg	1900	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Aldrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
alpha-BHC	µg/kg	--	< 10	< 10	< 10	< 10	< 10	< 10	< 9.8
beta-BHC	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Chlordane	µg/kg	440	< 50	< 50	< 50	< 50	< 50	< 50	<b>250</b>
delta-BHC	µg/kg	--	< 10	< 10	< 10	< 10	< 10	< 10	< 9.8
Dieldrin	µg/kg	34	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endosulfan I	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endosulfan II	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endosulfan sulfate	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endrin aldehyde	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Endrin ketone	µg/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
gamma-BHC (Lindane)	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Heptachlor	µg/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Heptachlor epoxide	µg/kg	70	< 10	< 10	< 10	< 10	< 10	< 10	< 9.8
Methoxychlor	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 4.9
Toxaphene	µg/kg	--	< 100	< 100	< 100	< 100	< 100	< 100	< 98

Notes:

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram

µg/kg - micrograms per kilogram

-- indicates the sample was not analyzed for the analyte

< indicates that the analyte was not-detected above the laboratory reporting limit shown.

**TABLE 1**  
 SOIL SAMPLE RESULTS  
 NORTH DISTRICT DEVELOPMENT  
 RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			LIND0741 LIND0741-04B-005-01 03/30/2018 0.0-0.5 ft	LIND0741 LIND0741-04B-025-01 03/30/2018 2.0-2.5 ft	PEAC0880 PEAC0880-03B-005-01 03/30/2018 0.0-0.5 ft	PEAC0880 PEAC0880-03C-005-01 03/30/2018 0.0-0.5 ft	PEAC3392 PEAC3392-04A-035-01 03/30/2018 3.0-3.5 ft	PEAC3392 PEAC3392-04B-005-01 03/30/2018 0.0-0.5 ft	PEAC3392 PEAC3392-04B-025-01 03/30/2018 2.0-2.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N	N	N	N	N
<b>Inorganics</b>									
Arsenic	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	80	<b>47.3</b>	<b>6.63</b>	<b>94.4</b>	<b>89.1</b>	--	<b>78.3</b>	<b>6.30</b>
<b>Pesticides</b>									
4,4'-DDD	µg/kg	1900	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
4,4'-DDE	µg/kg	2000	<b>66</b>	< 4.9	< 5.0	--	< 5.0	<b>14</b>	< 5.0
4,4'-DDT	µg/kg	1900	<b>16</b>	< 4.9	<b>6.4</b>	--	< 5.0	<b>9.1</b>	< 5.0
Aldrin	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
alpha-BHC	µg/kg	--	< 9.8	< 9.8	< 10	--	< 10	< 10	< 10
beta-BHC	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Chlordane	µg/kg	440	<b>250</b>	< 49	< 50	--	< 50	<b>520</b>	< 50
delta-BHC	µg/kg	--	< 9.8	< 9.8	< 10	--	< 10	< 10	< 10
Dieldrin	µg/kg	34	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan I	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan II	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin aldehyde	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin ketone	µg/kg	19000	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Heptachlor	µg/kg	130	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	µg/kg	70	< 9.8	< 9.8	< 10	--	< 10	< 10	< 10
Methoxychlor	µg/kg	--	< 4.9	< 4.9	< 5.0	--	< 5.0	< 5.0	< 5.0
Toxaphene	µg/kg	--	< 98	< 98	< 100	--	< 100	< 100	< 100

Notes:  
 Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram  
 µg/kg - micrograms per kilogram  
 -- indicates the sample was not analyzed for the analyte  
 < indicates that the analyte was not-detected above the laboratory reporting limit shown.

**TABLE 1**  
 SOIL SAMPLE RESULTS  
 NORTH DISTRICT DEVELOPMENT  
 RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			PEAC3392 PEAC3392-04C-005-01 03/30/2018 0.0-0.5 ft	PEAC3397 PEAC3397-03B-005-01 03/30/2018 0.0-0.5 ft	PEAC3397 PEAC3397-03B-025-01 03/30/2018 2.0-2.5 ft	PLUM0850 PLUM0850-02B-005-01 03/30/2018 0.0-0.5 ft	PLUM0850 PLUM0850-02B-025-01 03/30/2018 2.0-2.5 ft	UTAH3304 UTAH3304-02A-035-01 03/29/2018 3.0-3.5 ft	UTAH3304 UTAH3304-02B-005-01 03/29/2018 0.0-0.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N	N	N	N	N
<b>Inorganics</b>									
Arsenic	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	80	--	<b>67.6</b>	<b>10.1</b>	<b>76.8</b>	<b>17.2</b>	--	<b>19.9</b>
<b>Pesticides</b>									
4,4'-DDD	µg/kg	1900	< 5.0	< 5.0	< 5.0	<b>25</b>	<b>6.6</b>	< 5.0	< 5.0
4,4'-DDE	µg/kg	2000	<b>30</b>	<b>19</b>	< 5.0	<b>180</b>	<b>32</b>	<b>21</b>	<b>360</b>
4,4'-DDT	µg/kg	1900	<b>7.7</b>	<b>63</b>	< 5.0	<b>110</b>	<b>5.3</b>	<b>8.8</b>	<b>50</b>
Aldrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	µg/kg	--	< 10	< 10	< 10	< 9.9	< 9.9	< 10	< 10
beta-BHC	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	µg/kg	440	<b>680</b>	<b>220</b>	< 50	<b>270</b>	< 50	< 50	< 50
delta-BHC	µg/kg	--	< 10	< 10	< 10	< 9.9	< 9.9	< 10	< 10
Dieldrin	µg/kg	34	< 5.0	<b>21</b>	< 5.0	<b>9.2</b>	< 5.0	<b>24</b>	<b>93</b>
Endosulfan I	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	µg/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	µg/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	µg/kg	70	< 10	< 10	< 10	<b>26</b>	< 9.9	< 10	< 10
Methoxychlor	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	µg/kg	--	< 100	< 100	< 100	< 99	< 99	< 100	< 100

Notes:  
 Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram  
 µg/kg - micrograms per kilogram  
 -- indicates the sample was not analyzed for the analyte  
 < indicates that the analyte was not-detected above the laboratory reporting limit shown.

**TABLE 1**  
 SOIL SAMPLE RESULTS  
 NORTH DISTRICT DEVELOPMENT  
 RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			UTAH3304 UTAH3304-02B-005-02 03/29/2018 0.0-0.5 ft	UTAH3304 UTAH3304-02B-025-01 03/29/2018 2.0-2.5 ft	UTAH3304 UTAH3304-04A-035-01 03/29/2018 3.0-3.5 ft	UTAH3348 UTAH3348-01A-035-01 03/29/2018 3.0-3.5 ft	UTAH3348 UTAH3348-03A-035-01 03/29/2018 3.0-3.5 ft	UTAH3348 UTAH3348-03A-035-02 03/29/2018 3.0-3.5 ft	UTAH3348 UTAH3348-04A-035-01 03/29/2018 3.0-3.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N	N	N	N	N
<b>Inorganics</b>									
Arsenic	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	80	<b>22.4</b>	<b>5.79</b>	--	--	--	--	--
<b>Pesticides</b>									
4,4'-DDD	µg/kg	1900	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4,4'-DDE	µg/kg	2000	<b>97</b>	<b>12</b>	<b>7.7</b>	< 5.0	< 5.0	< 5.0	< 5.0
4,4'-DDT	µg/kg	1900	<b>68</b>	<b>7.6</b>	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aldrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	µg/kg	--	< 10	< 10	< 10	< 9.9	< 10	< 10	< 10
beta-BHC	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	µg/kg	440	< 50	< 50	< 50	< 50	< 50	< 50	<b>2,200</b>
delta-BHC	µg/kg	--	< 10	< 10	< 10	< 9.9	< 10	< 10	< 10
Dieldrin	µg/kg	34	<b>73</b>	<b>16</b>	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan I	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	µg/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	µg/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	µg/kg	70	< 10	< 10	< 10	< 9.9	< 10	< 10	< 10
Methoxychlor	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	µg/kg	--	< 100	< 100	< 100	< 99	< 100	< 100	< 100

Notes:  
 Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram  
 µg/kg - micrograms per kilogram  
 -- indicates the sample was not analyzed for the analyte  
 < indicates that the analyte was not-detected above the laboratory reporting limit shown.

**TABLE 1**  
SOIL SAMPLE RESULTS  
NORTH DISTRICT DEVELOPMENT  
RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			UTAH3348 UTAH3348-04A-045-01 03/29/2018 4.0-4.5 ft	UTAH3348 UTAH3348-04B-005-01 03/29/2018 0.0-0.5 ft	UTAH3348 UTAH3348-04B-025-01 03/29/2018 2.0-2.5 ft	UTAH3348 UTAH3348-04C-005-01 03/29/2018 0.0-0.5 ft	UTAH3348 UTAH3348-04D-005-01 03/29/2018 0.0-0.5 ft	UTAH3351 UTAH3351-01A-035-01 03/29/2018 3.0-3.5 ft	UTAH3351 UTAH3351-01B-005-01 03/29/2018 0.0-0.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N	N	N	N	N
<b>Inorganics</b>									
Arsenic	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	80	--	<b>61.3</b>	<b>4.00</b>	--	--	--	<b>6.46</b>
<b>Pesticides</b>									
4,4'-DDD	µg/kg	1900	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
4,4'-DDE	µg/kg	2000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
4,4'-DDT	µg/kg	1900	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Aldrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
alpha-BHC	µg/kg	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10
beta-BHC	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Chlordane	µg/kg	440	<b>650</b>	<b>2,700</b>	<b>150</b>	<b>1,500</b>	<b>83</b>	< 50	< 50
delta-BHC	µg/kg	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dieldrin	µg/kg	34	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endosulfan I	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endosulfan II	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endosulfan sulfate	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endrin	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endrin aldehyde	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Endrin ketone	µg/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
gamma-BHC (Lindane)	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Heptachlor	µg/kg	130	< 5.0	< 5.0	< 5.0	<b>6.2</b>	< 5.1	< 5.0	< 5.0
Heptachlor epoxide	µg/kg	70	< 10	< 10	< 10	<b>24</b>	< 10	< 10	< 10
Methoxychlor	µg/kg	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.1	< 5.0	< 5.0
Toxaphene	µg/kg	--	< 100	< 100	< 100	< 100	< 100	< 100	< 100

Notes:

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram

µg/kg - micrograms per kilogram

-- indicates the sample was not analyzed for the analyte

< indicates that the analyte was not-detected above the laboratory reporting limit shown.

**TABLE 1**  
SOIL SAMPLE RESULTS  
NORTH DISTRICT DEVELOPMENT  
RIVERSIDE, CALIFORNIA

Location: Sample ID: Date: Depth:			UTAH3351 UTAH3351-01B-025-01 03/29/2018 2.0-2.5 ft	UTAH3351 UTAH3351-02A-035-01 03/29/2018 3.0-3.5 ft	UTAH3351 UTAH3351-02A-035-02 03/29/2018 3.0-3.5 ft
Analyte	Unit	DTSC Modified Screening Level	N	N	N
<b>Inorganics</b>					
Arsenic	mg/kg	--	--	--	--
Lead	mg/kg	80	<b>4.93</b>	--	--
<b>Pesticides</b>					
4,4'-DDD	µg/kg	1900	< 5.0	< 5.0	< 5.0
4,4'-DDE	µg/kg	2000	< 5.0	< 5.0	< 5.0
4,4'-DDT	µg/kg	1900	< 5.0	< 5.0	< 5.0
Aldrin	µg/kg	--	< 5.0	< 5.0	< 5.0
alpha-BHC	µg/kg	--	< 10	< 10	< 10
beta-BHC	µg/kg	--	< 5.0	< 5.0	< 5.0
Chlordane	µg/kg	440	< 50	<b>120</b>	<b>180</b>
delta-BHC	µg/kg	--	< 10	< 10	< 10
Dieldrin	µg/kg	34	< 5.0	< 5.0	< 5.0
Endosulfan I	µg/kg	--	< 5.0	< 5.0	< 5.0
Endosulfan II	µg/kg	--	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	µg/kg	--	< 5.0	< 5.0	< 5.0
Endrin	µg/kg	--	< 5.0	< 5.0	< 5.0
Endrin aldehyde	µg/kg	--	< 5.0	< 5.0	< 5.0
Endrin ketone	µg/kg	19000	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	µg/kg	--	< 5.0	< 5.0	< 5.0
Heptachlor	µg/kg	130	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	µg/kg	70	< 10	< 10	< 10
Methoxychlor	µg/kg	--	< 5.0	< 5.0	< 5.0
Toxaphene	µg/kg	--	< 100	< 100	< 100

Notes:

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

mg/kg - milligrams per kilogram

µg/kg - micrograms per kilogram

-- indicates the sample was not analyzed for the analyte

< indicates that the analyte was not-detected above the laboratory reporting limit shown.



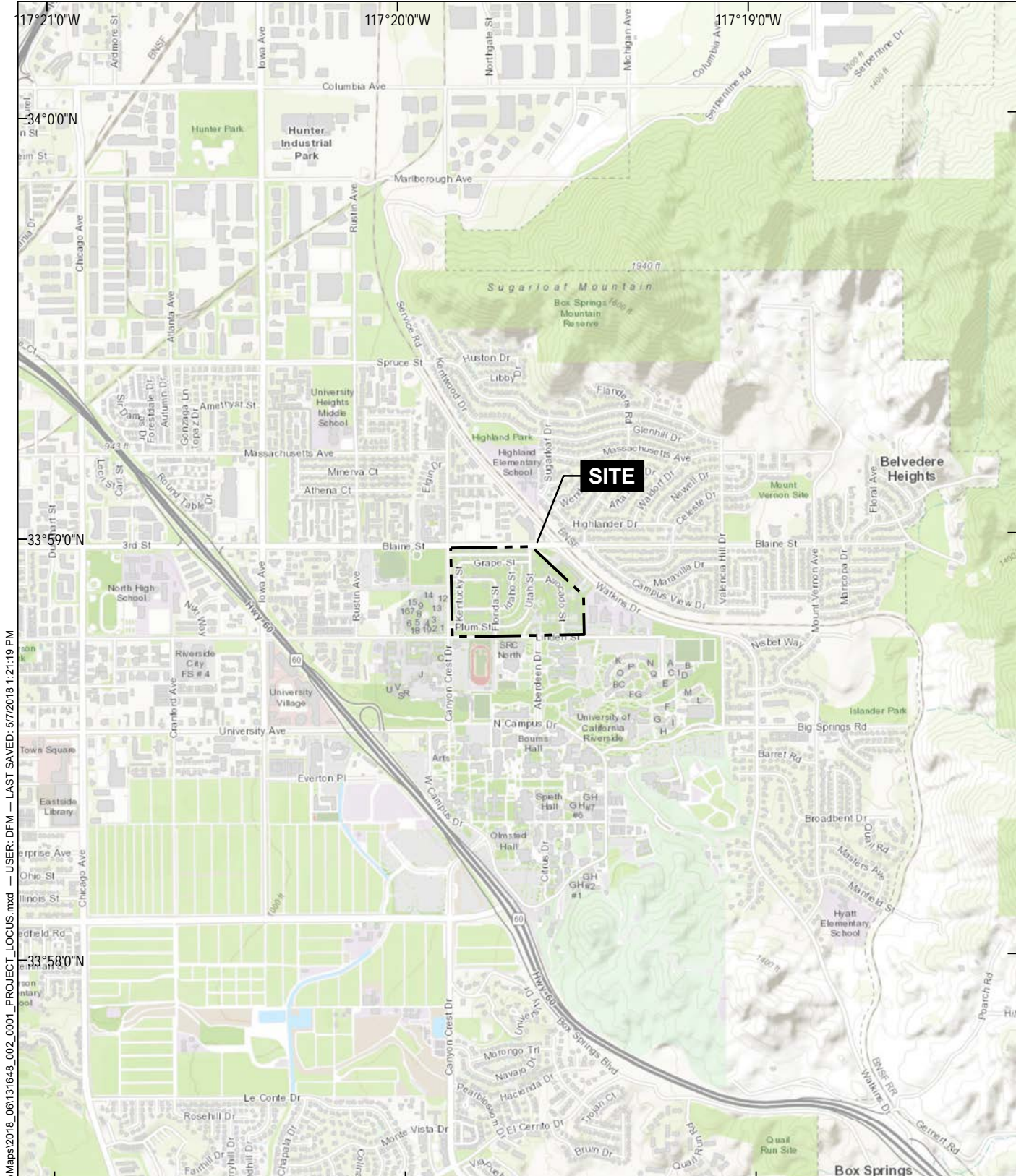
**TABLE 2**  
 EXPOSURE POINT CONCENTRATIONS  
 NORTH DISTRICT DEVELOPMENT  
 RIVERSIDE, CALIFORNIA

Chemical	Maximum Concentration	95% UCL	EPC	Basis
DDD	0.52	--	0.52	Maximum Concentration
DDE	1.4	--	1.4	Maximum Concentration
DDT	1.2	--	1.2	Maximum Concentration
Chlordane	15	1.1	1.1	95% UCL
Dieldrin	0.5	0.029	0.029	95% UCL
Endrin	0.005	--	0.005	Maximum Concentration
Heptachlor	0.083	--	0.083	Maximum Concentration
Heptachlor Epoxide	1.3	0.04	0.04	95% UCL
Lead	434	79	79	95% UCL

**Notes:**

Concentrations in milligrams per kilogram (mg/kg)  
 95% UCL = 95% Upper Confidence Level  
 EPC = Exposure Point Concentration

## FIGURES



GIS FILE PATH: G:\131648\_UCR\Global\GIS\Maps\2018\_06\131648\_002\_0001\_PROJECT\_LOCUS.mxd — USER: DFM — LAST SAVED: 5/7/2018 1:21:19 PM



MAP SOURCE: ESRI  
 SITE COORDINATES: 33°58'2"N 117°19'41"W

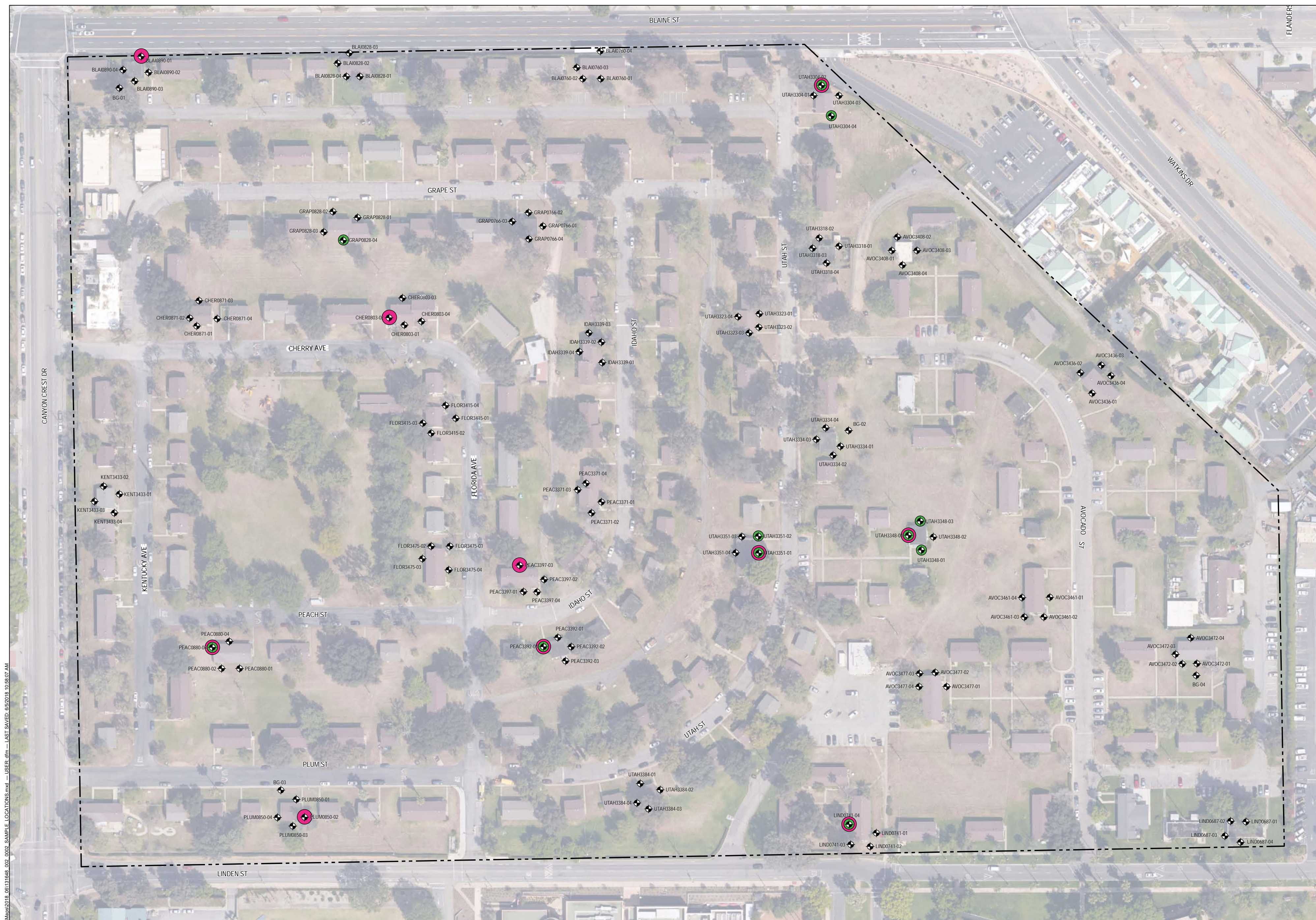
**HALEY  
 ALDRICH**

PRELIMINARY LIMITED ENVIRONMENTAL INVESTIGATION - ADDENDUM  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 JUNE 2018

**FIGURE 1**




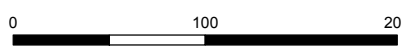
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**LEGEND**

- PREVIOUS SAMPLE LOCATION
- SOIL SAMPLE - VERTICAL DELINEATION
- SOIL SAMPLE - LATERAL DELINEATION
- SITE BOUNDARY

**NOTES**

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2. AERIAL IMAGERY SOURCE: PICTOMETRY, NOVEMBER 2014

SCALE IN FEET

**HALEY ALDRICH** PRELIMINARY LIMITED ENVIRONMENTAL INVESTIGATION - ADDENDUM  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**SOIL SAMPLE LOCATIONS**

JUNE 2018

**FIGURE 2**

## **APPENDIX A**

### **Soil Analytical Results – 2017 Investigation**

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436
			AVOC3408-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-02-025-01 03/27/2017 2.0-2.5 ft N	AVOC3408-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-04-005-01 03/27/2017 0.0-0.5 ft N	AVOC3436-01-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-01-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-01-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-02-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-02-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-02-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-03-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-03-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-03-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-04-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-04-005-02 03/29/2017 0.0-0.5 ft FD
<b>Inorganics</b>																		
Arsenic	mg/kg		3.82	--	--	--	--	7.44	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	40.4	84.5	8.05	38.6	44.6	95.0	--	14.9	68.1	--	--	36.7	--	--	31.9	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	--	15	3.5 J	--	< 5.0	< 5.0	--	47	< 5.0	--	< 5.0	
4,4'-DDE	ug/kg	2000	--	--	--	--	--	5.3	< 5.0	--	14	< 5.0	--	78	< 5.0	--	< 5.0	
4,4'-DDT	ug/kg	1900	--	--	--	--	--	< 4.9	< 5.0	--	43	5.0	--	20	< 5.0	--	< 5.0	
Aldrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
alpha-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
beta-BHC	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Chlordane	ug/kg	440	--	--	--	--	--	120	< 50	--	690	57	--	420	< 50	--	77	
delta-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
Dieldrin	ug/kg	34	--	--	--	--	--	8.0	2.4 J	--	59	5.2	--	29	< 5.0	--	2.9 J	
Endosulfan I	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan II	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan sulfate	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin aldehyde	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin ketone	ug/kg	19000	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
gamma-BHC (Lindane)	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Heptachlor	ug/kg	130	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	2.2 J	< 5.0	--	< 5.0	
Heptachlor epoxide	ug/kg	70	--	--	--	--	--	< 9.9	< 9.9	--	7.9 J	< 10	--	11	< 10	--	< 9.9	
Methoxychlor	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Toxaphene	ug/kg		--	--	--	--	--	< 99	< 99	--	< 100	< 100	--	< 100	< 100	--	< 99	

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3436	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3477
			AVOC3436-04-025-01 03/29/2017 2.0-2.5 ft N	AVOC3461-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-01-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-01-025-01 03/27/2017 2.0-2.5 ft N	AVOC3461-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-02-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-03-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-04-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-04-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3472-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-01-025-01 03/27/2017 0.0-0.5 ft N	AVOC3472-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-04-005-01 03/27/2017 2.0-2.5 ft N	AVOC3477-01-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	3.45	3.87	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	--	32.8	150	3.50	70.6	55.9	42.1	56.5	28.5	36.0	119	5.51	63.7	35.8	10.3	68.1
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 4.9	--	--	--	--	--	--	--	--	--	2.8 J	--	3.3 J	< 4.9	14	21
4,4'-DDE	ug/kg	2000	< 4.9	--	--	--	--	--	--	--	--	--	34	--	20	39	85	130
4,4'-DDT	ug/kg	1900	< 4.9	--	--	--	--	--	--	--	--	--	61	--	40	5.6	19	87
Aldrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10
beta-BHC	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Chlordane	ug/kg	440	< 4.9	--	--	--	--	--	--	--	--	--	410	--	470	340	400	270
delta-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10
Dieldrin	ug/kg	34	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	9.1	13	< 5.0	< 5.0
Endosulfan I	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endosulfan II	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	--	--	--	--	--	--	--	--	--	5.2 J	--	4.7 J	7.7 J	< 10	5.3 J
Methoxychlor	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	--	--	--	--	--	--	--	--	--	< 99	--	< 100	< 99	< 100	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3477	AVOC3477	AVOC3477	AVOC3477	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0828	BLAI0828	BLAI0828	BLAI0828	BLAI0828
			AVOC3477-02-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-03-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-025-01 03/29/2017 2.0-2.5 ft N	BLAI0760-01-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-01-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-02-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-04-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-04-025-01 03/27/2017 2.0-2.5 ft N	BLAI0828-01-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-025-01 03/30/2017 2.0-2.5 ft N	BLAI0828-03-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-04-005-01 03/30/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	6.55	--	--	--	--	--	--	1.85	--	--	--	--
Lead	mg/kg	80	53.7	37.7	82.9	21.5	151	6.87	76.6	91.8	19.0	111	7.59	70.8	68.4	13.7	11.5	60.6
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 25	12	6.5	--	6.6	--	13	24 J	--	56	--	< 5.0	4.4 J	--	< 5.0	12
4,4'-DDE	ug/kg	2000	360	28	21	--	66	--	63	170	--	680	--	9.5	120	--	6.2	16
4,4'-DDT	ug/kg	1900	250	23	24	--	2.2 J	--	4.0 J	20	--	160	--	9.6	82	--	< 5.0	12
Aldrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
beta-BHC	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	380	35 J	110	--	230	--	520	360	--	890	--	79	190	--	< 5.0	88
delta-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
Dieldrin	ug/kg	34	< 25	< 5.0	< 4.9	--	7.1	--	4.1 J	10	--	9.2	--	< 5.0	3.6 J	--	< 5.0	< 5.0
Endosulfan I	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	6.3 J	--	< 10	< 10	--	< 9.9	< 10
Methoxychlor	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		< 500	< 99	< 99	--	< 100	--	< 99	< 99	--	< 100	--	< 100	< 100	--	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.



**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	CHERO803	CHERO803	CHERO803	CHERO803	CHERO803
			BLAI0890-01-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-01-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-01-025-01 03/30/2017 2.0-2.5 ft N	BLAI0890-02-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-02-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-02-025-01 03/30/2017 2.0-2.5 ft N	BLAI0890-03-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-03-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-04-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-04-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-04-025-01 03/30/2017 2.0-2.5 ft N	CHERO803-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-02-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-03-005-01 03/28/2017 0.0-0.5 ft N	
<b>Inorganics</b>																			
Arsenic	mg/kg		2.78	--	--	--	--	--	--	--	--	--	--	6.19	--	--	--	--	--
Lead	mg/kg	80	434	--	5.90	90.4	--	8.10	63.3	--	107	--	8.33	218	6.00	163	26.7	80.5	
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	2300	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
4,4'-DDE	ug/kg	2000	--	13	--	--	10	--	--	42	--	100	--	38	--	18	--	--	2.3 J
4,4'-DDT	ug/kg	1900	--	42	--	--	41	--	--	56	--	92	--	30	--	11	--	--	2.5 J
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
alpha-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	--	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	420	--	--	120	--	680	--	430	--	890	--	--	280
delta-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	--	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	2.9 J	--	--	< 5.0	--	< 5.0	--	< 5.0	--	8.6	--	--	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	5.1 J	--	7.6 J	--	--	7.5 J
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	--	< 5.0
Toxaphene	ug/kg		--	< 100	--	--	< 99	--	--	< 100	--	< 100	--	< 100	--	< 100	--	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	CHERO803	CHERO803	CHERO803	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	FLOR3415	FLOR3415
			CHERO803-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-04-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-01-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-02-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-03-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-04-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-04-025-01 03/28/2017 2.0-2.5 ft N	FLOR3415-01-005-01 03/28/2017 0.0-0.5 ft N	FLOR3415-02-005-01 03/28/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	2.99	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	5.93	84.0	5.01	83.5	73.7	5.65	46.1	45.0	177	51.8	7.80	90.6	106	6.88	53.9	58.5
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	3.2 J	--	--	5.4	--	--	6.5	--	6.7	--	--	< 5.0	--	< 5.0	< 5.0
4,4'-DDE	ug/kg	2000	--	53	--	--	52	--	--	35	--	15	--	--	24	--	6.9	< 5.0
4,4'-DDT	ug/kg	1900	--	7.3	--	--	12	--	--	7.9	--	25	--	--	13	--	2.7 J	10
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	< 50	--	--	< 50	--	37 J	--	--	< 50	--	96	< 50
delta-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	3.3 J	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	--	6.0 J	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	4.4 J	< 10
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		--	< 99	--	--	< 100	--	--	< 100	--	< 100	--	--	< 99	--	< 100	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	FLOR3415	FLOR3415	FLOR3415	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766
			FLOR3415-03-005-01 03/28/2017 0.0-0.5 ft	FLOR3415-03-025-01 03/28/2017 2.0-2.5 ft	FLOR3415-04-005-01 03/28/2017 0.0-0.5 ft	FLOR3475-01-005-01 03/28/2017 0.0-0.5 ft	FLOR3475-01-025-01 03/28/2017 2.0-2.5 ft	FLOR3475-02-005-01 03/28/2017 0.0-0.5 ft	FLOR3475-02-025-01 03/28/2017 2.0-2.5 ft	FLOR3475-03-005-01 03/28/2017 0.0-0.5 ft	FLOR3475-04-005-01 03/28/2017 0.0-0.5 ft	FLOR3475-04-025-01 03/28/2017 2.0-2.5 ft	GRAP0766-01-005-01 03/30/2017 0.0-0.5 ft	GRAP0766-02-005-01 03/30/2017 0.0-0.5 ft	GRAP0766-02-025-01 03/30/2017 2.0-2.5 ft	GRAP0766-03-005-01 03/30/2017 0.0-0.5 ft	GRAP0766-04-005-01 03/30/2017 0.0-0.5 ft	GRAP0766-04-025-01 03/30/2017 2.0-2.5 ft
			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	4.75	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	90.7	6.70	63.4	109	6.56	88.5	6.51	69.1	89.0	3.95	52.8	121	6.03	49.5	14.7	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	5.5	--	35	--	23	2.4 J	--	35	66	--	11	2.5 J	< 5.0
4,4'-DDE	ug/kg	2000	2.7 J	--	80	24	--	240	--	46	12	--	700	270	--	110	38	< 5.0
4,4'-DDT	ug/kg	1900	< 5.0	--	40	7.1	--	160	--	120	7.9	--	270	400	--	54	6.6	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	--	540	140	--	400	--	260	45 J	--	240	920	--	430	< 50	< 50
delta-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
Dieldrin	ug/kg	34	< 5.0	--	< 5.0	< 5.0	--	6.1	--	< 5.0	< 5.0	--	2.3 J	4.4 J	--	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	7.5	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	3.0 J	--	2.2 J	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	--	56	< 10	--	14	--	< 10	< 10	--	5.6 J	7.7 J	--	< 9.9	< 10	< 9.9
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	--	< 100	< 100	--	< 100	--	< 100	< 100	--	< 99	< 100	--	< 99	< 100	< 99

Yellow shading indicates the soil sample results exceeded the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	IDAH3339	IDAH3339	IDAH3339	IDAH3339	KENT3433	KENT3433	KENT3433	KENT3433
			GRAP0828-01-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-01-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-02-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-02-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-03-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-03-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-04-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-04-025-01 03/30/2017 2.0-2.5 ft N	IDAH3339-01-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-02-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-03-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-04-005-01 03/30/2017 0.0-0.5 ft N	KENT3433-01-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-02-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-025-01 03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		3.95	--	--	--	--	--	--	--	--	--	--	--	2.91	--	--	--
Lead	mg/kg	80	51.3	--	98.3	--	80.0	--	57.5	--	25.2	24.1	15.2	64.4	43.5	40.3	295	4.95
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	15	< 5.0	4.5 J	< 5.0	20	< 5.0	3.1 J	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
4,4'-DDE	ug/kg	2000	9.6	< 5.0	120	28	95	11	22	5.4	--	--	--	--	7.6	6.2	13	--
4,4'-DDT	ug/kg	1900	18	< 5.0	75	16	38	6.1	5.1	3.3 J	--	--	--	--	6.7	6.7	15	--
Aldrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
alpha-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
beta-BHC	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Chlordane	ug/kg	440	120	< 5.0	240	47 J	210	27 J	120	28 J	--	--	--	--	68	810	350	--
delta-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
Dieldrin	ug/kg	34	2.8 J	< 5.0	51	9.7	7.1	< 5.0	120	40	--	--	--	--	< 5.0	3.5 J	76	--
Endosulfan I	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan II	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan sulfate	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin aldehyde	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin ketone	ug/kg	19000	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
gamma-BHC (Lindane)	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor	ug/kg	130	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor epoxide	ug/kg	70	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	3.8 J	< 9.9	--	--	--	--	< 10	17	< 10	--
Methoxychlor	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Toxaphene	ug/kg		< 99	< 99	< 99	< 100	< 99	< 100	< 99	< 99	--	--	--	--	< 100	< 100	< 100	--

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	KENT3433	KENT3433	LIND0687	LIND0687	LIND0687	LIND0687	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	PEAC0880	PEAC0880
			KENT3433-04-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-04-025-01 03/28/2017 2.0-2.5 ft N	LIND0687-01-005-01 03/27/2017 0.0-0.5 ft N	LIND0687-02-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-03-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-04-005-01 03/27/2017 0.0-0.5 ft N	LIND0741-01-005-01 03/29/2017 0.0-0.5 N	LIND0741-01-025-01 03/29/2017 2.0-2.5 N	LIND0741-02-005-01 03/29/2017 0.0-0.5 N	LIND0741-02-025-01 03/29/2017 2.0-2.5 N	LIND0741-03-005-01 03/29/2017 0.0-0.5 N	LIND0741-03-025-01 03/29/2017 2.0-2.5 N	LIND0741-04-005-01 03/29/2017 0.0-0.5 N	LIND0741-04-025-01 03/29/2017 2.0-2.5 N	PEAC0880-01-005-01 03/29/2017 0.0-0.5 ft N	PEAC0880-01-025-01 03/29/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	2.49	--	--	--	3.31	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	121	5.02	31.6	54.2	28.6	45.8	39.1	--	45.4	--	44.7	--	105	41.2	66.0	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	< 5.0	90	88	15	< 4.9	21	8.9	110	< 25	< 5.0	< 4.9	< 4.9	< 5.0
4,4'-DDE	ug/kg	2000	73	--	< 5.0	18	6.9	24	120	< 4.9	620	140	1,200	380	180	130	6.1	< 5.0
4,4'-DDT	ug/kg	1900	27	--	5.8	16	2.4 J	< 4.9	26	< 4.9	370	82	640	190	49	22	3.5 J	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
alpha-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Chlordane	ug/kg	440	310	--	190	600	490 J	970	100	< 49	1,200	260	980	220 J	630	480	57	< 50
delta-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
Dieldrin	ug/kg	34	19	--	2.6 J	< 5.0	< 5.0	6.3	< 5.0	< 4.9	5.6	4.0 J	< 50	< 25	6.2	2.9 J	8.5	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	2.6 J	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	6.2	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	--	< 10	5.1 J	11	6.0 J	6.7 J	< 9.9	37	25	170	< 50	15	12	< 9.9	< 10
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Toxaphene	ug/kg		< 100	--	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99	< 990	< 500	< 99	< 99	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3392	PEAC3392	PEAC3392	PEAC3392	PEAC3392
			03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	7.65	--	--	--	--	2.77	--	--	--	--
Lead	mg/kg	80	15.3	--	333	34.6	110	8.69	141	21.6	70.3	72.6	48.9	56.8	--	73.7	--	89.1
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	< 5.0	12	3.7 J	3.8 J	< 5.0	49	--	59	18	17	11	< 5.0	18 J	< 5.0	110
4,4'-DDE	ug/kg	2000	< 5.0	9.5	110	20	15	< 5.0	18	--	21	5.9	32	2.8 J	< 5.0	< 5.0	< 5.0	9.2
4,4'-DDT	ug/kg	1900	< 5.0	3.6 J	59	8.0	10	< 5.0	4.2 J	--	4.3 J	5.3	< 5.0	4.8 J	< 5.0	4.4 J	< 5.0	< 5.0
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	83	920	130	180	< 50	760	--	380	200	63	75	< 50	380	41 J	700
delta-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 9.9	< 10	< 10
Dieldrin	ug/kg	34	2.8 J	29	180	34	18	< 5.0	4.2 J	--	5.3	< 5.0	< 5.0	< 5.0	< 5.0	4.8 J	< 5.0	3.5 J
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	< 10	11	< 9.9	< 10	< 10	9.0 J	--	8.4 J	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	5.2 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	< 100	< 100	< 99	< 100	< 100	< 100	--	< 100	< 99	< 99	< 100	< 100	< 100	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC3392	PEAC3392	PEAC3392	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PLUM0850	PLUM0850	PLUM0850	PLUM0850	PLUM0850
			03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	--	5.53	--	--	--	--
Lead	mg/kg	80	20.6	137	25.2	136	13.8	169	34.2	194	32.1	302	10.7	111	3.88	94.2	3.07	72.0
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	130	54	39	--	81	--	54	--	52	--	32	--	16	--	< 5.0
4,4'-DDE	ug/kg	2000	< 5.0	26	7.3	22	--	120	--	43	--	38 J	--	15	--	400	--	17
4,4'-DDT	ug/kg	1900	< 5.0	4.6 J	< 5.0	36	--	55	--	200	--	170	--	16	--	210	--	8.5
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
alpha-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Chlordane	ug/kg	440	120	1,500	540	380	--	880	--	930	--	250	--	310	--	530	--	900
delta-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
Dieldrin	ug/kg	34	< 5.0	4.1 J	< 5.0	25	--	15	--	55	--	22	--	41	--	16	--	11
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	3.4 J	--	< 5.0	--	< 5.0	--	3.3 J	--	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	14	< 10	5.9 J	--	10	--	21	--	< 10	--	5.9 J	--	36	--	8.7 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Toxaphene	ug/kg		< 100	< 99	< 100	< 99	--	< 100	--	< 100	--	< 100	--	< 99	--	< 100	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PLUM0850	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3351	UTAH3351	UTAH3351
			PLUM0850-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3304-01-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-01-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-01-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-02-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-02-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-02-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-03-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-03-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-03-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-04-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-04-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-04-025-01 03/27/2017 2.0-2.5 ft N	UTAH3315-01-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-01-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-02-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	5.69	5.67	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	51.6	52.9	48.8	--	31.1	31.0	--	47.9	46.0	--	38.3	37.4	--	124	25.3	40.4
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	4.7 J	< 49	< 5.0	< 5.0
4,4'-DDE	ug/kg	2000	3.2 J	320	--	< 5.0	1,400	--	130	230	--	2.3 J	730	--	90	38 J	3.4 J	36
4,4'-DDT	ug/kg	1900	2.5 J	130	--	< 5.0	1,200	--	270	74	--	< 5.0	130	--	3.4 J	< 49	< 5.0	5.3
Aldrin	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
alpha-BHC	ug/kg		< 10	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	< 9.9	< 99	< 9.9	< 9.9
beta-BHC	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Chlordane	ug/kg	440	32 J	490	--	< 50	300	--	< 250	130	--	< 50	< 250	--	110	6,400	790	1,600
delta-BHC	ug/kg		< 10	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	< 9.9	< 99	< 9.9	< 9.9
Dieldrin	ug/kg	34	12	240	--	< 5.0	500	--	56	52	--	< 5.0	32	--	67	< 49	< 5.0	27
Endosulfan I	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	3.6 J
gamma-BHC (Lindane)	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	13	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	8.5 J	< 99	5.3 J	11
Methoxychlor	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Toxaphene	ug/kg		< 100	< 500	--	< 99	< 2,000	--	< 500	< 500	--	< 100	< 500	--	< 99	< 990	< 99	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.



**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323
			UTAH3315-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-04-025-01 03/29/2017 2.0-2.5 ft N	UTAH3318-01-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-025-01 03/27/2017 2.0-2.5 ft N	UTAH3318-03-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-04-005-01 03/27/2017 0.0-0.5 ft N	UTAH3323-01-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-01-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-02-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-04-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	4.08	--	--	--	--	--
Lead	mg/kg	80	--	27.6	--	103	8.27	61.8	144	14.5	65.0	37.7	169	69.1	240	4.67	31.4	54.9
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	190	< 4.9	520	< 5.0	< 5.0	6.6	--	4.4 J	< 5.0	< 5.0	--	26	--	4.0 J	< 5.0
4,4'-DDE	ug/kg	2000	9.9	76	< 4.9	74	2.8 J	28	17	--	13	10	21	--	440	--	28	130
4,4'-DDT	ug/kg	1900	< 5.0	87	< 4.9	19 J	< 5.0	8.9	14	--	6.6	< 5.0	38	--	190	--	16	150
Aldrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
alpha-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
beta-BHC	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Chlordane	ug/kg	440	560	3,500	56	9,500	160	150	390	--	44 J	43 J	330	--	210	--	110	660
delta-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
Dieldrin	ug/kg	34	5.0		< 4.9	14 J	< 5.0	< 5.0	5.3	--	< 5.0	< 5.0	< 5.0	--	5.6	--	2.4 J	< 5.0
Endosulfan I	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 50	< 4.9	28	< 5.0	< 5.0	< 5.0	--	< 5.0	2.8 J	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	4.0 J	69 J	< 9.9	86	< 9.9	9.7 J	7.4 J	--	< 10	20	6.5 J	--	< 10	--	< 9.9	8.9 J
Methoxychlor	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Toxaphene	ug/kg		< 99	< 1,000	< 99	< 500	< 99	< 100	< 100	--	< 100	< 100	< 100	--	< 100	--	< 99	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3334	UTAH3334	UTAH3334	UTAH3334	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3384	UTAH3384	UTAH3384	UTAH3384	
			03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	2.20	--	--	--	--	--	--	--	2.99	--	--	--
Lead	mg/kg	80	56.7	46.8	7.89	47.2	37.6	--	95.0	57.7	25.9	--	143	21.4	54.6	--	133	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	< 5.0	< 5.0	< 5.0	3.9 J	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
4,4'-DDE	ug/kg	2000	--	--	--	--	5.2	17	14	2.3 J	20	2.8 J	20	22	--	22	--	120
4,4'-DDT	ug/kg	1900	--	--	--	--	< 5.0	< 5.0	9.9	6.8	< 5.0	< 5.0	22	14	--	25	--	81
Aldrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
alpha-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
beta-BHC	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Chlordane	ug/kg	440	--	--	--	--	490	740	1,000	230	4,600	980	11,000	9,200	--	98	--	300
delta-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
Dieldrin	ug/kg	34	--	--	--	--	< 5.0	2.7 J	9.3	4.7 J	20	2.2 J	20	12	--	< 5.0	--	9.9
Endosulfan I	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan II	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan sulfate	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin aldehyde	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin ketone	ug/kg	19000	--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
gamma-BHC (Lindane)	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Heptachlor	ug/kg	130	--	--	--	--	< 5.0	< 5.0	4.2 J	< 5.0	23	< 5.0	14	7.9	--	< 5.0	--	< 4.9
Heptachlor epoxide	ug/kg	70	--	--	--	--	6.5 J	19	5.9 J	< 10	44 J	29	29	16	--	4.0 J	--	32
Methoxychlor	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Toxaphene	ug/kg		--	--	--	--	< 99	< 99	< 99	< 100	< 99	< 100	< 100	< 100	--	< 99	--	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384
			UTAH3384-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-03-005-02 03/29/2017 0.0-0.5 ft FD	UTAH3384-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-04-005-02 03/29/2017 0.0-0.5 ft FD
<b>Inorganics</b>								
Arsenic	mg/kg		--	--	--	--	--	--
Lead	mg/kg	80	7.35	82.3	--	3.54	64.5	--
<b>Pesticides</b>								
4,4'-DDD	ug/kg	2300	--	--	29 J	--	--	5.6
4,4'-DDE	ug/kg	2000	--	--	110	--	--	14
4,4'-DDT	ug/kg	1900	--	--	69	--	--	3.7 J
Aldrin	ug/kg		--	--	< 50	--	--	< 5.0
alpha-BHC	ug/kg		--	--	< 99	--	--	< 10
beta-BHC	ug/kg		--	--	< 50	--	--	< 5.0
Chlordane	ug/kg	440	--	--	< 500	--	--	98
delta-BHC	ug/kg		--	--	< 99	--	--	< 10
Dieldrin	ug/kg	34	--	--	< 50	--	--	< 5.0
Endosulfan I	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan II	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan sulfate	ug/kg		--	--	< 50	--	--	< 5.0
Endrin	ug/kg		--	--	< 50	--	--	< 5.0
Endrin aldehyde	ug/kg		--	--	< 50	--	--	< 5.0
Endrin ketone	ug/kg	19000	--	--	< 50	--	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	--	< 50	--	--	< 5.0
Heptachlor	ug/kg	130	--	--	< 50	--	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	--	1,300	--	--	13
Methoxychlor	ug/kg		--	--	< 50	--	--	< 5.0
Toxaphene	ug/kg		--	--	< 990	--	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-01	COMPOSITE-02	COMPOSITE-03	COMPOSITE-04	COMPOSITE-05	COMPOSITE-05-dup	COMPOSITE-06	COMPOSITE-07	COMPOSITE-08	COMPOSITE-09	COMPOSITE-10	COMPOSITE-11	COMPOSITE-12-Dup	COMPOSITE-13	COMPOSITE-14
					03/27/2017 Lind0687-01-005-01 Lind0687-04-005-01	03/27/2017 Lind0687-01-025-01 Lind0687-02-025-01 Lind0687-03-025-01 Lind0687-04-025-01	03/27/2017 Avoc3472-01-005-01 Avoc3472-02-005-01 Avoc3472-03-005-01 Avoc3472-04-005-01	03/27/2017 Avoc3472-01-025-01 Avoc3472-02-025-01 Avoc3472-03-025-01 Avoc3472-04-025-01	03/27/2017 Avoc3461-01-005-01 Avoc3461-02-005-01 Avoc3461-03-005-01 Avoc3461-04-005-01	03/27/2017 Avoc3461-01-005-02 Avoc3461-02-005-02 Avoc3461-03-005-02 Avoc3461-04-005-02	03/27/2017 Avoc3461-01-025-01 Avoc3461-02-025-01 Avoc3461-03-025-01 Avoc3461-04-025-01	03/27/2017 Avoc3408-01-005-01 Avoc3408-02-005-01 Avoc3408-03-005-01 Avoc3408-04-005-01	03/27/2017 Avoc3408-01-025-01 Avoc3408-02-025-01 Avoc3408-03-025-01 Avoc3408-04-025-01	03/27/2017 Utah3318-01-005-01 Utah3318-02-005-01 Utah3318-03-005-01 Utah3318-04-005-01	03/27/2017 Utah3318-01-025-01 Utah3318-02-025-01 Utah3318-03-025-01 Utah3318-04-025-01	03/27/2017 Utah3304-01-005-01 Utah3304-02-005-01 Utah3304-03-005-01 Utah3304-04-005-01	03/27/2017 Utah3304-01-005-02 Utah3304-02-005-02 Utah3304-03-005-02 Utah3304-04-005-02	03/27/2017 Utah3304-01-025-01 Utah3304-02-025-01 Utah3304-03-025-01 Utah3304-04-025-01	03/27/2017 Blai0760-01-005-01 Blai0760-02-005-01 Blai0760-03-005-01 Blai0760-04-005-01
N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	FD	N	N
Pesticides																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.7 J	4.4 J	< 5.0	7.7	< 5.0	< 5.0	< 5.0	89	61	13	< 5.0
4,4'-DDE	ug/kg	800	530	400	7.1	< 5.0	42	< 5.0	29	34	6.3	97	14	10	2.7 J	920	890	32	140
4,4'-DDT	ug/kg	800	530	400	8.0	< 5.0	30	< 5.0	13	12	3.6 J	35	< 5.0	9.9	< 5.0	470	370	46	57
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	320	< 5.0	340	< 5.0	40 J	47 J	34 J	66	< 5.0	390	< 5.0	200	370	< 5.0	680
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	< 5.0	6.1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	270	340	11	2.7 J
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-15	COMPOSITE-16	COMPOSITE-17	COMPOSITE-18	COMPOSITE-18-Dup	COMPOSITE-19	COMPOSITE-20	COMPOSITE-21	COMPOSITE-22	COMPOSITE-23	COMPOSITE-24	COMPOSITE-25	COMPOSITE-26	COMPOSITE-27	COMPOSITE-28
					03/27/2017 Blai0760-01-025-01 Blai0760-02-025-01 Blai0760-03-025-01 Blai0760-04-025-01 N	03/28/2017 Kent3433-01-005-01 Kent3433-02-005-01 Kent3433-03-005-01 Kent3433-04-005-01 N	03/28/2017 Kent3433-01-025-01 Kent3433-02-025-01 Kent3433-03-025-01 Kent3433-04-025-01 N	03/28/2017 Cher0871-01-005-01 Cher0871-02-005-01 Cher0871-03-005-01 Cher0871-04-005-01 N	03/28/2017 Cher0871-01-005-02 Cher0871-02-005-02 Cher0871-03-005-02 Cher0871-04-005-02 FD	03/28/2017 Cher0871-01-025-01 Cher0871-02-025-01 Cher0871-03-025-01 Cher0871-04-025-01 N	03/28/2017 Cher0803-01-005-01 Cher0803-02-005-01 Cher0803-03-005-01 Cher0803-04-005-01 N	03/28/2017 Cher0803-01-025-01 Cher0803-02-025-01 Cher0803-03-025-01 Cher0803-04-025-01 N	03/28/2017 Flor3415-01-005-01 Flor3415-02-005-01 Flor3415-03-005-01 Flor3415-04-005-01 N	03/28/2017 Flor3415-01-025-01 Flor3415-02-025-01 Flor3415-03-025-01 Flor3415-04-025-01 N	03/28/2017 Flor3475-01-005-01 Flor3475-02-005-01 Flor3475-03-005-01 Flor3475-04-005-01 N	03/28/2017 Flor3475-01-025-01 Flor3475-02-025-01 Flor3475-03-025-01 Flor3475-04-025-01 N	03/28/2017 Peac3397-01-005-01 Peac3397-02-005-01 Peac3397-03-005-01 Peac3397-04-005-01 N	03/28/2017 Peac3397-01-025-01 Peac3397-02-025-01 Peac3397-03-025-01 Peac3397-04-025-01 N	03/28/2017 Peac3392-01-005-01 Peac3392-02-005-01 Peac3392-03-005-01 Peac3392-04-005-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.5 J	< 5.0	< 5.0	< 5.0	2.6 J	< 5.0	< 25	< 5.0	28	3.6 J	< 5.0
4,4'-DDE	ug/kg	800	530	400	9.4	45	3.0 J	55	55	< 5.0	37	< 5.0	9.0	4.6 J	180	4.3 J	57	4.7 J	7.3
4,4'-DDT	ug/kg	800	530	400	4.5 J	25	< 5.0	34	45	< 5.0	13	< 5.0	18	5.5	140	< 5.0	71	2.2 J	3.0 J
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	< 50	440	34 J	55	63	< 50	780	64	99	< 50	360	< 50	730	64	850
delta-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	22	2.2 J	< 5.0	< 5.0	< 5.0	2.8 J	< 5.0	< 5.0	< 5.0	11 J	< 5.0	33	4.3 J	14
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 9.9	7.7 J	< 10	5.9 J	24	< 10	11	< 10	27	< 10	< 50	< 10	8.1 J	< 10	5.0 J
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-29	COMPOSITE-30	COMPOSITE-31	COMPOSITE-32	COMPOSITE-33	COMPOSITE-33-Dup	COMPOSITE-34	COMPOSITE-35	COMPOSITE-36	COMPOSITE-37	COMPOSITE-38	COMPOSITE-39	COMPOSITE-40	COMPOSITE-41	COMPOSITE-42
					03/28/2017 Peac3392-01-025-01 Peac3392-02-025-01 Peac3392-03-025-01 Peac3392-04-025-01 N	03/28/2017 Peac3371-01-005-01 Peac3371-02-005-01 Peac3371-03-005-01 Peac3371-04-005-01 N	03/28/2017 Peac3371-01-025-01 Peac3371-02-025-01 Peac3371-03-025-01 Peac3371-04-025-01 N	03/28/2017 Lind0687-02-005-01 Lind0687-03-005-01 N	03/29/2017 Avoc3436-01-005-01 Avoc3436-02-005-01 Avoc3436-03-005-01 Avoc3436-04-005-01 N	03/29/2017 Avoc3436-01-005-02 Avoc3436-02-005-02 Avoc3436-03-005-02 Avoc3436-04-005-02 FD	03/29/2017 Avoc3436-01-025-01 Avoc3436-02-025-01 Avoc3436-03-025-01 Avoc3436-04-025-01 N	03/29/2017 Utah3323-01-005-01 Utah3323-02-005-01 Utah3323-03-005-01 Utah3323-04-005-01 N	03/29/2017 Utah3323-01-025-01 Utah3323-02-025-01 Utah3323-03-025-01 Utah3323-04-025-01 N	03/29/2017 Utah3315-01-005-01 Utah3315-02-005-01 Utah3315-03-005-01 Utah3315-04-005-01 N	03/29/2017 Utah3315-01-025-01 Utah3315-02-025-01 Utah3315-03-025-01 Utah3315-04-025-01 N	03/29/2017 Utah3348-01-005-01 Utah3348-02-005-01 Utah3348-03-005-01 Utah3348-04-005-01 N	03/29/2017 Utah3348-01-025-01 Utah3348-02-025-01 Utah3348-03-025-01 Utah3348-04-025-01 N	03/29/2017 Avoc3477-01-005-01 Avoc3477-02-005-01 Avoc3477-03-005-01 Avoc3477-04-005-01 N	03/29/2017 Avoc3477-01-025-01 Avoc3477-02-025-01 Avoc3477-03-025-01 Avoc3477-04-025-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	<b>8.7</b>	< 5.0	< 5.0	< 5.0	<b>9.2</b>	< 5.0	<b>74</b>	<b>10</b>	<b>420</b>	<b>30</b>	<b>320</b>	<b>410</b>	<b>37</b>	< 5.0
4,4'-DDE	ug/kg	800	530	400	< 5.0	<b>33</b>	<b>2.6 J</b>	<b>16</b>	<b>3.1 J</b>	<b>37</b>	<b>2.4 J</b>	<b>380</b>	<b>34</b>	<b>190</b>	<b>9.1</b>	<b>32</b>	<b>21</b>	<b>100</b>	<b>11</b>
4,4'-DDT	ug/kg	800	530	400	< 5.0	<b>4.3 J</b>	<b>2.6 J</b>	<b>33</b>	<b>20</b>	<b>29</b>	<b>5.2</b>	<b>250</b>	<b>11</b>	<b>65</b>	< 5.0	<b>4.2 J</b>	<b>12</b>	<b>51</b>	<b>3.1 J</b>
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	<b>210</b>	<b>430</b>	<b>57</b>	<b>1,300</b>	<b>330</b>	<b>580</b>	<b>58</b>	<b>910</b>	<b>100</b>	<b>6,700</b>	<b>470</b>	<b>7,700</b>	<b>15,000</b>	<b>210</b>	< 50
delta-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	<b>2.2 J</b>	< 5.0	<b>13</b>	<b>31</b>	<b>44</b>	<b>5.2</b>	<b>4.3 J</b>	< 5.0	<b>26</b>	< 5.0	<b>7.6</b>	<b>11</b>	<b>2.5 J</b>	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<b>83</b>	<b>64</b>	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	<b>4.6 J</b>	< 9.9	<b>10</b>	<b>4.7 J</b>	<b>8.5 J</b>	< 10	<b>21</b>	<b>5.0 J</b>	<b>120</b>	<b>6.5 J</b>	<b>93</b>	<b>44 J</b>	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 99	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-43	COMPOSITE-44	COMPOSITE-45	COMPOSITE-45-Dup	COMPOSITE-46	COMPOSITE-47	COMPOSITE-48	COMPOSITE-49	COMPOSITE-50	COMPOSITE-51	COMPOSITE-51-Dup	COMPOSITE-52	COMPOSITE-53	COMPOSITE-54	COMPOSITE-55
					03/29/2017 Lind0741-01-005-01 Lind0741-02-005-01 Lind0741-03-005-01 Lind0741-04-005-01 N	03/29/2017 Lind0741-01-025-01 Lind0741-02-025-01 Lind0741-03-025-01 Lind0741-04-025-01 N	03/29/2017 Utah3384-01-005-01 Utah3384-02-005-01 Utah3384-03-005-01 Utah3384-04-005-01 N	03/29/2017 Utah3384-01-005-02 Utah3384-02-005-02 Utah3384-03-005-02 Utah3384-04-005-02 FD	03/29/2017 Utah3384-01-025-01 Utah3384-02-025-01 Utah3384-03-025-01 Utah3384-04-025-01 N	03/29/2017 Plum0850-01-005-01 Plum0850-02-005-01 Plum0850-03-005-01 Plum0850-04-005-01 N	03/29/2017 Plum0850-01-025-01 Plum0850-02-025-01 Plum0850-03-025-01 Plum0850-04-025-01 N	03/29/2017 Peac0880-01-005-01 Peac0880-02-005-01 Peac0880-03-005-01 Peac0880-04-005-01 N	03/29/2017 Peac0880-01-025-01 Peac0880-02-025-01 Peac0880-03-025-01 Peac0880-04-025-01 N	03/30/2017 Blai0890-01-005-01 Blai0890-02-005-01 Blai0890-03-005-01 Blai0890-04-005-01 N	03/30/2017 Blai0890-01-005-02 Blai0890-02-005-02 Blai0890-03-005-02 Blai0890-04-005-02 FD	03/30/2017 Blai0890-01-025-01 Blai0890-02-025-01 Blai0890-03-025-01 Blai0890-04-025-01 N	03/30/2017 Blai0828-01-005-01 Blai0828-02-005-01 Blai0828-03-005-01 Blai0828-04-005-01 N	03/30/2017 Blai0828-01-025-01 Blai0828-02-025-01 Blai0828-03-025-01 Blai0828-04-025-01 N	03/30/2017 Grap0828-01-005-01 Grap0828-02-005-01 Grap0828-03-005-01 Grap0828-04-005-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	7.4	11	5.0	7.5	< 5.0	17	< 5.0	5.8	< 5.0	25	14	< 5.0	12	9.4	22
4,4'-DDE	ug/kg	800	530	400	180	48	37	37	< 5.0	110	< 5.0	32	5.0	38	32	4.2 J	49	29	61
4,4'-DDT	ug/kg	800	530	400	11	14	13	13	< 5.0	19	< 5.0	12	< 5.0	30	17	< 5.0	6.7	3.5 J	8.6
Aldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
beta-BHC	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	500	150	92	110	< 5.0	650	< 5.0	340	42 J	510	670	30 J	130	46 J	240
delta-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
Dieldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	27	< 5.0	62	11	2.2 J	5.1	< 5.0	2.8 J	< 5.0	46
Endosulfan I	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				5.9 J	13	< 10	< 10	< 9.9	12	< 10	3.7 J	< 9.9	15	20	< 9.9	< 10	< 10	5.8 J
Methoxychlor	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-56	COMPOSITE-57	COMPOSITE-58	COMPOSITE-59	COMPOSITE-60	COMPOSITE-61	COMPOSITE-62
					03/30/2017 Grap0828-01-025-01 Grap0828-02-025-01 Grap0828-03-025-01 Grap0828-04-025-01 N	03/30/2017 Grap0766-01-005-01 Grap0766-02-005-01 Grap0766-03-005-01 N	03/30/2017 Grap0766-01-025-01 Grap0766-02-025-01 Grap0766-03-025-01 N	03/30/2017 Idah3339-01-005-01 Idah3339-02-005-01 Idah3339-03-005-01 Idah3339-04-005-01 N	03/30/2017 Idah3339-01-025-01 Idah3339-02-025-01 Idah3339-03-025-01 Idah3339-04-025-01 N	03/30/2017 Utah3334-01-005-01 Utah3334-02-005-01 Utah3334-03-005-01 Utah3334-04-005-01 N	03/30/2017 Utah3334-01-025-01 Utah3334-02-025-01 Utah3334-03-025-01 Utah3334-04-025-01 N
<b>Pesticides</b>											
4,4'-DDD	ug/kg	1150	760	575	7.1	55	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4,4'-DDE	ug/kg	800	530	400	25	300	15	2.9 J	< 5.0	5.0	< 5.0
4,4'-DDT	ug/kg	800	530	400	2.7 J	160	9.1	< 5.0	< 5.0	7.8	< 5.0
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	74	610	< 50	< 50	< 50	< 50	< 50
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
Dieldrin	ug/kg	16	10	5	15	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	2.2 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	9.2 J	< 10	< 10	< 10	< 9.9	< 10
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 99	< 100

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.



## **APPENDIX B**

### **Laboratory Test Results**



Calscience



**WORK ORDER NUMBER: 18-03-2553**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

### Analytical Report For

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** ACC-UCR 131648-003/2.2

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/09/2018 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: ACC-UCR 131648-003/2.2

Work Order Number: 18-03-2553

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/29/18. They were assigned to Work Order 18-03-2553.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq$  15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2553
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	
	Date/Time Received:	03/29/18 18:15
	Number of Containers:	51

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
UTAH3351-01A-035-01	18-03-2553-1	03/29/18 07:57	1	Solid
UTAH3351-01A-045-01	18-03-2553-2	03/29/18 08:05	1	Solid
UTAH3351-01B-005-01	18-03-2553-3	03/29/18 08:10	1	Solid
UTAH3351-01B-025-01	18-03-2553-4	03/29/18 08:15	1	Solid
UTAH3351-01C-005-01	18-03-2553-5	03/29/18 08:22	1	Solid
UTAH3351-01C-025-01	18-03-2553-6	03/29/18 08:26	1	Solid
UTAH3351-01D-005-01	18-03-2553-7	03/29/18 08:30	1	Solid
UTAH3351-01D-025-01	18-03-2553-8	03/29/18 08:35	1	Solid
UTAH3351-02A-035-01	18-03-2553-9	03/29/18 08:50	1	Solid
UTAH3351-02A-045-01	18-03-2553-10	03/29/18 09:05	1	Solid
UTAH3351-02A-035-02	18-03-2553-11	03/29/18 08:57	1	Solid
UTAH3348-04A-035-01	18-03-2553-12	03/29/18 09:30	1	Solid
UTAH3348-04A-045-01	18-03-2553-13	03/29/18 09:35	1	Solid
UTAH3348-04B-005-01	18-03-2553-14	03/29/18 09:40	1	Solid
UTAH3348-04B-025-01	18-03-2553-15	03/29/18 09:45	1	Solid
UTAH3348-04C-005-01	18-03-2553-16	03/29/18 09:50	1	Solid
UTAH3348-04C-025-01	18-03-2553-17	03/29/18 09:55	1	Solid
UTAH3348-04D-005-01	18-03-2553-18	03/29/18 10:00	1	Solid
UTAH3348-04D-025-01	18-03-2553-19	03/29/18 10:05	1	Solid
UTAH3348-03A-035-01	18-03-2553-20	03/29/18 10:15	1	Solid
UTAH3348-03A-035-02	18-03-2553-21	03/29/18 10:20	1	Solid
UTAH3348-03A-045-01	18-03-2553-22	03/29/18 10:25	1	Solid
UTAH3348-01A-035-01	18-03-2553-23	03/29/18 10:40	1	Solid
UTAH3348-01A-045-01	18-03-2553-24	03/29/18 10:45	1	Solid
UTAH3304-04A-035-01	18-03-2553-25	03/29/18 11:10	1	Solid
UTAH3304-04A-035-02	18-03-2553-26	03/29/18 11:15	1	Solid
UTAH3304-04A-045-01	18-03-2553-27	03/29/18 11:20	1	Solid
UTAH3304-02A-035-01	18-03-2553-28	03/29/18 11:30	1	Solid
UTAH3304-02A-045-01	18-03-2553-29	03/29/18 11:40	1	Solid
UTAH3304-02B-005-01	18-03-2553-30	03/29/18 11:45	1	Solid
UTAH3304-02B-005-02	18-03-2553-31	03/29/18 11:50	1	Solid
UTAH3304-02B-025-01	18-03-2553-32	03/29/18 11:55	1	Solid
UTAH3304-02C-005-01	18-03-2553-33	03/29/18 12:00	1	Solid
UTAH3304-02C-025-01	18-03-2553-34	03/29/18 12:05	1	Solid
UTAH3304-02D-005-01	18-03-2553-35	03/29/18 12:10	1	Solid
UTAH3304-02D-025-01	18-03-2553-36	03/29/18 12:15	1	Solid
BLAI0890-01B-005-01	18-03-2553-37	03/29/18 13:20	1	Solid
BLAI0890-01B-005-02	18-03-2553-38	03/29/18 13:25	1	Solid
BLAI0890-01B-025-01	18-03-2553-39	03/29/18 13:30	1	Solid
BLAI0890-01C-025-01	18-03-2553-40	03/29/18 13:35	1	Solid
BLAI0890-01C-025-01	18-03-2553-41	03/29/18 13:40	1	Solid
BLAI0890-01D-005-01	18-03-2553-42	03/29/18 13:45	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2553
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	
	Date/Time Received:	03/29/18 18:15
	Number of Containers:	51

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BLAI0890-01D-025-01	18-03-2553-43	03/29/18 13:50	1	Solid
GRAP0828-04A-035-01	18-03-2553-44	03/29/18 14:11	1	Solid
GRAP0828-04A-045-01	18-03-2553-45	03/29/18 14:17	1	Solid
CHER0803-02B-005-01	18-03-2553-46	03/29/18 14:35	1	Solid
CHER0803-02B-025-01	18-03-2553-47	03/29/18 14:40	1	Solid
CHER0803-02C-005-01	18-03-2553-48	03/29/18 14:45	1	Solid
CHER0803-02C-025-01	18-03-2553-49	03/29/18 14:50	1	Solid
CHER0803-02D-005-01	18-03-2553-50	03/29/18 14:55	1	Solid
CHER0803-02D-025-01	18-03-2553-51	03/29/18 15:00	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2553  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/29/18

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
UTAH3351-01B-005-01 (18-03-2553-3)						
Lead	6.46		0.488	mg/kg	EPA 6010B	EPA 3050B
UTAH3351-01B-025-01 (18-03-2553-4)						
Lead	4.93		0.481	mg/kg	EPA 6010B	EPA 3050B
UTAH3351-02A-035-01 (18-03-2553-9)						
Chlordane	120		50	ug/kg	EPA 8081A	EPA 3545
UTAH3351-02A-035-02 (18-03-2553-11)						
Chlordane	180		50	ug/kg	EPA 8081A	EPA 3545
UTAH3348-04A-035-01 (18-03-2553-12)						
Chlordane	2200		250	ug/kg	EPA 8081A	EPA 3545
UTAH3348-04B-005-01 (18-03-2553-14)						
Lead	61.3		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	2700		250	ug/kg	EPA 8081A	EPA 3545
UTAH3348-04B-025-01 (18-03-2553-15)						
Lead	4.00		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	150		50	ug/kg	EPA 8081A	EPA 3545
UTAH3304-04A-035-01 (18-03-2553-25)						
4,4'-DDE	7.7		5.0	ug/kg	EPA 8081A	EPA 3545
UTAH3304-02A-035-01 (18-03-2553-28)						
4,4'-DDE	21		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.8		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	24		5.0	ug/kg	EPA 8081A	EPA 3545
UTAH3304-02B-005-01 (18-03-2553-30)						
Lead	19.9		0.505	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	360		100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	50		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	93		25	ug/kg	EPA 8081A	EPA 3545
UTAH3304-02B-005-02 (18-03-2553-31)						
Lead	22.4		0.481	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	97		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	68		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	73		25	ug/kg	EPA 8081A	EPA 3545
UTAH3304-02B-025-01 (18-03-2553-32)						
Lead	5.79		0.505	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	12		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.6		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	16		5.0	ug/kg	EPA 8081A	EPA 3545
BLAI0890-01B-005-01 (18-03-2553-37)						
Lead	30.7		0.490	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2553  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/29/18

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
BLAI0890-01B-005-02 (18-03-2553-38) Lead	11.6		0.505	mg/kg	EPA 6010B	EPA 3050B
BLAI0890-01B-025-01 (18-03-2553-39) Lead	6.38		0.483	mg/kg	EPA 6010B	EPA 3050B
CHER0803-02B-005-01 (18-03-2553-46) Lead	6.65		0.505	mg/kg	EPA 6010B	EPA 3050B
CHER0803-02B-025-01 (18-03-2553-47) Lead	6.46		0.485	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-01B-005-01	18-03-2553-3-A	03/29/18 08:10	Solid	ICP 7300	04/05/18	04/06/18 15:34	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.46		0.488		0.976	
UTAH3351-01B-025-01	18-03-2553-4-A	03/29/18 08:15	Solid	ICP 7300	04/05/18	04/06/18 15:37	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		4.93		0.481		0.962	
UTAH3348-04B-005-01	18-03-2553-14-A	03/29/18 09:40	Solid	ICP 7300	04/05/18	04/06/18 15:38	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		61.3		0.505		1.01	
UTAH3348-04B-025-01	18-03-2553-15-A	03/29/18 09:45	Solid	ICP 7300	04/05/18	04/06/18 15:38	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		4.00		0.500		1.00	
UTAH3304-02B-005-01	18-03-2553-30-A	03/29/18 11:45	Solid	ICP 7300	04/05/18	04/06/18 15:39	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		19.9		0.505		1.01	
UTAH3304-02B-005-02	18-03-2553-31-A	03/29/18 11:50	Solid	ICP 7300	04/05/18	04/06/18 15:40	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		22.4		0.481		0.962	
UTAH3304-02B-025-01	18-03-2553-32-A	03/29/18 11:55	Solid	ICP 7300	04/05/18	04/06/18 15:44	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.79		0.505		1.01	
BLAI0890-01B-005-01	18-03-2553-37-A	03/29/18 13:20	Solid	ICP 7300	04/05/18	04/06/18 15:45	180405L07
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		30.7		0.490		0.980	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>BLAI0890-01B-005-02</b>	<b>18-03-2553-38-A</b>	<b>03/29/18 13:25</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:45</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		11.6		0.505		1.01	
<b>BLAI0890-01B-025-01</b>	<b>18-03-2553-39-A</b>	<b>03/29/18 13:30</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:46</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.38		0.483		0.966	
<b>CHER0803-02B-005-01</b>	<b>18-03-2553-46-A</b>	<b>03/29/18 14:35</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:47</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.65		0.505		1.01	
<b>CHER0803-02B-025-01</b>	<b>18-03-2553-47-A</b>	<b>03/29/18 14:40</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:48</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.46		0.485		0.971	
<b>Method Blank</b>	<b>097-01-002-26142</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:13</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.481		0.962	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-01A-035-01	18-03-2553-1-A	03/29/18 07:57	Solid	GC 41	03/30/18	04/02/18 13:49	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

Page 2 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-01B-005-01	18-03-2553-3-A	03/29/18 08:10	Solid	GC 41	03/30/18	04/02/18 14:04	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
Decachlorobiphenyl	102	24-168		
2,4,5,6-Tetrachloro-m-Xylene	80	25-145		


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-01B-025-01	18-03-2553-4-A	03/29/18 08:15	Solid	GC 41	03/30/18	04/02/18 14:19	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
Decachlorobiphenyl	93	24-168		
2,4,5,6-Tetrachloro-m-Xylene	68	25-145		


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-02A-035-01	18-03-2553-9-A	03/29/18 08:50	Solid	GC 41	03/30/18	04/02/18 14:34	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	120	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3351-02A-035-02	18-03-2553-11-A	03/29/18 08:57	Solid	GC 41	03/30/18	04/02/18 14:49	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	180	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04A-035-01	18-03-2553-12-A	03/29/18 09:30	Solid	GC 41	03/30/18	04/02/18 15:04	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

UTAH3348-04A-035-01	18-03-2553-12-A	03/29/18 09:30	Solid	GC 41	03/30/18	04/03/18 16:05	180330L09
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Parameter	Result	RL	DF	Qualifiers
Chlordane	2200	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	82	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04B-005-01	18-03-2553-14-A	03/29/18 09:40	Solid	GC 41	03/30/18	04/02/18 15:19	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	83	25-145	

UTAH3348-04B-005-01	18-03-2553-14-A	03/29/18 09:40	Solid	GC 41	03/30/18	04/03/18 16:20	180330L09
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Parameter	Result	RL	DF	Qualifiers
Chlordane	2700	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04B-025-01	18-03-2553-15-A	03/29/18 09:45	Solid	GC 41	03/30/18	04/02/18 15:34	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	150	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-03A-035-01	18-03-2553-20-A	03/29/18 10:15	Solid	GC 41	03/30/18	04/02/18 15:49	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-03A-035-02	18-03-2553-21-A	03/29/18 10:20	Solid	GC 41	03/30/18	04/02/18 16:04	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-01A-035-01	18-03-2553-23-A	03/29/18 10:40	Solid	GC 41	03/30/18	04/03/18 16:35	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	9.9	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	9.9	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	9.9	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	99	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
Decachlorobiphenyl	107	24-168		
2,4,5,6-Tetrachloro-m-Xylene	90	25-145		


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-04A-035-01	18-03-2553-25-A	03/29/18 11:10	Solid	GC 41	03/30/18	04/03/18 16:50	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	7.7	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02A-035-01	18-03-2553-28-A	03/29/18 11:30	Solid	GC 41	03/30/18	04/03/18 17:05	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	21	5.0	1.00	
4,4'-DDT	8.8	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	24	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	89	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02B-005-01	18-03-2553-30-A	03/29/18 11:45	Solid	GC 41	03/30/18	04/03/18 17:20	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	94	25-145	

UTAH3304-02B-005-01	18-03-2553-30-A	03/29/18 11:45	Solid	GC 41	03/30/18	04/03/18 19:06	180330L09
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Parameter	Result	RL	DF	Qualifiers
4,4'-DDT	50	25	5.00	
Dieldrin	93	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	24-168	
2,4,5,6-Tetrachloro-m-Xylene	100	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02B-005-01	18-03-2553-30-A	03/29/18 11:45	Solid	GC 41	03/30/18	04/03/18 19:21	180330L09

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	360	100	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	150	24-168	
2,4,5,6-Tetrachloro-m-Xylene	120	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02B-005-02	18-03-2553-31-A	03/29/18 11:50	Solid	GC 41	03/30/18	04/03/18 17:35	180330L09

Parameter	Result	RL	DF	Qualifiers
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Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	24-168	
2,4,5,6-Tetrachloro-m-Xylene	96	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02B-005-02	18-03-2553-31-A	03/29/18 11:50	Solid	GC 41	03/30/18	04/03/18 19:36	180330L09

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	97	25	5.00	
4,4'-DDT	68	25	5.00	
Dieldrin	73	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	24-168	
2,4,5,6-Tetrachloro-m-Xylene	104	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3304-02B-025-01	18-03-2553-32-A	03/29/18 11:55	Solid	GC 41	03/30/18	04/03/18 17:50	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	12	5.0	1.00	
4,4'-DDT	7.6	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	16	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BLAI0890-01B-005-01	18-03-2553-37-A	03/29/18 13:20	Solid	GC 41	03/30/18	04/03/18 18:05	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	99	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BLAI0890-01B-005-02	18-03-2553-38-A	03/29/18 13:25	Solid	GC 41	03/30/18	04/03/18 18:20	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BLAI0890-01B-025-01	18-03-2553-39-A	03/29/18 13:30	Solid	GC 41	03/30/18	04/03/18 18:35	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	24-168	
2,4,5,6-Tetrachloro-m-Xylene	89	25-145	


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GRAP0828-04A-035-01	18-03-2553-44-A	03/29/18 14:11	Solid	GC 41	03/30/18	04/03/18 18:51	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	86	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CHER0803-02B-005-01	18-03-2553-46-A	03/29/18 14:35	Solid	GC 41	03/30/18	04/02/18 13:19	180330L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CHER0803-02B-025-01	18-03-2553-47-A	03/29/18 14:40	Solid	GC 41	03/30/18	04/02/18 13:34	180330L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2915</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 10:58</b>	<b>180330L09</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	94	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2916</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 11:28</b>	<b>180330L10</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
UTAH3351-01B-005-01	Sample	Solid	ICP 7300	04/05/18	04/06/18 15:34	180405S07
UTAH3351-01B-005-01	Matrix Spike	Solid	ICP 7300	04/05/18	04/06/18 15:35	180405S07
UTAH3351-01B-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/05/18	04/06/18 15:36	180405S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	6.458	25.00	33.63	109	32.89	106	75-125	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
UTAH3351-02A-035-01	Sample	Solid	GC 41	03/30/18	04/02/18 14:34	180330S09
UTAH3351-02A-035-01	Matrix Spike	Solid	GC 41	03/30/18	04/02/18 12:19	180330S09
UTAH3351-02A-035-01	Matrix Spike Duplicate	Solid	GC 41	03/30/18	04/02/18 12:34	180330S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	20.62	82	20.79	83	50-135	1	0-25	
Alpha-BHC	ND	25.00	19.99	80	20.27	81	50-135	1	0-25	
Beta-BHC	ND	25.00	22.42	90	22.53	90	50-135	0	0-25	
4,4'-DDD	ND	25.00	28.14	113	28.64	115	50-135	2	0-25	
4,4'-DDE	ND	25.00	30.58	122	30.38	122	50-135	1	0-25	
4,4'-DDT	ND	25.00	30.31	121	30.26	121	50-135	0	0-25	
Delta-BHC	ND	25.00	23.32	93	23.37	93	50-135	0	0-25	
Dieldrin	ND	25.00	27.35	109	26.86	107	50-135	2	0-25	
Endosulfan I	ND	25.00	24.01	96	23.44	94	50-135	2	0-25	
Endosulfan II	ND	25.00	26.94	108	26.09	104	50-135	3	0-25	
Endosulfan Sulfate	ND	25.00	27.45	110	26.71	107	50-135	3	0-25	
Endrin	ND	25.00	21.60	86	22.27	89	50-135	3	0-25	
Endrin Aldehyde	ND	25.00	25.30	101	23.81	95	50-135	6	0-25	
Gamma-BHC	ND	25.00	21.03	84	21.20	85	50-135	1	0-25	
Heptachlor	ND	25.00	21.53	86	21.46	86	50-135	0	0-25	
Heptachlor Epoxide	ND	25.00	25.30	101	25.46	102	50-135	1	0-25	
Methoxychlor	ND	25.00	26.87	107	27.58	110	50-135	3	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CHER0803-02B-025-01	Sample	Solid	GC 41	03/30/18	04/02/18 13:34	180330S10
CHER0803-02B-025-01	Matrix Spike	Solid	GC 41	03/30/18	04/02/18 12:49	180330S10
CHER0803-02B-025-01	Matrix Spike Duplicate	Solid	GC 41	03/30/18	04/02/18 13:04	180330S10

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	18.33	73	17.19	69	50-135	6	0-25	
Alpha-BHC	ND	25.00	18.51	74	16.93	68	50-135	9	0-25	
Beta-BHC	ND	25.00	19.02	76	19.03	76	50-135	0	0-25	
4,4'-DDD	ND	25.00	25.32	101	24.40	98	50-135	4	0-25	
4,4'-DDE	ND	25.00	24.52	98	23.74	95	50-135	3	0-25	
4,4'-DDT	ND	25.00	25.14	101	24.02	96	50-135	5	0-25	
Delta-BHC	ND	25.00	19.57	78	19.49	78	50-135	0	0-25	
Dieldrin	ND	25.00	21.16	85	20.39	82	50-135	4	0-25	
Endosulfan I	ND	25.00	19.48	78	18.59	74	50-135	5	0-25	
Endosulfan II	ND	25.00	23.26	93	22.28	89	50-135	4	0-25	
Endosulfan Sulfate	ND	25.00	24.83	99	23.67	95	50-135	5	0-25	
Endrin	ND	25.00	17.79	71	17.06	68	50-135	4	0-25	
Endrin Aldehyde	ND	25.00	24.25	97	22.79	91	50-135	6	0-25	
Gamma-BHC	ND	25.00	18.61	74	17.56	70	50-135	6	0-25	
Heptachlor	ND	25.00	18.52	74	17.35	69	50-135	7	0-25	
Heptachlor Epoxide	ND	25.00	19.50	78	18.53	74	50-135	5	0-25	
Methoxychlor	ND	25.00	25.23	101	24.04	96	50-135	5	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-26142</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 15:14</b>	<b>180405L07</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	25.31	101	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2915</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 11:13</b>	<b>180330L09</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.51	94	50-135	36-149	
Alpha-BHC		25.00	24.33	97	50-135	36-149	
Beta-BHC		25.00	23.32	93	50-135	36-149	
4,4'-DDD		25.00	23.77	95	50-135	36-149	
4,4'-DDE		25.00	23.44	94	50-135	36-149	
4,4'-DDT		25.00	23.48	94	50-135	36-149	
Delta-BHC		25.00	24.20	97	50-135	36-149	
Dieldrin		25.00	24.22	97	50-135	36-149	
Endosulfan I		25.00	24.35	97	50-135	36-149	
Endosulfan II		25.00	24.12	96	50-135	36-149	
Endosulfan Sulfate		25.00	23.75	95	50-135	36-149	
Endrin		25.00	22.30	89	50-135	36-149	
Endrin Aldehyde		25.00	24.00	96	50-135	36-149	
Gamma-BHC		25.00	24.32	97	50-135	36-149	
Heptachlor		25.00	24.15	97	50-135	36-149	
Heptachlor Epoxide		25.00	23.48	94	50-135	36-149	
Methoxychlor		25.00	22.91	92	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2916</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 11:43</b>	<b>180330L10</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.16	93	50-135	36-149	
Alpha-BHC		25.00	23.99	96	50-135	36-149	
Beta-BHC		25.00	22.95	92	50-135	36-149	
4,4'-DDD		25.00	23.26	93	50-135	36-149	
4,4'-DDE		25.00	22.95	92	50-135	36-149	
4,4'-DDT		25.00	23.08	92	50-135	36-149	
Delta-BHC		25.00	23.74	95	50-135	36-149	
Dieldrin		25.00	23.81	95	50-135	36-149	
Endosulfan I		25.00	24.12	96	50-135	36-149	
Endosulfan II		25.00	23.67	95	50-135	36-149	
Endosulfan Sulfate		25.00	23.31	93	50-135	36-149	
Endrin		25.00	21.96	88	50-135	36-149	
Endrin Aldehyde		25.00	23.25	93	50-135	36-149	
Gamma-BHC		25.00	23.90	96	50-135	36-149	
Heptachlor		25.00	23.85	95	50-135	36-149	
Heptachlor Epoxide		25.00	23.01	92	50-135	36-149	
Methoxychlor		25.00	22.39	90	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

## Sample Analysis Summary Report

Work Order: 18-03-2553

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3545	1096	GC 41	1

## Glossary of Terms and Qualifiers

Work Order: 18-03-2553

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



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CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY

**18-03-2553**

Date 3/29/2018  
 Page 1 of 6

LABORATORY CLIENT: <b>Haley &amp; Aldrich, Inc.</b>		CLIENT PROJECT NAME / NO.: <b>Acc-OCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 Red Hill Ave. #155</b>		PROJECT CONTACT: <b>Colleen Cantfield / M. Raithe</b>		LAB CONTACT OR QUOTE NO.: <b>V. Patel</b>	
CITY: <b>COSTA MESA</b> STATE: <b>CA</b> ZIP: <b>92672</b>		GLOBAL ID: <b>—</b>		LOG CODE: <b>—</b>	
TEL: <b>714.371.1802</b> E-MAIL: <b>ccantfield@haleyaldrich.com</b>		SAMPLER(S) (PRINT): <b>R. Leeper</b>			
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) - <b>OCPS</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010747X <input type="checkbox"/> 6020747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>Lead (6010)</b>	
		DATE	TIME																					
1	UTAH3351-01A-035-01	3/29/18	0757	SOIL	1																			
2	UTAH3351-01A-045-01	3/29/18	0805	SOIL	1																			
3	UTAH3351-01B-005-01		0810	SOIL	1																			X
4	UTAH3351-01B-025-01		0815		1																			X
5	UTAH3351-01C-005-01		0822		1																			#
6	UTAH3351-01C-025-01		0826		1																			#
7	UTAH3351-01D-005-01		0830		1																			#
8	UTAH3351-01D-025-01		0835		1																			#
9	UTAH3351-02A-035-01		0848		1																			X
10	UTAH3351-02A-045-01	X	0905	X	1																			#

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>EC</i>	Date: <u>3/29/2018</u>	Time: <u>1630</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <u>3/29/18</u>	Time: <u>1815</u>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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CHAIN-OF-CUSTODY RECORD

Date 3/29/2018  
Page 2 of 6

WO NO. / LAB USE ONLY  
2553

LABORATORY CLIENT: **HALEY + ALDRICH, INC.**  
 ADDRESS: **3187 RED HILL AVE. #155**  
 CITY: **COSTA MESA** STATE: **CA** ZIP: **92672**  
 TEL: **714.371.1802** E-MAIL: **ccanfield@haleyaldrich.com**  
 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 EDD  
 COELT EDF  OTHER **EQUIS**

CLIENT PROJECT NAME / NO.: **ACC-UCR 131648-003/2.2** P.O. NO.: **131648-003/2.2**  
 PROJECT CONTACT: **COLLEEN CANFIELD / M. RAETHEL** LAB CONTACT OR QUOTE NO.: **V. PATEL**  
 GLOBAL ID: **—** LOG CODE: **—** SAMPLER(S): (PRINT) **R. LEPPER**

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

SPECIAL INSTRUCTIONS:

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>-OCPs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/147X <input type="checkbox"/> 6020/147X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>		
		DATE	TIME																						
11	UTAH 3351-02A-035-02	3/29/18	0857	SOIL	1														X						
12	UTAH 3348-04A-035-01		0930																X						
13	UTAH 3348-04A-045-01		0935																H						
14	UTAH 3348-04B-005-01		0940																X					X	
15	UTAH 3348-04B-025-01		0945																X					X	
16	UTAH 3348-04C-005-01		0950																H					H	
17	UTAH 3348-04B-025-01		0955																H					H	
18	UTAH 3348-04D-005-01		1000																H					H	
19	UTAH 3348-04D-025-01		1005																H					H	
20	UTAH 3348-03A-035-01		1015																X						

Relinquished by: (Signature) [Signature]  
 Relinquished by: (Signature) [Signature]  
 Relinquished by: (Signature)

Received by: (Signature/Affiliation) [Signature] Date: 3/29/2018 Time: 1630  
 Received by: (Signature/Affiliation) [Signature] Date: 3/29/18 Time: 1815  
 Received by: (Signature/Affiliation)



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CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY

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Date 3/29/2018  
 Page 3 of 6

LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 RED HILL AVE. #155</b>		PROJECT CONTACT: <b>C. CANFIELD / M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>V. PATEL</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	GLOBAL ID: <b>---</b>		LOG CODE: <b>---</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		SAMPLER(S): (PRINT) <b>R. LEEPER</b>		
TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>ocp<sub>s</sub></b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/147X <input type="checkbox"/> 6020/147X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>		
		DATE	TIME																						
21	UTAH 3348-03A-035-02	3/29/18	1020	SOIL	1																				
22	UTAH 3348-03A-045-01		1025																						
23	UTAH 3348-03A-035-01		1040																						
24	UTAH 3348-01A-045-01		1045																						
25	UTAH 3304-04A-035-01		1110																						
26	UTAH 3304-04A-035-02		1115																						
27	UTAH 3304-04A-045-01		1120																						
28	UTAH 3304-02A-035-01		1130																						
29	UTAH 3304-02A-045-01		1140																						
30	UTAH 3304-02B-005-01		1145																						X

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>EC</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1825</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:





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CHAIN-OF-CUSTODY RECORD

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Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY &amp; ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 Red Hill Ave. # 155</b>		PROJECT CONTACT: <b>COLLEEN CANFIELD/M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>J. PATEL</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	GLOBAL ID: —		LOG CODE: —
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		SAMPLER(S) (PRINT) <b>R. LEEPER</b>		
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
31	UTAH3304-02B-005-02	3/29/18	1150	SOIL	1																			X	X	
32	UTAH 3304-02B-025-01		1155																						X	X
33	UTAH 3304-02C-005-01		1200																						H	H
34	UTAH 3304-02C-025-01		1205																						H	H
35	UTAH 3304-02D-005-01		1210																						H	H
36	UTAH 3304-02D-025-01		1215																						H	H
37	BLA10890-01B-005-01		1320																						X	X
38	BLA10890-01B-005-02		1325																						X	X
39	BLA10890-01B-025-01		1330																						X	X
40	BLA10890-01C-005-01		1335																						H	H

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:







SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: HALEY & ALDRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.4 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1057

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>z</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO<sub>3</sub>, **na** = NaOH, **na<sub>2</sub>** = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, **p** = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

**s** = H<sub>2</sub>SO<sub>4</sub>, **u** = ultra-pure, **x** = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, **z**na = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1057

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Haley & ALBRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.5 °C (w/ CF): 2.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1053

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>z</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (1)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1053

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Environmental  
**Calscience**

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.



**WORK ORDER NUMBER: 18-03-2553**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

### Analytical Report For

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** ACC-UCR 131648-003/2.2

**Attention:** Colleen Canfield  
 3187 Red Hill Avenue  
 Suite 155  
 Costa Mesa, CA 92626-3453

Approved for release on 04/16/2018 by:  
 Virendra Patel  
 Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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Work Order Number: 18-03-2553

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/29/18. They were assigned to Work Order 18-03-2553.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq$  15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2553
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	131648-003/2.2
	Date/Time Received:	03/29/18 18:15
	Number of Containers:	51

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
UTAH3348-04A-045-01	18-03-2553-13	03/29/18 09:35	1	Solid
UTAH3348-04C-005-01	18-03-2553-16	03/29/18 09:50	1	Solid
UTAH3348-01A-035-01	18-03-2553-23	03/29/18 10:40	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2553  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/29/18

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
UTAH3348-04A-045-01 (18-03-2553-13)						
Chlordane	650		50	ug/kg	EPA 8081A	EPA 3545
UTAH3348-04C-005-01 (18-03-2553-16)						
Chlordane	1500		250	ug/kg	EPA 8081A	EPA 3545
Heptachlor	6.2		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	24		10	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04A-045-01	18-03-2553-13-A	03/29/18 09:35	Solid	GC 44	04/10/18	04/11/18 17:49	180410L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	650	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	34	24-168	
2,4,5,6-Tetrachloro-m-Xylene	26	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04C-005-01	18-03-2553-16-A	03/29/18 09:50	Solid	GC 44	04/10/18	04/11/18 18:04	180410L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	6.2	5.0	1.00	
Heptachlor Epoxide	24	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

UTAH3348-04C-005-01	18-03-2553-16-A	03/29/18 09:50	Solid	GC 44	04/10/18	04/12/18 10:43	180410L09
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Parameter	Result	RL	DF	Qualifiers
Chlordane	1500	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	24-168	
2,4,5,6-Tetrachloro-m-Xylene	96	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-01A-035-01	18-03-2553-23-A	03/29/18 10:40	Solid	GC 41	03/30/18	04/03/18 16:35	180330L09

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	9.9	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	9.9	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	9.9	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	99	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
Decachlorobiphenyl	107	24-168		
2,4,5,6-Tetrachloro-m-Xylene	90	25-145		


  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2915</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 10:58</b>	<b>180330L09</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	94	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2927</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/10/18</b>	<b>04/11/18 17:35</b>	<b>180410L09</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	93	24-168	
2,4,5,6-Tetrachloro-m-Xylene	99	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
UTAH3351-02A-035-01	Sample	Solid	GC 41	03/30/18	04/02/18 14:34	180330S09
UTAH3351-02A-035-01	Matrix Spike	Solid	GC 41	03/30/18	04/02/18 12:19	180330S09
UTAH3351-02A-035-01	Matrix Spike Duplicate	Solid	GC 41	03/30/18	04/02/18 12:34	180330S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	20.62	82	20.79	83	50-135	1	0-25	
Alpha-BHC	ND	25.00	19.99	80	20.27	81	50-135	1	0-25	
Beta-BHC	ND	25.00	22.42	90	22.53	90	50-135	0	0-25	
4,4'-DDD	ND	25.00	28.14	113	28.64	115	50-135	2	0-25	
4,4'-DDE	ND	25.00	30.58	122	30.38	122	50-135	1	0-25	
4,4'-DDT	ND	25.00	30.31	121	30.26	121	50-135	0	0-25	
Delta-BHC	ND	25.00	23.32	93	23.37	93	50-135	0	0-25	
Dieldrin	ND	25.00	27.35	109	26.86	107	50-135	2	0-25	
Endosulfan I	ND	25.00	24.01	96	23.44	94	50-135	2	0-25	
Endosulfan II	ND	25.00	26.94	108	26.09	104	50-135	3	0-25	
Endosulfan Sulfate	ND	25.00	27.45	110	26.71	107	50-135	3	0-25	
Endrin	ND	25.00	21.60	86	22.27	89	50-135	3	0-25	
Endrin Aldehyde	ND	25.00	25.30	101	23.81	95	50-135	6	0-25	
Gamma-BHC	ND	25.00	21.03	84	21.20	85	50-135	1	0-25	
Heptachlor	ND	25.00	21.53	86	21.46	86	50-135	0	0-25	
Heptachlor Epoxide	ND	25.00	25.30	101	25.46	102	50-135	1	0-25	
Methoxychlor	ND	25.00	26.87	107	27.58	110	50-135	3	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-04-0584-22	Sample	Solid	GC 44	04/10/18	04/12/18 12:09	180410S09
18-04-0584-22	Matrix Spike	Solid	GC 44	04/10/18	04/12/18 11:26	180410S09
18-04-0584-22	Matrix Spike Duplicate	Solid	GC 44	04/10/18	04/12/18 11:40	180410S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	23.05	92	23.84	95	50-135	3	0-25	
Alpha-BHC	ND	25.00	22.44	90	23.77	95	50-135	6	0-25	
Beta-BHC	ND	25.00	21.96	88	22.74	91	50-135	3	0-25	
4,4'-DDD	ND	25.00	25.82	103	24.96	100	50-135	3	0-25	
4,4'-DDE	ND	25.00	26.66	107	25.84	103	50-135	3	0-25	
4,4'-DDT	ND	25.00	30.56	122	27.00	108	50-135	12	0-25	
Delta-BHC	ND	25.00	24.45	98	24.62	98	50-135	1	0-25	
Dieldrin	ND	25.00	24.90	100	25.06	100	50-135	1	0-25	
Endosulfan I	ND	25.00	24.28	97	25.32	101	50-135	4	0-25	
Endosulfan II	ND	25.00	25.94	104	25.04	100	50-135	4	0-25	
Endosulfan Sulfate	ND	25.00	25.98	104	24.26	97	50-135	7	0-25	
Endrin	ND	25.00	22.04	88	19.66	79	50-135	11	0-25	
Endrin Aldehyde	ND	25.00	20.30	81	26.14	105	50-135	25	0-25	
Gamma-BHC	ND	25.00	22.96	92	24.25	97	50-135	5	0-25	
Heptachlor	ND	25.00	23.44	94	24.30	97	50-135	4	0-25	
Heptachlor Epoxide	ND	25.00	23.18	93	24.48	98	50-135	5	0-25	
Methoxychlor	ND	25.00	27.44	110	23.81	95	50-135	14	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2915</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/30/18</b>	<b>04/02/18 11:13</b>	<b>180330L09</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.51	94	50-135	36-149	
Alpha-BHC		25.00	24.33	97	50-135	36-149	
Beta-BHC		25.00	23.32	93	50-135	36-149	
4,4'-DDD		25.00	23.77	95	50-135	36-149	
4,4'-DDE		25.00	23.44	94	50-135	36-149	
4,4'-DDT		25.00	23.48	94	50-135	36-149	
Delta-BHC		25.00	24.20	97	50-135	36-149	
Dieldrin		25.00	24.22	97	50-135	36-149	
Endosulfan I		25.00	24.35	97	50-135	36-149	
Endosulfan II		25.00	24.12	96	50-135	36-149	
Endosulfan Sulfate		25.00	23.75	95	50-135	36-149	
Endrin		25.00	22.30	89	50-135	36-149	
Endrin Aldehyde		25.00	24.00	96	50-135	36-149	
Gamma-BHC		25.00	24.32	97	50-135	36-149	
Heptachlor		25.00	24.15	97	50-135	36-149	
Heptachlor Epoxide		25.00	23.48	94	50-135	36-149	
Methoxychlor		25.00	22.91	92	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents



## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2927</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/10/18</b>	<b>04/12/18 11:12</b>	<b>180410L09</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.78	91	50-135	36-149	
Alpha-BHC		25.00	22.40	90	50-135	36-149	
Beta-BHC		25.00	21.89	88	50-135	36-149	
4,4'-DDD		25.00	23.10	92	50-135	36-149	
4,4'-DDE		25.00	26.40	106	50-135	36-149	
4,4'-DDT		25.00	30.40	122	50-135	36-149	
Delta-BHC		25.00	24.38	98	50-135	36-149	
Dieldrin		25.00	24.46	98	50-135	36-149	
Endosulfan I		25.00	24.36	97	50-135	36-149	
Endosulfan II		25.00	25.74	103	50-135	36-149	
Endosulfan Sulfate		25.00	25.22	101	50-135	36-149	
Endrin		25.00	20.26	81	50-135	36-149	
Endrin Aldehyde		25.00	21.13	85	50-135	36-149	
Gamma-BHC		25.00	22.80	91	50-135	36-149	
Heptachlor		25.00	23.27	93	50-135	36-149	
Heptachlor Epoxide		25.00	23.12	92	50-135	36-149	
Methoxychlor		25.00	27.18	109	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

## Sample Analysis Summary Report

Work Order: 18-03-2553

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8081A	EPA 3545	669	GC 44	1
EPA 8081A	EPA 3545	1096	GC 41	1

## Glossary of Terms and Qualifiers

Work Order: 18-03-2553

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



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CHAIN-OF-CUSTODY RECORD

Date 3/29/2018  
Page 2 of 6

WO NO. / LAB USE ONLY  
2553

LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.:		P.O. NO.:	
ADDRESS: <b>3187 RED HILL AVE. #155</b>		<b>ACC-UCR 131648-003/2.2</b>		<b>131648-003/2.2</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	PROJECT CONTACT: <b>COLLEEN CANNFIELD / M. RAETHEL</b>		LAB CONTACT OR QUOTE NO. <b>V. PATEL</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccannfield@haleyaldrich.com</b>		GLOBAL ID: —	LOG CODE: —	SAMPLER(S): (PRINT) <b>R. LEEPER</b>

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY    24 HR    48 HR    72 HR    5 DAYS    STANDARD

EDD  
 COELT EDF    OTHER   **EQUIS**

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

SPECIAL INSTRUCTIONS:

Revised COC received from Matt Raithel (H&A) on 04/10/2018 at 09:59am - Virendra (ECI)

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8280 <input type="checkbox"/> —	VOCs (8280)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>-OCPs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 60107/47X <input type="checkbox"/> 60207/47X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (609) (473)</b>			
		DATE	TIME																							
11	UTAH 3351-02A-035-02	3/29/18	0857	Soil	1																					
12	UTAH 3348-04A-035-01		0930																							
13	UTAH 3348-04A-045-01		0935																							
14	UTAH 3348-04B-005-01		0940																							
15	UTAH 3348-04B-025-01		0945																						X	
16	UTAH 3348-04C-005-01		0950																						X	
17	UTAH 3348-04B-025-01		0955																						H	
18	UTAH 3348-04D-005-01		1000																						H	
19	UTAH 3348-04D-025-01		1005																						H	
20	UTAH 3348-03A-035-01		1015																						X	

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>9 EC</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>9</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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WO NO. / LAB USE ONLY  
**(2553)**

Date 3/29/2018  
Page 4 of 86

LABORATORY CLIENT:  
**HALEY & ALDRICH, INC.**

ADDRESS:  
**3187 RED HILL AVE. # 155**

CITY: **COSTA MESA** STATE: **CA** ZIP: **92672**

TEL: **714.371.1802** E-MAIL: **ccanfield@haleyaldrich.com**

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

EDD  
 COELT EDF  OTHER **EQUIS**

CLIENT PROJECT NAME / NO.:  
**ACC-UCR 131648-003/2.2**

P.O. NO.:  
**131648-003/2.2**

PROJECT CONTACT:  
**COLLEEN CANFIELD/M. RAITHEL**

LAB CONTACT OR QUOTE NO.:  
**J. PATEL**

GLOBAL ID: **—** LOG CODE: **—**

SAMPLER(S): (PRINT)  
**R. LEOPER**

REQUESTED ANALYSES  
Please check box or fill in blank as needed

Revised COC received from Matt Raithel (H&A) on 04/10/2018 at 09:59am - Virendra (ECI)

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C8-C36 <input type="checkbox"/> C8-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>OCFs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010747X <input type="checkbox"/> 6020747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
31	UTAH3304-02B-005-02	3/29/18	1150	SOIL	1																					
32	UTAH3304-02B-025-01		1155																							
33	UTAH3304-02C-005-01		1200																							
34	UTAH3304-02C-025-01		1205																							
35	UTAH3304-02D-005-01		1210																							
36	UTAH3304-02D-025-01		1215																							
37	BLA10890-01B005-01		1320																							
38	BLA10890-01B-005-02		1325																							
39	BLA10890-01B-025-01		1330																							
40	BLA10890-01C-005-01		1335																							

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Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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18-03-2553

Date 3/29/2018  
Page 1 of 6

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave. #155  
 CITY: COSTA MESA STATE: CA ZIP: 92672  
 TEL: 714.371.1802 E-MAIL: ccanfield@haleyaldrich.com  
 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 EDD  
 COELT EDF  OTHER EQUIS

CLIENT PROJECT NAME / NO.: ACC-UCR 131648-003/2.2 P.O. NO.: 131648-003/2.2  
 PROJECT CONTACT: Colleen Canfield / M. Raithe LAB CONTACT OR QUOTE NO.: V. Patel  
 GLOBAL ID: — LOG CODE: — SAMPLER(S) (PRINT): R. Leeper

REQUESTED ANALYSES  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) - OCPs	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010747X <input type="checkbox"/> 6020747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	Lead (6010)	
		DATE	TIME																					
1	UTAH3351-01A-035-01	3/29/18	0757	SOIL	1													X						
2	UTAH3351-01A-045-01	3/29/18	0805	SOIL	1													X						
3	UTAH3351-01B-005-01		0810	SOIL	1													X					X	
4	UTAH3351-01B-025-01		0815		1													X					X	
5	UTAH3351-01C-005-01		0822		1													H					H	
6	UTAH3351-01C-025-01		0826		1													H					H	
7	UTAH3351-01D-005-01		0830		1													H					H	
8	UTAH3351-01D-025-01		0835		1													H					H	
9	UTAH3351-02A-035-01		0848		1													X						
10	UTAH3351-02A-045-01	X	0905	X	1													H						

Relinquished by: (Signature) <u>R. Leeper</u>	Received by: (Signature/Affiliation) <u>EC</u>	Date: <u>3/29/2018</u>	Time: <u>1630</u>
Relinquished by: (Signature) <u>[Signature]</u>	Received by: (Signature/Affiliation) <u>[Signature]</u>	Date: <u>3/29/18</u>	Time: <u>1815</u>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:





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Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.:		P.O. NO.:	
ADDRESS: <b>3187 RED HILL AVE. #155</b>		<b>ACC-UCR 131648-003/2.2</b>		<b>131648-003/2.2</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	PROJECT CONTACT: <b>COLLEEN CANFIELD / M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>V. PATEL</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		GLOBAL ID: —	LOG CODE: —	SAMPLER(S): (PRINT) <b>R. LEPPER</b>
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>			<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.		
SPECIAL INSTRUCTIONS:					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>-OCPs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/147X <input type="checkbox"/> 6020/147X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>		
		DATE	TIME																						
11	UTAH 3351-02A-035-02	3/29/18	0857	SOIL	1																				
12	UTAH 3348-04A-035-01		0930																						
13	UTAH 3348-04A-045-01		0935																						
14	UTAH 3348-04B-005-01		0940																						
15	UTAH 3348-04B-025-01		0945																						
16	UTAH 3348-04C-005-01		0950																						
17	UTAH 3348-04B-025-01		0955																						
18	UTAH 3348-04D-005-01		1000																						
19	UTAH 3348-04D-025-01		1005																						
20	UTAH 3348-03A-035-01		1015																						

Relinquished by: (Signature) <i>R. Lepper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:







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**2553**

Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY &amp; ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 RED HILL AVE. # 155</b>		PROJECT CONTACT: <b>COLLEEN CANFIELD/M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>J. PATEL</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	GLOBAL ID: —		LOG CODE: —
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		SAMPLER(S) (PRINT) <b>R. LEEPER</b>		
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
31	UTAH3304-02B-005-02	3/29/18	1150	SOIL	1																			X	X	
32	UTAH 3304-02B-025-01		1155																						X	X
33	UTAH 3304-02C-005-01		1200																						H	H
34	UTAH 3304-02C-025-01		1205																						H	H
35	UTAH 3304-02D-005-01		1210																						H	H
36	UTAH 3304-02D-025-01		1215																						H	H
37	BLA10890-01B-005-01		1320																						X	X
38	BLA10890-01B-005-02		1325																						X	X
39	BLA10890-01B-025-01		1330																						X	X
40	BLA10890-01C-005-01		1335																						H	H

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:





SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: HALEY & ALDRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.4 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1057

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>z</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO<sub>3</sub>, **na** = NaOH, **na<sub>2</sub>** = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, **p** = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

**s** = H<sub>2</sub>SO<sub>4</sub>, **u** = ultra-pure, **x** = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, **z**na = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1057

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Haley & ALBRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.5 °C (w/ CF): 2.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1053

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>znna</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (1)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1053

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CalScience

Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.



**WORK ORDER NUMBER: 18-03-2553**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** ACC-UCR 131648-003/2.2

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/25/2018 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins CalScience (CalScience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, CalScience is not responsible, legally or otherwise. The client or recipient agrees to indemnify CalScience for any defense to any litigation which may arise.

Client Project Name: ACC-UCR 131648-003/2.2

Work Order Number: 18-03-2553

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/29/18. They were assigned to Work Order 18-03-2553.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



## Sample Summary

---

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2553
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	131648-003/2.2
	Date/Time Received:	03/29/18 18:15
	Number of Containers:	51

Attn: Colleen Canfield

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
UTAH3348-04D-005-01	18-03-2553-18	03/29/18 10:00	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2553  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/29/18

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
UTAH3348-04D-005-01 (18-03-2553-18) Chlordane	83	ET	51	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

  
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\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UTAH3348-04D-005-01	18-03-2553-18-A	03/29/18 10:00	Solid	GC 41	04/16/18	04/17/18 15:06	180416L08

Comment(s): - Sample extracted outside recommended holding time.

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.1	1.00	ET
Alpha-BHC	ND	10	1.00	ET
Beta-BHC	ND	5.1	1.00	ET
Chlordane	83	51	1.00	ET
4,4'-DDD	ND	5.1	1.00	ET
4,4'-DDE	ND	5.1	1.00	ET
4,4'-DDT	ND	5.1	1.00	ET
Delta-BHC	ND	10	1.00	ET
Dieldrin	ND	5.1	1.00	ET
Endosulfan I	ND	5.1	1.00	ET
Endosulfan II	ND	5.1	1.00	ET
Endosulfan Sulfate	ND	5.1	1.00	ET
Endrin	ND	5.1	1.00	ET
Endrin Aldehyde	ND	5.1	1.00	ET
Endrin Ketone	ND	5.1	1.00	ET
Gamma-BHC	ND	5.1	1.00	ET
Heptachlor	ND	5.1	1.00	ET
Heptachlor Epoxide	ND	10	1.00	ET
Methoxychlor	ND	5.1	1.00	ET
Toxaphene	ND	100	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	24-168	
2,4,5,6-Tetrachloro-m-Xylene	110	25-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2933</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/16/18</b>	<b>04/17/18 14:21</b>	<b>180416L08</b>

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	111	25-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
 Work Order: 18-03-2553  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
UTAH3348-04D-005-01	Sample	Solid	GC 41	04/16/18	04/17/18 15:06	180416S08
UTAH3348-04D-005-01	Matrix Spike	Solid	GC 41	04/16/18	04/17/18 14:36	180416S08
UTAH3348-04D-005-01	Matrix Spike Duplicate	Solid	GC 41	04/16/18	04/17/18 14:51	180416S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	26.36	105	27.08	108	50-135	3	0-25	
Alpha-BHC	ND	25.00	26.60	106	27.00	108	50-135	1	0-25	
Beta-BHC	ND	25.00	25.64	103	25.98	104	50-135	1	0-25	
4,4'-DDD	ND	25.00	39.13	157	39.32	157	50-135	0	0-25	3
4,4'-DDE	ND	25.00	30.73	123	31.10	124	50-135	1	0-25	
4,4'-DDT	ND	25.00	24.79	99	25.22	101	50-135	2	0-25	
Delta-BHC	ND	25.00	26.74	107	27.16	109	50-135	2	0-25	
Dieldrin	ND	25.00	28.56	114	28.92	116	50-135	1	0-25	
Endosulfan I	ND	25.00	25.43	102	25.83	103	50-135	2	0-25	
Endosulfan II	ND	25.00	26.39	106	26.66	107	50-135	1	0-25	
Endosulfan Sulfate	ND	25.00	26.69	107	28.17	113	50-135	5	0-25	
Endrin	ND	25.00	25.31	101	26.03	104	50-135	3	0-25	
Endrin Aldehyde	ND	25.00	22.28	89	22.39	90	50-135	0	0-25	
Gamma-BHC	ND	25.00	26.57	106	27.03	108	50-135	2	0-25	
Heptachlor	ND	25.00	26.87	107	27.39	110	50-135	2	0-25	
Heptachlor Epoxide	ND	25.00	29.53	118	30.12	120	50-135	2	0-25	
Methoxychlor	ND	25.00	25.67	103	25.52	102	50-135	1	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/18  
Work Order: 18-03-2553  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2933</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/16/18</b>	<b>04/17/18 15:36</b>	<b>180416L08</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	27.43	110	50-135	36-149	
Alpha-BHC		25.00	28.78	115	50-135	36-149	
Beta-BHC		25.00	27.10	108	50-135	36-149	
4,4'-DDD		25.00	34.16	137	50-135	36-149	ME
4,4'-DDE		25.00	30.37	121	50-135	36-149	
4,4'-DDT		25.00	18.41	74	50-135	36-149	
Delta-BHC		25.00	28.70	115	50-135	36-149	
Dieldrin		25.00	29.17	117	50-135	36-149	
Endosulfan I		25.00	28.44	114	50-135	36-149	
Endosulfan II		25.00	28.63	115	50-135	36-149	
Endosulfan Sulfate		25.00	29.71	119	50-135	36-149	
Endrin		25.00	22.98	92	50-135	36-149	
Endrin Aldehyde		25.00	30.65	123	50-135	36-149	
Gamma-BHC		25.00	28.77	115	50-135	36-149	
Heptachlor		25.00	27.52	110	50-135	36-149	
Heptachlor Epoxide		25.00	28.38	114	50-135	36-149	
Methoxychlor		25.00	19.57	78	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 1

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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# Sample Analysis Summary Report

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Work Order: 18-03-2553

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8081A	EPA 3545	669	GC 41	1



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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.





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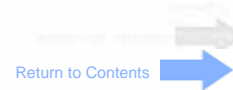
WO NO. / LAB USE ONLY  
2553

LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO. <b>ACC-UCR 131648-003/2.2</b>	P.O. NO. <b>131648-003/2.2</b>
ADDRESS: <b>3187 RED HILL AVE. #155</b>		PROJECT CONTACT: <b>COLLEEN CAMPFIELD / M. RAITHEL</b>	LAB CONTACT OR QUOTE NO. <b>V. PATEL</b>
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	SAMPLER(S): (PRINT) <b>R. LEEPER</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccampfield@haleyaldrich.com</b>	GLOBAL ID: <b>—</b>	LOG CODE: <b>—</b>
TURNDOWN TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>			

REQUESTED ANALYSES  
 Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPHig <input type="checkbox"/> GRO	<input type="checkbox"/> TPHig <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C8 <input type="checkbox"/> C8-C14	TPH	BTX / MTBE <input type="checkbox"/> B260 <input type="checkbox"/>	VOCs (8260)	Organics (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8061) <b>-OCPs</b>	PCBs (8062)	PAHs <input type="checkbox"/> B270 <input type="checkbox"/> B270 SIM	T22 Metals <input type="checkbox"/> 6010747X <input type="checkbox"/> 6020747X	Cd(VI) <input type="checkbox"/> 7106 <input type="checkbox"/> 7109 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>		
		DATE	TIME																						
11	UTAH3351-02A-035-02	3/29/18	0857	SoxL	1																				
12	UTAH3348-04A-035-01		0930																						
13	UTAH3348-04A-045-01		0935																						
14	UTAH3348-04B-005-01		0940																						
15	UTAH3348-04B-025-01		0945																						
16	UTAH3348-04C-005-01		0950																						
17	UTAH3348-04B-025-01		0955																						
18	UTAH3348-04D-005-01		1000																						
19	UTAH3348-04D-025-01		1005																						
20	UTAH3348-03A-035-01		1015																						

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Initiation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Initiation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Initiation)	Date:	Time:





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LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>			CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>			P.O. NO.: <b>131648-003/2.2</b>			
ADDRESS: <b>3187 RED HILL AVE. #155</b>			PROJECT CONTACT: <b>COLLEEN CANFIELD / M. RAETHEL</b>			LAB CONTACT OR QUOTE NO.: <b>V. PATEL</b>			
CITY: <b>COSTA MESA</b>		STATE: <b>CA</b>	ZIP: <b>92672</b>		GLOBAL ID: <b>—</b>			LOG CODE: <b>—</b>	
TEL: <b>714.371.1802</b>		E-MAIL: <b>ccanfield@haleyaldrich.com</b>				SAMPLER(S): (PRINT) <b>R. LEEPER</b>			

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY    24 HR    48 HR    72 HR    5 DAYS    STANDARD

EDD  
 COELT EDF    OTHER   **EQUIS**

REQUESTED ANALYSES  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) <input type="checkbox"/> GRO	TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8280 <input type="checkbox"/>	VOCs (8280)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) -OCPs	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 60107/47X <input type="checkbox"/> 60207/47X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	LEAD (6010)		
		DATE	TIME																						
11	UTAH 3351-02A-035-02	3/29/18	0857	Soil	1																				
12	UTAH 3348-04A-035-01		0930																						
13	UTAH 3348-04A-045-01		0935																						
14	UTAH 3348-04B-005-01		0940																						
15	UTAH 3348-04B-025-01		0945																						X
16	UTAH 3348-04C-005-01		0950																						X
17	UTAH 3348-04B-025-01		0955																						H
18	UTAH 3348-04D-005-01		1000																						H
19	UTAH 3348-04D-025-01		1005																						H
20	UTAH 3348-03A-035-01		1015																						X

Revised COC received from Matt Raithel (H&A) on 04/10/2018 at 09:59am - Virendra (ECI)

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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**(2553)**

Date 3/29/2018  
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LABORATORY CLIENT:  
**HALEY & ALDRICH, INC.**

ADDRESS:  
**3187 RED HILL AVE. # 155**

CITY: **COSTA MESA** STATE: **CA** ZIP: **92672**

TEL: **714.371.1802** E-MAIL: **ccanfield@haleyaldrich.com**

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

EDD  
 COELT EDF  OTHER **EQUIS**

CLIENT PROJECT NAME / NO.:  
**ACC-UCR 131648-003/2.2**

P.O. NO.:  
**131648-003/2.2**

PROJECT CONTACT:  
**COLLEEN CANFIELD/M. RAITHEL**

LAB CONTACT OR QUOTE NO.:  
**J. PATEL**

GLOBAL ID: **—** LOG CODE: **—**

SAMPLER(S): (PRINT)  
**R. LEOPER**

REQUESTED ANALYSES  
Please check box or fill in blank as needed

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C8-C38 <input type="checkbox"/> C8-C44	TPH	BTEX / MTBE <input type="checkbox"/> B260 <input type="checkbox"/>	VOCs (B260)	Oxygenates (B260)	Prep (B035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (B270)	Pesticides (B081) <b>OCs</b>	PCBs (B082)	PAHs <input type="checkbox"/> B270 <input type="checkbox"/> B270 SIM	T22 Metals <input type="checkbox"/> B010747X <input type="checkbox"/> B020747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
31	UTAH3304-02B-005-02	3/29/18	1150	SOIL	1																					
32	UTAH3304-02B-025-01		1155																							
33	UTAH3304-02C-005-01		1200																							
34	UTAH3304-02C-025-01		1205																							
35	UTAH3304-02D-005-01		1210																							
36	UTAH3304-02D-025-01		1215																							
37	BLA10890-01B-005-01		1320																							
38	BLA10890-01B-005-02		1325																							
39	BLA10890-01B-025-01		1330																							
40	BLA10890-01C-005-01		1335																							

Revised COC received from Matt Raithel (H&A) on 04/10/2018 at 09:59am - Virendra (ECI)

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <u>3/29/2018</u>	Time: <u>1630</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <u>3/29/18</u>	Time: <u>1815</u>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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WO NO. / LAB USE ONLY

**18-03-2553**

Date 3/29/2018  
Page 1 of 6

LABORATORY CLIENT: <b>Haley &amp; Aldrich, Inc.</b>		CLIENT PROJECT NAME / NO.: <b>Acc-OCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 Red Hill Ave. #155</b>		PROJECT CONTACT: <b>Colleen Cantfield / M. Raithe</b>		LAB CONTACT OR QUOTE NO.: <b>V. Patel</b>	
CITY: <b>COSTA MESA</b> STATE: <b>CA</b> ZIP: <b>92672</b>		GLOBAL ID: <b>—</b>		LOG CODE: <b>—</b>	
TEL: <b>714.371.1802</b> E-MAIL: <b>ccantfield@haleyaldrich.com</b>		SAMPLER(S) (PRINT): <b>R. Leeper</b>			
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) - <b>OCPS</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010747X <input type="checkbox"/> 6020747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>Lead (6010)</b>	
		DATE	TIME																					
1	UTAH3351-01A-035-01	3/29/18	0757	SOIL	1																			
2	UTAH3351-01A-045-01	3/29/18	0805	SOIL	1																			
3	UTAH3351-01B-005-01		0810	SOIL	1																			X
4	UTAH3351-01B-025-01		0815		1																			X
5	UTAH3351-01C-005-01		0822		1																			H
6	UTAH3351-01C-025-01		0826		1																			H
7	UTAH3351-01D-005-01		0830		1																			H
8	UTAH3351-01D-025-01		0835		1																			H
9	UTAH3351-02A-035-01		0848		1																			X
10	UTAH3351-02A-045-01	X	0905	X	1																			H

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>EC</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.:		P.O. NO.:	
ADDRESS: <b>3187 RED HILL AVE. #155</b>		ACC-UCR 131648-003/2.2		131648-003/2.2	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	PROJECT CONTACT: <b>COLLEEN CANFIELD / M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>V. PATEL</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		GLOBAL ID: <b>—</b>	LOG CODE: <b>—</b>	SAMPLER(S): (PRINT) <b>R. LEPPER</b>
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD			<p align="center"><b>REQUESTED ANALYSES</b></p> <p align="center">Please check box or fill in blank as needed.</p>		
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>-OCPs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/147X <input type="checkbox"/> 6020/147X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
	UTAH 3351-02A-035-02	3/29/18	0857	SOIL	1																					
	UTAH 3348-04A-035-01		0930																							
	UTAH 3348-04A-045-01		0935																							
	UTAH 3348-04B-005-01		0940																						X	
	UTAH 3348-04B-025-01		0945																						X	
	UTAH 3348-04C-005-01		0950																						H	
	UTAH 3348-04B-025-01		0955																						H	
	UTAH 3348-04D-005-01		1000																						H	
	UTAH 3348-04D-025-01		1005																						H	
	UTAH 3348-03A-035-01		1015																						X	

Relinquished by: (Signature) <i>R. Lepper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:





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Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY + ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 RED HILL AVE. #155</b>		PROJECT CONTACT: <b>C. CANFIELD / M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>V. PATEL</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	GLOBAL ID: <b>---</b>		LOG CODE: <b>---</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		SAMPLER(S) (PRINT) <b>R. LEEPER</b>		
TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'):					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081) <b>OCs</b>	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/147X <input type="checkbox"/> 6020/147X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>		
		DATE	TIME																						
21	UTAH 3348-03A-035-02	3/29/18	1020	SOIL	1																				
22	UTAH 3348-03A-045-01		1025																						
23	UTAH 3348-03A-035-01		1040																						
24	UTAH 3348-01A-045-01		1045																						
25	UTAH 3304-04A-035-01		1110																						
26	UTAH 3304-04A-035-02		1115																						
27	UTAH 3304-04A-045-01		1120																						
28	UTAH 3304-02A-035-01		1130																						
29	UTAH 3304-02A-045-01		1140																						
30	UTAH 3304-02B-005-01		1145																						X

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1825</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



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WO NO. / LAB USE ONLY  
**2553**

Date 3/29/2018  
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LABORATORY CLIENT: <b>HALEY &amp; ALDRICH, INC.</b>		CLIENT PROJECT NAME / NO.: <b>ACC-UCR 131648-003/2.2</b>		P.O. NO.: <b>131648-003/2.2</b>	
ADDRESS: <b>3187 RED HILL AVE. # 155</b>		PROJECT CONTACT: <b>COLLEEN CANFIELD/M. RAETHEL</b>		LAB CONTACT OR QUOTE NO.: <b>J. PATEL</b>	
CITY: <b>COSTA MESA</b>	STATE: <b>CA</b>	ZIP: <b>92672</b>	GLOBAL ID: <b>—</b>		LOG CODE: <b>—</b>
TEL: <b>714.371.1802</b>	E-MAIL: <b>ccanfield@haleyaldrich.com</b>		SAMPLER(S): (PRINT) <b>R. LEEPER</b>		
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD <input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER <b>EQUIS</b>					
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.					

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<b>LEAD (6010)</b>			
		DATE	TIME																							
31	UTAH3304-02B-005-02	3/29/18	1150	SOIL	1																			X	X	
32	UTAH 3304-02B-025-01		1155																						X	X
33	UTAH 3304-02C-005-01		1200																						H	H
34	UTAH 3304-02C-025-01		1205																						H	H
35	UTAH 3304-02D-005-01		1210																						H	H
36	UTAH 3304-02D-025-01		1215																						H	H
37	BLA10890-01B-005-01		1320																						X	X
38	BLA10890-01B-005-02		1325																						X	X
39	BLA10890-01B-025-01		1330																						X	X
40	BLA10890-01C-005-01		1335																						H	H

Relinquished by: (Signature) <i>R. Leeper</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/2018</b>	Time: <b>1630</b>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: <b>3/29/18</b>	Time: <b>1815</b>
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:







SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: HALEY & ALDRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.4 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1057

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>z</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1057

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Haley & ALBRICH

DATE: 03/29/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.5 °C (w/ CF): 2.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR

Checked by: 1053

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOAh  VOAn<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  125PBz<sub>na</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PBn (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGBna<sub>2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PBna (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (✓)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

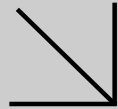
Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1140

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1053

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Calscience



**WORK ORDER NUMBER: 18-03-2654**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** ACC-UCR 131648-003/2.2

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/10/2018 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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 Work Order Number: 18-03-2654

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/30/18. They were assigned to Work Order 18-03-2654.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq$  15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2654
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	
	Date/Time Received:	03/30/18 17:05
	Number of Containers:	39

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
PEAC3397-03B-005-01	18-03-2654-1	03/30/18 07:15	1	Solid
PEAC3397-03B-025-01	18-03-2654-2	03/30/18 07:20	1	Solid
PEAC3397-03B-025-02	18-03-2654-3	03/30/18 07:25	1	Solid
PEAC3397-03C-005-01	18-03-2654-4	03/30/18 07:30	1	Solid
PEAC3397-03C-025-01	18-03-2654-5	03/30/18 07:35	1	Solid
PEAC3397-03D-005-01	18-03-2654-6	03/30/18 07:40	1	Solid
PEAC3397-03D-025-01	18-03-2654-7	03/30/18 07:45	1	Solid
PEAC3392-04A-035-01	18-03-2654-8	03/30/18 08:00	1	Solid
PEAC3392-04A-045-01	18-03-2654-9	03/30/18 08:05	1	Solid
PEAC3392-04B-005-01	18-03-2654-10	03/30/18 08:10	1	Solid
PEAC3392-04B-005-02	18-03-2654-11	03/30/18 08:15	1	Solid
PEAC3392-04B-025-01	18-03-2654-12	03/30/18 08:20	1	Solid
PEAC3392-04C-005-01	18-03-2654-13	03/30/18 08:25	1	Solid
PEAC3392-04C-025-01	18-03-2654-14	03/30/18 08:30	1	Solid
PEAC3392-04D-005-01	18-03-2654-15	03/30/18 08:35	1	Solid
PEAC3392-04D-025-01	18-03-2654-16	03/30/18 08:40	1	Solid
PEAC0880-03B-005-01	18-03-2654-17	03/30/18 09:10	1	Solid
PEAC0880-03B-005-02	18-03-2654-18	03/30/18 09:15	1	Solid
PEAC0880-03C-005-01	18-03-2654-19	03/30/18 09:30	1	Solid
PEAC0880-03D-005-01	18-03-2654-20	03/30/18 09:35	1	Solid
PLUM0850-02B-005-01	18-03-2654-21	03/30/18 10:00	1	Solid
PLUM0850-02B-025-01	18-03-2654-22	03/30/18 10:10	1	Solid
PLUM0850-02B-005-02	18-03-2654-23	03/30/18 10:05	1	Solid
PLUM0850-02C-005-01	18-03-2654-24	03/30/18 10:15	1	Solid
PLUM0850-02C-025-01	18-03-2654-25	03/30/18 10:20	1	Solid
PLUM0850-02D-005-01	18-03-2654-26	03/30/18 10:30	1	Solid
PLUM0850-02D-025-01	18-03-2654-27	03/30/18 10:35	1	Solid
LIND0741-04A-035-01	18-03-2654-28	03/30/18 11:05	1	Solid
LIND0741-04A-045-01	18-03-2654-29	03/30/18 11:10	1	Solid
LIND0741-04B-005-01	18-03-2654-30	03/30/18 01:15	1	Solid
LIND0741-04B-025-01	18-03-2654-31	03/30/18 11:20	1	Solid
LIND0741-04B-025-02	18-03-2654-32	03/30/18 11:25	1	Solid
LIND0741-04C-005-01	18-03-2654-33	03/30/18 11:30	1	Solid
LIND0741-04C-025-01	18-03-2654-34	03/30/18 11:35	1	Solid
LIND0741-04D-005-01	18-03-2654-35	03/30/18 11:40	1	Solid
LIND0741-04D-025-01	18-03-2654-36	03/30/18 11:45	1	Solid
UCRCONWATER-03-30-18	18-03-2654-37	03/30/18 12:30	1	Aqueous
A-UCRCONWATER-03-30-18	18-03-2654-38	03/30/18 12:30	1	Aqueous
B-UCRCONWATER-03-30-18	18-03-2654-39	03/30/18 12:30	1	Aqueous


  
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## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2654  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/30/18

Attn: Colleen Canfield

Page 1 of 2

### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
PEAC3397-03B-005-01 (18-03-2654-1)						
Lead	67.6		0.524	mg/kg	EPA 6010B	EPA 3050B
Chlordane	220		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	19		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	63		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	21		5.0	ug/kg	EPA 8081A	EPA 3545
PEAC3397-03B-025-01 (18-03-2654-2)						
Lead	10.1		0.481	mg/kg	EPA 6010B	EPA 3050B
PEAC3392-04B-005-01 (18-03-2654-10)						
Lead	78.3		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	520		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	14		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	9.1		5.0	ug/kg	EPA 8081A	EPA 3545
PEAC3392-04B-025-01 (18-03-2654-12)						
Lead	6.30		0.495	mg/kg	EPA 6010B	EPA 3050B
PEAC0880-03B-005-01 (18-03-2654-17)						
Lead	94.4		0.521	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDT	6.4		5.0	ug/kg	EPA 8081A	EPA 3545
PLUM0850-02B-005-01 (18-03-2654-21)						
Lead	76.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	270		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	25		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	180		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	110		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.2		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	26		9.9	ug/kg	EPA 8081A	EPA 3545
PLUM0850-02B-025-01 (18-03-2654-22)						
Lead	17.2		0.500	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	6.6		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.3		5.0	ug/kg	EPA 8081A	EPA 3545
LIND0741-04A-035-01 (18-03-2654-28)						
Chlordane	250		49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	85		24	ug/kg	EPA 8081A	EPA 3545
LIND0741-04B-005-01 (18-03-2654-30)						
Lead	47.3		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	250		49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	66		24	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	16		4.9	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown



## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 18-03-2654  
 Project Name: ACC-UCR 131648-003/2.2  
 Received: 03/30/18

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
LIND0741-04B-025-01 (18-03-2654-31)						
Lead	6.63		0.476	mg/kg	EPA 6010B	EPA 3050B
UCRCONWATER-03-30-18 (18-03-2654-37)						
Barium	0.127		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Chromium	0.0187		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Copper	0.423		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Vanadium	0.0136		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	0.155		0.0100	mg/L	EPA 6010B	EPA 3010A Total
A-UCRCONWATER-03-30-18 (18-03-2654-38)						
HEM: Oil and Grease	4.4		1.0	mg/L	EPA 1664A	N/A

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: N/A  
Method: EPA 1664A  
Units: mg/L

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-UCRCONWATER-03-30-18	18-03-2654-38-A	03/30/18 12:30	Aqueous	N/A	04/07/18	04/07/18 16:50	I0407HEML2

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease	4.4	1.0	1.00	

Method Blank	099-16-923-356	N/A	Aqueous	N/A	04/07/18	04/07/18 16:50	I0407HEML2
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease	ND	1.0	1.00	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3397-03B-005-01	18-03-2654-1-A	03/30/18 07:15	Solid	ICP 7300	04/05/18	04/06/18 12:07	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		67.6		0.524		1.05	
PEAC3397-03B-025-01	18-03-2654-2-A	03/30/18 07:20	Solid	ICP 7300	04/05/18	04/06/18 12:10	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		10.1		0.481		0.962	
PEAC3392-04B-005-01	18-03-2654-10-A	03/30/18 08:10	Solid	ICP 7300	04/05/18	04/06/18 12:11	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		78.3		0.493		0.985	
PEAC3392-04B-025-01	18-03-2654-12-A	03/30/18 08:20	Solid	ICP 7300	04/05/18	04/06/18 12:11	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.30		0.495		0.990	
PEAC0880-03B-005-01	18-03-2654-17-A	03/30/18 09:10	Solid	ICP 7300	04/05/18	04/06/18 12:12	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		94.4		0.521		1.04	
PLUM0850-02B-005-01	18-03-2654-21-A	03/30/18 10:00	Solid	ICP 7300	04/05/18	04/06/18 12:13	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		76.8		0.500		1.00	
PLUM0850-02B-025-01	18-03-2654-22-A	03/30/18 10:10	Solid	ICP 7300	04/05/18	04/06/18 12:17	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		17.2		0.500		1.00	
LIND0741-04B-005-01	18-03-2654-30-A	03/30/18 01:15	Solid	ICP 7300	04/05/18	04/06/18 12:18	180405L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		47.3		0.505		1.01	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04B-025-01	18-03-2654-31-A	03/30/18 11:20	Solid	ICP 7300	04/05/18	04/06/18 12:18	180405L03

Parameter	Result	RL	DF	Qualifiers
Lead	6.63	0.476	0.952	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-26137	N/A	Solid	ICP 7300	04/05/18	04/06/18 10:50	180405L03

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.485	0.971	

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3010A Total  
Method: EPA 6010B  
Units: mg/L

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UCRCONWATER-03-30-18	18-03-2654-37-A	03/30/18 12:30	Aqueous	ICP 7300	04/04/18	04/04/18 13:38	180404LA2
Parameter	Result	RL	DF	Qualifiers			
Antimony	ND	0.0150	1.00				
Arsenic	ND	0.0100	1.00				
Barium	0.127	0.0100	1.00				
Beryllium	ND	0.0100	1.00				
Cadmium	ND	0.0100	1.00				
Chromium	0.0187	0.0100	1.00				
Cobalt	ND	0.0100	1.00				
Copper	0.423	0.0100	1.00				
Lead	ND	0.0100	1.00				
Molybdenum	ND	0.0100	1.00				
Nickel	ND	0.0100	1.00				
Selenium	ND	0.0150	1.00				
Silver	ND	0.00500	1.00				
Thallium	ND	0.0150	1.00				
Vanadium	0.0136	0.0100	1.00				
Zinc	0.155	0.0100	1.00				

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B  
 Units: mg/L

Project: ACC-UCR 131648-003/2.2

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>097-01-003-16848</b>	<b>N/A</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>04/04/18</b>	<b>04/04/18 13:35</b>	<b>180404LA2</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	ND	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	ND	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	
Molybdenum	ND	0.0100	1.00	
Nickel	ND	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	ND	0.0100	1.00	
Zinc	ND	0.0100	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

### Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 7470A Total  
 Method: EPA 7470A  
 Units: mg/L

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UCRCONWATER-03-30-18	18-03-2654-37-A	03/30/18 12:30	Aqueous	Mercury 07	04/04/18	04/04/18 15:18	180404LA2

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-04-008-8521	N/A	Aqueous	Mercury 07	04/04/18	04/04/18 15:07	180404LA2

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3397-03B-005-01	18-03-2654-1-A	03/30/18 07:15	Solid	GC 44	04/04/18	04/06/18 13:22	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	220	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	19	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	21	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	94	25-145	

PEAC3397-03B-005-01	18-03-2654-1-A	03/30/18 07:15	Solid	GC 44	04/04/18	04/09/18 10:55	180404L10
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Parameter	Result	RL	DF	Qualifiers
4,4'-DDT	63	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	97	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3397-03B-025-01	18-03-2654-2-A	03/30/18 07:20	Solid	GC 44	04/04/18	04/06/18 13:36	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3392-04A-035-01	18-03-2654-8-A	03/30/18 08:00	Solid	GC 44	04/04/18	04/06/18 13:50	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3392-04B-005-01	18-03-2654-10-A	03/30/18 08:10	Solid	GC 44	04/04/18	04/06/18 14:05	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	520	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	14	5.0	1.00	
4,4'-DDT	9.1	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3392-04B-025-01	18-03-2654-12-A	03/30/18 08:20	Solid	GC 44	04/04/18	04/06/18 14:19	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC0880-03B-005-01	18-03-2654-17-A	03/30/18 09:10	Solid	GC 44	04/04/18	04/06/18 14:33	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	6.4	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PLUM0850-02B-005-01	18-03-2654-21-A	03/30/18 10:00	Solid	GC 44	04/04/18	04/06/18 14:47	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	9.9	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	270	50	1.00	
4,4'-DDD	25	5.0	1.00	
Delta-BHC	ND	9.9	1.00	
Dieldrin	9.2	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	26	9.9	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	99	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PLUM0850-02B-005-01	18-03-2654-21-A	03/30/18 10:00	Solid	GC 44	04/04/18	04/09/18 11:09	180404L10

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	180	25	5.00	
4,4'-DDT	110	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	24-168	
2,4,5,6-Tetrachloro-m-Xylene	89	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PLUM0850-02B-025-01	18-03-2654-22-A	03/30/18 10:10	Solid	GC 44	04/04/18	04/06/18 15:01	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	9.9	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	6.6	5.0	1.00	
4,4'-DDE	32	5.0	1.00	
4,4'-DDT	5.3	5.0	1.00	
Delta-BHC	ND	9.9	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	9.9	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	99	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04A-035-01	18-03-2654-28-A	03/30/18 11:05	Solid	GC 44	04/04/18	04/06/18 15:16	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	4.9	1.00	
Alpha-BHC	ND	9.8	1.00	
Beta-BHC	ND	4.9	1.00	
Chlordane	250	49	1.00	
4,4'-DDD	ND	4.9	1.00	
4,4'-DDT	ND	4.9	1.00	
Delta-BHC	ND	9.8	1.00	
Dieldrin	ND	4.9	1.00	
Endosulfan I	ND	4.9	1.00	
Endosulfan II	ND	4.9	1.00	
Endosulfan Sulfate	ND	4.9	1.00	
Endrin	ND	4.9	1.00	
Endrin Aldehyde	ND	4.9	1.00	
Endrin Ketone	ND	4.9	1.00	
Gamma-BHC	ND	4.9	1.00	
Heptachlor	ND	4.9	1.00	
Heptachlor Epoxide	ND	9.8	1.00	
Methoxychlor	ND	4.9	1.00	
Toxaphene	ND	98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04A-035-01	18-03-2654-28-A	03/30/18 11:05	Solid	GC 44	04/04/18	04/09/18 11:37	180404L10

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	85	24	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04B-005-01	18-03-2654-30-A	03/30/18 01:15	Solid	GC 44	04/04/18	04/06/18 15:30	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	4.9	1.00	
Alpha-BHC	ND	9.8	1.00	
Beta-BHC	ND	4.9	1.00	
Chlordane	250	49	1.00	
4,4'-DDD	ND	4.9	1.00	
4,4'-DDT	16	4.9	1.00	
Delta-BHC	ND	9.8	1.00	
Dieldrin	ND	4.9	1.00	
Endosulfan I	ND	4.9	1.00	
Endosulfan II	ND	4.9	1.00	
Endosulfan Sulfate	ND	4.9	1.00	
Endrin	ND	4.9	1.00	
Endrin Aldehyde	ND	4.9	1.00	
Endrin Ketone	ND	4.9	1.00	
Gamma-BHC	ND	4.9	1.00	
Heptachlor	ND	4.9	1.00	
Heptachlor Epoxide	ND	9.8	1.00	
Methoxychlor	ND	4.9	1.00	
Toxaphene	ND	98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04B-005-01	18-03-2654-30-A	03/30/18 01:15	Solid	GC 44	04/04/18	04/09/18 11:52	180404L10

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	66	24	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LIND0741-04B-025-01	18-03-2654-31-A	03/30/18 11:20	Solid	GC 44	04/04/18	04/06/18 15:44	180404L10

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	4.9	1.00	
Alpha-BHC	ND	9.8	1.00	
Beta-BHC	ND	4.9	1.00	
Chlordane	ND	49	1.00	
4,4'-DDD	ND	4.9	1.00	
4,4'-DDE	ND	4.9	1.00	
4,4'-DDT	ND	4.9	1.00	
Delta-BHC	ND	9.8	1.00	
Dieldrin	ND	4.9	1.00	
Endosulfan I	ND	4.9	1.00	
Endosulfan II	ND	4.9	1.00	
Endosulfan Sulfate	ND	4.9	1.00	
Endrin	ND	4.9	1.00	
Endrin Aldehyde	ND	4.9	1.00	
Endrin Ketone	ND	4.9	1.00	
Gamma-BHC	ND	4.9	1.00	
Heptachlor	ND	4.9	1.00	
Heptachlor Epoxide	ND	9.8	1.00	
Methoxychlor	ND	4.9	1.00	
Toxaphene	ND	98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2921</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/04/18</b>	<b>04/06/18 12:40</b>	<b>180404L10</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-UCRCONWATER-03-30-18	18-03-2654-39-A	03/30/18 12:30	Aqueous	GC 44	04/03/18	04/04/18 14:02	180403L07A

Parameter	Result	RL	DF	Qualifiers
Alpha-BHC	ND	0.097	1.00	
Gamma-BHC	ND	0.097	1.00	
Beta-BHC	ND	0.097	1.00	
Heptachlor	ND	0.097	1.00	
Delta-BHC	ND	0.097	1.00	
Aldrin	ND	0.097	1.00	
Heptachlor Epoxide	ND	0.097	1.00	
Endosulfan I	ND	0.097	1.00	
Dieldrin	ND	0.097	1.00	
4,4'-DDE	ND	0.097	1.00	
Endrin	ND	0.097	1.00	
Endrin Aldehyde	ND	0.097	1.00	
4,4'-DDD	ND	0.097	1.00	
Endosulfan II	ND	0.097	1.00	
4,4'-DDT	ND	0.097	1.00	
Endosulfan Sulfate	ND	0.097	1.00	
Methoxychlor	ND	0.097	1.00	
Chlordane	ND	0.97	1.00	
Toxaphene	ND	1.9	1.00	
Endrin Ketone	ND	0.097	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
Decachlorobiphenyl	16	50-135	2,6	
2,4,5,6-Tetrachloro-m-Xylene	67	50-135		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: ACC-UCR 131648-003/2.2

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-529-1015	N/A	Aqueous	GC 44	04/03/18	04/04/18 12:08	180403L07A

Parameter	Result	RL	DF	Qualifiers
Alpha-BHC	ND	0.10	1.00	
Gamma-BHC	ND	0.10	1.00	
Beta-BHC	ND	0.10	1.00	
Heptachlor	ND	0.10	1.00	
Delta-BHC	ND	0.10	1.00	
Aldrin	ND	0.10	1.00	
Heptachlor Epoxide	ND	0.10	1.00	
Endosulfan I	ND	0.10	1.00	
Dieldrin	ND	0.10	1.00	
4,4'-DDE	ND	0.10	1.00	
Endrin	ND	0.10	1.00	
Endrin Aldehyde	ND	0.10	1.00	
4,4'-DDD	ND	0.10	1.00	
Endosulfan II	ND	0.10	1.00	
4,4'-DDT	ND	0.10	1.00	
Endosulfan Sulfate	ND	0.10	1.00	
Methoxychlor	ND	0.10	1.00	
Chlordane	ND	1.0	1.00	
Toxaphene	ND	2.0	1.00	
Endrin Ketone	ND	0.10	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
Decachlorobiphenyl	64	50-135		
2,4,5,6-Tetrachloro-m-Xylene	79	50-135		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PEAC3397-03B-005-01	Sample	Solid	ICP 7300	04/05/18	04/06/18 12:07	180405S03
PEAC3397-03B-005-01	Matrix Spike	Solid	ICP 7300	04/05/18	04/06/18 12:08	180405S03
PEAC3397-03B-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/05/18	04/06/18 12:09	180405S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	67.55	25.00	102.9	141	104.4	147	75-125	1	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
UCRCONWATER-03-30-18	Sample	Aqueous	ICP 7300	04/04/18	04/04/18 13:38	180404SA2				
UCRCONWATER-03-30-18	Matrix Spike	Aqueous	ICP 7300	04/04/18	04/04/18 13:39	180404SA2				
UCRCONWATER-03-30-18	Matrix Spike Duplicate	Aqueous	ICP 7300	04/04/18	04/04/18 13:40	180404SA2				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	0.5000	0.3230	65	0.4296	86	72-132	28	0-10	3,4
Arsenic	ND	0.5000	0.4622	92	0.4693	94	80-140	2	0-11	
Barium	0.1268	0.5000	0.6553	106	0.6662	108	87-123	2	0-6	
Beryllium	ND	0.5000	0.5172	103	0.5232	105	89-119	1	0-8	
Cadmium	ND	0.5000	0.5309	106	0.5303	106	82-124	0	0-7	
Chromium	0.01871	0.5000	0.5340	103	0.5358	103	86-122	0	0-8	
Cobalt	ND	0.5000	0.5166	103	0.5312	106	83-125	3	0-7	
Copper	0.4230	0.5000	0.9558	107	0.9472	105	78-126	1	0-7	
Lead	ND	0.5000	0.5379	108	0.5472	109	84-120	2	0-7	
Molybdenum	ND	0.5000	0.4725	94	0.4917	98	78-126	4	0-7	
Nickel	ND	0.5000	0.5324	106	0.5514	110	84-120	3	0-7	
Selenium	ND	0.5000	0.4815	96	0.5070	101	79-127	5	0-9	
Silver	ND	0.2500	0.2496	100	0.2408	96	86-128	4	0-7	
Thallium	ND	0.5000	0.5015	100	0.5260	105	79-121	5	0-8	
Vanadium	0.01363	0.5000	0.5284	103	0.5291	103	88-118	0	0-7	
Zinc	0.1551	0.5000	0.7127	112	0.7086	111	89-131	1	0-8	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 7470A Total  
Method: EPA 7470A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-03-2567-2	Sample	Aqueous	Mercury 07	04/04/18	04/04/18 15:11	180404SA2
18-03-2567-2	Matrix Spike	Aqueous	Mercury 07	04/04/18	04/04/18 15:14	180404SA2
18-03-2567-2	Matrix Spike Duplicate	Aqueous	Mercury 07	04/04/18	04/04/18 15:16	180404SA2

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.008934	89	0.009425	94	55-133	5	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits





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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PEAC3397-03B-025-01	Sample	Solid	GC 44	04/04/18	04/06/18 13:36	180404S10
PEAC3397-03B-025-01	Matrix Spike	Solid	GC 44	04/04/18	04/06/18 12:54	180404S10
PEAC3397-03B-025-01	Matrix Spike Duplicate	Solid	GC 44	04/04/18	04/06/18 13:08	180404S10

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.84	79	21.31	85	50-135	7	0-25	
Alpha-BHC	ND	25.00	18.92	76	20.36	81	50-135	7	0-25	
Beta-BHC	ND	25.00	20.77	83	29.77	119	50-135	36	0-25	4
4,4'-DDD	ND	25.00	23.23	93	22.24	89	50-135	4	0-25	
4,4'-DDE	ND	25.00	24.95	100	28.88	116	50-135	15	0-25	
4,4'-DDT	ND	25.00	30.38	122	35.07	140	50-135	14	0-25	3
Delta-BHC	ND	25.00	22.48	90	22.24	89	50-135	1	0-25	
Dieldrin	ND	25.00	23.90	96	25.39	102	50-135	6	0-25	
Endosulfan I	ND	25.00	22.64	91	26.56	106	50-135	16	0-25	
Endosulfan II	ND	25.00	23.47	94	23.82	95	50-135	1	0-25	
Endosulfan Sulfate	ND	25.00	23.70	95	23.65	95	50-135	0	0-25	
Endrin	ND	25.00	23.25	93	23.40	94	50-135	1	0-25	
Endrin Aldehyde	ND	25.00	20.77	83	18.91	76	50-135	9	0-25	
Gamma-BHC	ND	25.00	20.39	82	21.54	86	50-135	6	0-25	
Heptachlor	ND	25.00	20.36	81	22.44	90	50-135	10	0-25	
Heptachlor Epoxide	ND	25.00	21.32	85	20.54	82	50-135	4	0-25	
Methoxychlor	ND	25.00	25.86	103	24.90	100	50-135	4	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

### Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: N/A  
 Method: EPA 1664A

Project: ACC-UCR 131648-003/2.2

Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-923-356	LCS	Aqueous	N/A	04/07/18	04/07/18 16:50	I0407HEML2
099-16-923-356	LCSD	Aqueous	N/A	04/07/18	04/07/18 16:50	I0407HEML2

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
HEM: Oil and Grease	40.00	35.70	89	37.90	95	78-114	6	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-26137</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/18</b>	<b>04/06/18 10:51</b>	<b>180405L03</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	25.93	104	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>097-01-003-16848</b>	<b>LCS</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>04/04/18</b>	<b>04/04/18 13:36</b>	<b>180404LA2</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony		0.5000	0.4889	98	80-120	73-127	
Arsenic		0.5000	0.5264	105	80-120	73-127	
Barium		0.5000	0.5409	108	80-120	73-127	
Beryllium		0.5000	0.5292	106	80-120	73-127	
Cadmium		0.5000	0.5570	111	80-120	73-127	
Chromium		0.5000	0.5467	109	80-120	73-127	
Cobalt		0.5000	0.5569	111	80-120	73-127	
Copper		0.5000	0.5432	109	80-120	73-127	
Lead		0.5000	0.5667	113	80-120	73-127	
Molybdenum		0.5000	0.5143	103	80-120	73-127	
Nickel		0.5000	0.5703	114	80-120	73-127	
Selenium		0.5000	0.4963	99	80-120	73-127	
Silver		0.2500	0.2921	117	80-120	73-127	
Thallium		0.5000	0.5312	106	80-120	73-127	
Vanadium		0.5000	0.5327	107	80-120	73-127	
Zinc		0.5000	0.5653	113	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 7470A Total  
Method: EPA 7470A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-04-008-8521</b>	<b>LCS</b>	<b>Aqueous</b>	<b>Mercury 07</b>	<b>04/04/18</b>	<b>04/04/18 15:09</b>	<b>180404LA2</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.01000	0.009544	95	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2921</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/04/18</b>	<b>04/06/18 12:25</b>	<b>180404L10</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.47	94	50-135	36-149	
Alpha-BHC		25.00	23.13	93	50-135	36-149	
Beta-BHC		25.00	22.22	89	50-135	36-149	
4,4'-DDD		25.00	23.14	93	50-135	36-149	
4,4'-DDE		25.00	24.93	100	50-135	36-149	
4,4'-DDT		25.00	28.42	114	50-135	36-149	
Delta-BHC		25.00	23.84	95	50-135	36-149	
Dieldrin		25.00	24.21	97	50-135	36-149	
Endosulfan I		25.00	24.14	97	50-135	36-149	
Endosulfan II		25.00	24.06	96	50-135	36-149	
Endosulfan Sulfate		25.00	23.29	93	50-135	36-149	
Endrin		25.00	20.51	82	50-135	36-149	
Endrin Aldehyde		25.00	23.59	94	50-135	36-149	
Gamma-BHC		25.00	23.72	95	50-135	36-149	
Heptachlor		25.00	24.52	98	50-135	36-149	
Heptachlor Epoxide		25.00	23.74	95	50-135	36-149	
Methoxychlor		25.00	25.00	100	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass


  
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## Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3510C  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-529-1015	LCS	Aqueous	GC 44	04/03/18	04/04/18 14:16	180403L07A				
099-12-529-1015	LCSD	Aqueous	GC 44	04/03/18	04/04/18 14:30	180403L07A				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.2862	57	0.2987	60	50-135	36-149	4	0-25	
Gamma-BHC	0.5000	0.2713	54	0.3070	61	50-135	36-149	12	0-25	
Beta-BHC	0.5000	0.2753	55	0.3136	63	50-135	36-149	13	0-25	
Heptachlor	0.5000	0.2665	53	0.2960	59	50-135	36-149	10	0-25	
Delta-BHC	0.5000	0.3023	60	0.3066	61	50-135	36-149	1	0-25	
Aldrin	0.5000	0.2227	45	0.2355	47	50-135	36-149	6	0-25	ME
Heptachlor Epoxide	0.5000	0.2780	56	0.3077	62	50-135	36-149	10	0-25	
Endosulfan I	0.5000	0.2870	57	0.3068	61	50-135	36-149	7	0-25	
Dieldrin	0.5000	0.2654	53	0.2759	55	50-135	36-149	4	0-25	
4,4'-DDE	0.5000	0.3038	61	0.3372	67	50-135	36-149	10	0-25	
Endrin	0.5000	0.2959	59	0.3141	63	50-135	36-149	6	0-25	
Endrin Aldehyde	0.5000	0.2729	55	0.2728	55	50-135	36-149	0	0-25	
4,4'-DDD	0.5000	0.2913	58	0.3244	65	50-135	36-149	11	0-25	
Endosulfan II	0.5000	0.3023	60	0.3272	65	50-135	36-149	8	0-25	
4,4'-DDT	0.5000	0.3943	79	0.4235	85	50-135	36-149	7	0-25	
Endosulfan Sulfate	0.5000	0.2993	60	0.2945	59	50-135	36-149	2	0-25	
Methoxychlor	0.5000	0.3695	74	0.3847	77	50-135	36-149	4	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 1

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 18-03-2654

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1664A	N/A	1009	N/A	1
EPA 6010B	EPA 3010A Total	935	ICP 7300	1
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8081A	EPA 3545	669	GC 44	1
EPA 8081A	EPA 3510C	1096	GC 44	1



## Glossary of Terms and Qualifiers

Work Order: 18-03-2654

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

**Virendra Patel**

**From:** Canfield, Colleen <CCanfield@haleyaldrich.com>  
**Sent:** Monday, April 02, 2018 9:59 AM  
**To:** Erick Ovalle  
**Cc:** Virendra Patel  
**Subject:** RE: UCR / 18-03-2654 - Response requested

EXTERNAL EMAIL\*

Title 22 please.  
 Colleen

**From:** Erick Ovalle <[ErickOvalle@eurofinsUS.com](mailto:ErickOvalle@eurofinsUS.com)>  
**Sent:** Monday, April 02, 2018 9:49 AM  
**To:** Canfield, Colleen <[CCanfield@haleyaldrich.com](mailto:CCanfield@haleyaldrich.com)>  
**Cc:** Virendra Patel <[VirendraPatel@eurofinsUS.com](mailto:VirendraPatel@eurofinsUS.com)>  
**Subject:** UCR / 18-03-2654 - Response requested  
**Importance:** High

Colleen,

The COC requests 'metals' to be performed on sample -37. Please clarify what metals need to reported?

							X	PESTICIDES
							X	LEAD (6010)
	X							METALS
X								HEM
		X	X	X	X	X		HOLD

Best Regards,  
 Erick Ovalle  
 Project Manager Assistant

Eurofins Calscience  
 7440 Lincoln Way  
 Garden Grove, CA 92841-1427  
 USA  
 Phone: +1 (714) 895-5494

Email: [ErickOvalle@eurofinsus.com](mailto:ErickOvalle@eurofinsus.com)  
 Website: [www.eurofinsUS.com/Calscience](http://www.eurofinsUS.com/Calscience)

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Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us 26\_sales@eurofins.com or call us.

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

18-03-2654

DATE: 3/30/2018
PAGE: 1 OF 4

LABORATORY CLIENT:
HALEY + ALDRICH, INC.
ADDRESS: 3187 RED HILL AVE. #155
CITY: COSTA MESA STATE: CA ZIP: 92672
TEL: 714.371.1802 E-MAIL: ccanfield@haleyaldrich.com

CLIENT PROJECT NAME / NUMBER: ACC-UCR 131648-003/2.2
P.O. NO.: 131648-003/2.2
PROJECT CONTACT: COLLEEN CANFIELD/M. RAITHEL
SAMPLER(S): (PRINT) ROBERT LEEGER

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
[ ] SAME DAY [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] 5 DAYS [X] STANDARD
[ ] COELT EDF GLOBAL ID: LOG CODE:

REQUESTED ANALYSES

SPECIAL INSTRUCTIONS:
EQUIS

Table with columns for analytes (Pesticides, Lead, HCLD) and checkboxes for Unpreserved, Preserved, Field Filtered. Includes handwritten notes 'Pesticides (6081) acPs' and 'LEAD (6010)'.

Table with columns: LAB USE ONLY, SAMPLE ID, SAMPLING (DATE, TIME), MATRIX, NO. OF CONT., and checkboxes for Unpreserved, Preserved, Field Filtered.

Relinquished by: (Signature) Received by: (Signature/Affiliation) Date: Time:
[Signature] [Signature] EC 03/30/18 1705







SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: Haley + Aldrich

DATE: 03/30/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.0 °C (w/ CF): 4.2 °C;  Blank  Sample

- Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
 Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: [Signature]

CUSTODY SEAL:

- Cooler  Present and Intact  Present but Not Intact  Not Present  N/A
Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: [Signature]
Checked by: [Signature]

SAMPLE CONDITION:

Table with columns: SAMPLE CONDITION, Yes, No, N/A. Rows include Chain-of-Custody (COC) document(s) received with samples, COC document(s) received complete, Sampler's name indicated on COC, etc.

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

- Aqueous:  VOA  VOAh  VOAna2  100PJ  100PJna2  125AGB  125AGBh  125AGBp  125PB  125PBzanna (pH\_\_9)
Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_)  TerraCores® (\_\_)
Air:  Tedlar™  Canister  Sorbent Tube  PUF  Other Matrix (\_\_\_\_\_):  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO3, na = NaOH, na2 = Na2S2O3, p = H3PO4,

s = H2SO4, u = ultra-pure, x = Na2SO3+NaHSO4.H2O, zanna = Zn (CH3CO2)2 + NaOH

Labeled/Checked by: [Signature]
Reviewed by: 1052



SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Haley + Aldrich

DATE: 03/30/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.3 °C (w/ CF): 4.5 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 617

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 617

Checked by: 617

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOAh  VOAna<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  125PBz<sub>2</sub>na (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PBn (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGBna<sub>2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PBna (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 617

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>2</sub>na = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1057

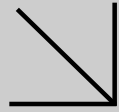
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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.



**WORK ORDER NUMBER: 18-03-2654**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** ACC-UCR 131648-003/2.2

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/19/2018 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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Client Project Name: ACC-UCR 131648-003/2.2

Work Order Number: 18-03-2654

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/30/18. They were assigned to Work Order 18-03-2654.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

## Sample Summary

---

Client: Haley & Aldrich, Inc.	Work Order:	18-03-2654
3187 Red Hill Avenue, Suite 155	Project Name:	ACC-UCR 131648-003/2.2
Costa Mesa, CA 92626-3453	PO Number:	131648-003/2.2
	Date/Time Received:	03/30/18 17:05
	Number of Containers:	39

Attn: Colleen Canfield

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
PEAC3392-04C-005-01	18-03-2654-13	03/30/18 08:25	1	Solid
PEAC0880-03C-005-01	18-03-2654-19	03/30/18 09:30	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 18-03-2654  
Project Name: ACC-UCR 131648-003/2.2  
Received: 03/30/18

Attn: Colleen Canfield

Page 1 of 1

### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
PEAC3392-04C-005-01 (18-03-2654-13)						
Chlordane	680		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	30		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.7		5.0	ug/kg	EPA 8081A	EPA 3545
PEAC0880-03C-005-01 (18-03-2654-19)						
Lead	89.1		0.521	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: ACC-UCR 131648-003/2.2

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC0880-03C-005-01	18-03-2654-19-A	03/30/18 09:30	Solid	ICP 7300	04/18/18	04/18/18 15:35	180418L02

Parameter	Result	RL	DF	Qualifiers
Lead	89.1	0.521	1.04	

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-26203	N/A	Solid	ICP 7300	04/18/18	04/18/18 14:26	180418L02

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.481	0.962	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PEAC3392-04C-005-01	18-03-2654-13-A	03/30/18 08:25	Solid	GC 41	04/11/18	04/12/18 12:05	180411L07

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	680	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	30	5.0	1.00	
4,4'-DDT	7.7	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
Decachlorobiphenyl	151	24-168		
2,4,5,6-Tetrachloro-m-Xylene	124	25-145		


  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: ACC-UCR 131648-003/2.2

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2929</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/11/18</b>	<b>04/12/18 10:35</b>	<b>180411L07</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	112	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-04-0827-1	Sample	Solid	ICP 7300	04/18/18	04/18/18 15:31	180418S02
18-04-0827-1	Matrix Spike	Solid	ICP 7300	04/18/18	04/18/18 15:32	180418S02
18-04-0827-1	Matrix Spike Duplicate	Solid	ICP 7300	04/18/18	04/18/18 15:33	180418S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	5.716	25.00	32.48	107	32.82	108	75-125	1	0-20	



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3545  
Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PEAC3392-04C-005-01	Sample	Solid	GC 41	04/11/18	04/12/18 12:05	180411S07
PEAC3392-04C-005-01	Matrix Spike	Solid	GC 41	04/11/18	04/12/18 11:35	180411S07
PEAC3392-04C-005-01	Matrix Spike Duplicate	Solid	GC 41	04/11/18	04/12/18 11:50	180411S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	33.54	134	36.05	144	50-135	7	0-25	3
Alpha-BHC	ND	25.00	30.78	123	33.02	132	50-135	7	0-25	
Beta-BHC	ND	25.00	31.01	124	36.69	147	50-135	17	0-25	3
4,4'-DDD	ND	25.00	44.40	178	57.20	229	50-135	25	0-25	3
4,4'-DDE	29.50	25.00	65.55	144	69.80	161	50-135	6	0-25	3
4,4'-DDT	7.678	25.00	53.03	181	29.40	87	50-135	57	0-25	3,4
Delta-BHC	ND	25.00	30.99	124	36.33	145	50-135	16	0-25	3
Dieldrin	ND	25.00	40.78	163	44.75	179	50-135	9	0-25	3
Endosulfan I	ND	25.00	41.34	165	46.22	185	50-135	11	0-25	3
Endosulfan II	ND	25.00	41.22	165	45.67	183	50-135	10	0-25	3
Endosulfan Sulfate	ND	25.00	41.97	168	62.35	249	50-135	39	0-25	3,4
Endrin	ND	25.00	39.15	157	40.85	163	50-135	4	0-25	3
Endrin Aldehyde	ND	25.00	20.15	81	24.61	98	50-135	20	0-25	
Gamma-BHC	ND	25.00	38.58	154	40.28	161	50-135	4	0-25	3
Heptachlor	ND	25.00	36.02	144	32.51	130	50-135	10	0-25	3
Heptachlor Epoxide	ND	25.00	46.18	185	53.99	216	50-135	16	0-25	3
Methoxychlor	ND	25.00	38.76	155	24.07	96	50-135	47	0-25	3,4

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - PDS/PDSD

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number				
18-04-0827-1	Sample	Solid	ICP 7300	04/18/18 00:00	04/18/18 15:31	180418S02				
18-04-0827-1	PDS	Solid	ICP 7300	04/18/18 00:00	04/18/18 15:34	180418S02				
18-04-0827-1	PDSD	Solid	ICP 7300	04/18/18 00:00	04/18/18 15:34	180418S02				
Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	5.716	25.00	33.03	109	33.57	111	75-125	2	0-20	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
Work Order: 18-03-2654  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: ACC-UCR 131648-003/2.2

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-26203</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/18/18</b>	<b>04/18/18 14:27</b>	<b>180418L02</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	27.09	108	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/18  
 Work Order: 18-03-2654  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: ACC-UCR 131648-003/2.2

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2929</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/11/18</b>	<b>04/12/18 10:50</b>	<b>180411L07</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	30.23	121	50-135	36-149	
Alpha-BHC		25.00	30.46	122	50-135	36-149	
Beta-BHC		25.00	29.50	118	50-135	36-149	
4,4'-DDD		25.00	31.27	125	50-135	36-149	
4,4'-DDE		25.00	32.66	131	50-135	36-149	
4,4'-DDT		25.00	31.87	127	50-135	36-149	
Delta-BHC		25.00	30.59	122	50-135	36-149	
Dieldrin		25.00	30.55	122	50-135	36-149	
Endosulfan I		25.00	30.68	123	50-135	36-149	
Endosulfan II		25.00	30.85	123	50-135	36-149	
Endosulfan Sulfate		25.00	30.81	123	50-135	36-149	
Endrin		25.00	15.62	62	50-135	36-149	
Endrin Aldehyde		25.00	32.40	130	50-135	36-149	
Gamma-BHC		25.00	30.82	123	50-135	36-149	
Heptachlor		25.00	30.68	123	50-135	36-149	
Heptachlor Epoxide		25.00	30.37	121	50-135	36-149	
Methoxychlor		25.00	27.38	110	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Sample Analysis Summary Report

Work Order: 18-03-2654

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.





Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494  
For courier service / sample drop off information, contact us 26 sales@eurofins.com or call us.

CHAIN OF CUSTODY RECORD

WD # / LAB USE ONLY  
**18-03-2654**

DATE: 3/30/2018  
PAGE: 2 OF 4

LABORATORY CLIENT: **HALEY + ALDRICH, INC.**  
ADDRESS: **3187 RED HILL AVE. #155**  
CITY: **COSTA MESA** STATE: **CA** ZIP: **92672**  
TEL: **714.371.1802** E-MAIL: **ccanfield@haleyaldrich.com**

CLIENT PROJECT NAME / NUMBER: **ACC-UCR 131648-003/2.2** P.O. NO.: **131648-003/2.2**  
PROJECT CONTACT: **COLLEEN CANFIELD / M. RAITHEL** SAMPLER(S) (PRINT): **ROBERT LEEPER**

TURNAROUND TIME (Rush surcharges may apply to any TA) not STANDARD:  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 COELT EDF GLOBAL ID: LOG CODE:

REQUESTED ANALYSES

SPECIAL INSTRUCTIONS: **EBUIS**  

Revised COC page received from Matt Raithel (H&A) on 04/11/2018 at 09:00am. - Virendra (ECI)

Please check box or fill in blank as needed.									
RESIDUES (BOB) CLR	LEAD (GOLD)	HOLD							
		X							
X	X								
X		X							
		X							
		X							
X	X								
X	X	X							
X	X	X							

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	RESIDUES (BOB) CLR	LEAD (GOLD)	HOLD
		DATE	TIME								
11	PEAC3392-04B-005-02	3/30/18	0815	SPIL	1						X
12	PEAC3392-04B-025-01		0820						X	X	
13	PEAC3392-04C-005-01		0825						X		X
14	PEAC3392-04C-025-01		0830								X
15	PEAC3392-04D-005-01		0835								X
16	PEAC3392-04D-025-01		0840								X
17	PEAC0880-03B-005-01		0910						X	X	
18	PEAC0880-03B-005-02		0915						X	X	X
19	PEAC0880-03C-005-01		0930						X		X
20	PEAC0880-03D-005-01	▽	0935	▽	▽				X		X

Relinquished by: (Signature) *[Signature]*  
Relinquished by: (Signature)  
Relinquished by: (Signature)

Received by: (Signature/Affiliation) *[Signature]*  
Received by: (Signature/Affiliation)  
Received by: (Signature/Affiliation)

Date: 03/30/18 Time: 1705  
Date: Time:  
Date: Time:

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**Virendra Patel**

**From:** Canfield, Colleen <CCanfield@haleyaldrich.com>  
**Sent:** Monday, April 02, 2018 9:59 AM  
**To:** Erick Ovalle  
**Cc:** Virendra Patel  
**Subject:** RE: UCR / 18-03-2654 - Response requested

EXTERNAL EMAIL\*

Title 22 please.  
 Colleen

**From:** Erick Ovalle <[ErickOvalle@eurofinsUS.com](mailto:ErickOvalle@eurofinsUS.com)>  
**Sent:** Monday, April 02, 2018 9:49 AM  
**To:** Canfield, Colleen <[CCanfield@haleyaldrich.com](mailto:CCanfield@haleyaldrich.com)>  
**Cc:** Virendra Patel <[VirendraPatel@eurofinsUS.com](mailto:VirendraPatel@eurofinsUS.com)>  
**Subject:** UCR / 18-03-2654 - Response requested  
**Importance:** High

Colleen,

The COC requests 'metals' to be performed on sample -37. Please clarify what metals need to reported?

							X	PESTICIDES
							X	LEAD (6010)
	X							METALS
X								HEM
		X	X	X	X	X		HOLD

Best Regards,  
 Erick Ovalle  
 Project Manager Assistant

Eurofins Calscience  
 7440 Lincoln Way  
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 USA  
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SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: Haley + Aldrich

DATE: 03/30/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.0 °C (w/ CF): 4.2 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 617

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 617

Checked by: 617

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  125PB<sub>z</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PB<sub>n</sub> (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGB<sub>na2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PB<sub>na</sub> (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 617

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 1052

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SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Haley + Aldrich

DATE: 03/30/2018

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.3 °C (w/ CF): 4.5 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 617

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 617

Checked by: 617

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOAh  VOAn<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  125PBz<sub>na</sub> (pH\_\_9)

250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PBn (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB

1AGB  1AGBna<sub>2</sub>  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PBna (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO<sub>3</sub>, **na** = NaOH, **na<sub>2</sub>** = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, **p** = H<sub>3</sub>PO<sub>4</sub>, **s** = H<sub>2</sub>SO<sub>4</sub>, **u** = ultra-pure, **x** = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, **z<sub>na</sub>** = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH

Labeled/Checked by: 617

Reviewed by: 1057

## **APPENDIX C**

### **Human Health Risk Evaluation Calculations**

<b>Appendix C, Table 1</b> <b>Intake and Risk Equations - Single Age</b> <b>Soil -</b> <b>Resident - ADULT</b>		<b>Exposure Routes Evaluated</b> Incidental Ingestion Yes Dermal Contact Yes Particulate Inhalation Yes Ambient Vapor Inhalation Yes		<b>ELCR (Total)</b> 2E-07 6E-08 4E-11 <hr/> <b>3E-07</b>	
<b>Limited Environmental Site Assessment</b> <b>North of West Linden Street and East of Canyon Crest Drive</b> <b>Riverside, California</b>					

NC - not carcinogenic by this exposure route      NV - not volatile      EC - exposure concentration      CSF - cancer slope factor      ELCR - excess lifetime cancer risk      COPC - chemical of potential concern  
 NTV - no toxicity value available      DAD - dermally absorbed dose      ABS - absorption factor      UR - cancer unit risk      EPC - exposure point concentration

COPC	CASRN	EPC (mg/kg)	Intake Calculations				Absorption Factors		Cancer Toxicity Values			ELCR <sub>ingestion</sub>	ELCR <sub>dermal</sub>	ELCR <sub>particulate</sub>	ELCR <sub>vapor</sub>	ELCR <sub>total</sub>
			Intake <sub>ingestion</sub> (mg/kg/day)	DAD <sub>dermal</sub> (mg/kg/day)	EC <sub>particulate</sub> (ug/m <sup>3</sup> )	EC <sub>vapor</sub> (ug/m <sup>3</sup> )	ABS <sub>ing</sub> (unitless)	ABS <sub>d</sub> (unitless)	CSF <sub>oral</sub> (mg/kg/day) <sup>-1</sup>	CSF <sub>dermal</sub> (mg/kg/day) <sup>-1</sup>	IUR (ug/m <sup>3</sup> ) <sup>-1</sup>					
DDD	72-54-8	5.2E-01	3.6E-08	4.5E-09	2.1E-08	NV	1	0.03	2.4E-01	2.4E-01	6.9E-05	8.5E-09	1.1E-09	1.4E-12	NV	9.6E-09
DDE	72-55-9	1.4E+00	9.6E-08	1.2E-08	5.6E-08	NV	1	0.03	3.4E-01	3.4E-01	9.7E-05	3.3E-08	4.1E-09	5.5E-12	NV	3.7E-08
DDT	50-29-3	1.2E+00	8.2E-08	1.0E-08	4.8E-08	NV	1	0.03	3.4E-01	3.4E-01	9.7E-05	2.8E-08	3.5E-09	4.7E-12	NV	3.1E-08
Chlordane	12789-03-6	1.1E+00	7.5E-08	1.3E-08	4.4E-08	NV	1	0.04	1.3E+00	1.3E+00	3.4E-04	9.8E-08	1.7E-08	1.5E-11	NV	1.1E-07
Dieldrin	60-57-1	2.9E-02	2.0E-09	8.4E-10	1.2E-09	NV	1	0.1	1.6E+01	1.6E+01	4.6E-03	3.2E-08	1.3E-08	5.4E-12	NV	4.5E-08
Endrin	72-20-8	5.0E-03	NC	NC	NC	NV	NC	NC							NV	
Heptachlor	76-44-8	8.3E-02	5.7E-09	3.1E-09	3.3E-09	NV	1	0.13	4.5E+00	4.5E+00	1.3E-03	2.6E-08	1.4E-08	4.3E-12	NV	4.0E-08
Heptachlor Epoxide	1024-57-3	4.0E-02	2.7E-09	1.2E-09	1.6E-09	NV	1	0.1	9.1E+00	9.1E+00	2.6E-03	2.5E-08	1.1E-08	4.2E-12	NV	3.5E-08

<b>Appendix C, Table 2</b> <b>Non-Cancer Risk Calculations</b> <b>Soil -</b> <b>Resident - ADULT</b>		<b>Exposure Routes Evaluated</b>		<b>HI (Total)</b>
<b>Limited Environmental Site Assessment</b> <b>North of West Linden Street and East of Canyon Crest Drive</b> <b>Riverside, California</b>		Incidental Ingestion Yes	1E-02	1E-02
		Dermal Contact Yes	3E-03	3E-03
		Particulate Inhalation Yes	2E-06	2E-06
		Ambient Vapor Inhalation Yes	Yes	0.02

NV - not volatile      EC - exposure concentration      RfD - reference dose      HI - hazard index      EPC - exposure point concentration (if blank, then COPC was not detected)  
 NTV - no toxicity value available      DAD - dermally absorbed dose      ABS - absorption factor      RfC - reference concentration      COPC - chemical of potential concern

COPC	CASRN	EPC (mg/kg)	Intake Calculations				Absorption Factors		Non-Cancer Toxicity Values			HQ <sub>ingestion</sub>	HQ <sub>dermal</sub>	HQ <sub>particulate</sub>	HQ <sub>vapor</sub>	HQ <sub>total</sub>
			Intake <sub>ingestion</sub> (mg/kg/day)	DAD <sub>dermal</sub> (mg/kg/day)	EC <sub>particulate</sub> (mg/m <sup>3</sup> )	EC <sub>vapor</sub> (mg/m <sup>3</sup> )	ABS <sub>ing</sub> (unitless)	ABS <sub>d</sub> (unitless)	RfD <sub>oral</sub> (mg/kg/day)	RfD <sub>dermal</sub> (mg/kg/day)	RfC (mg/m <sup>3</sup> )					
DDD	72-54-8	5.2E-01	6.2E-07	1.3E-07	3.7E-10	NV	1	0.05	5.0E-04	5.0E-04		1.2E-03	2.6E-04	NTV	NV	1.5E-03
DDE	72-55-9	1.4E+00	1.7E-06	3.5E-07	9.9E-10	NV	1	0.05	5.0E-04	5.0E-04		3.4E-03	7.1E-04	NTV	NV	4.1E-03
DDT	50-29-3	1.2E+00	1.4E-06	3.0E-07	8.5E-10	NV	1	0.05	5.0E-04	5.0E-04		2.9E-03	6.1E-04	NTV	NV	3.5E-03
Chlordane	12789-03-6	1.1E+00	1.3E-06	2.8E-07	7.8E-10	NV	1	0.05	5.0E-04	5.0E-04	7.0E-04	2.6E-03	5.6E-04	1.1E-06	NV	3.2E-03
Dieldrin	60-57-1	2.9E-02	3.5E-08	1.5E-08	2.0E-11	NV	1	0.1	5.0E-05	5.0E-05	2.0E-04	7.0E-04	2.9E-04	1.0E-07	NV	9.9E-04
Endrin	72-20-8	5.0E-03	6.0E-09	2.5E-09	3.5E-12	NV	1	0.1	3.0E-04	3.0E-04		2.0E-05	8.4E-06	NTV	NV	2.8E-05
Heptachlor	76-44-8	8.3E-02	9.9E-08	2.1E-08	5.9E-11	NV	1	0.05	5.0E-04	5.0E-04	2.0E-03	2.0E-04	4.2E-05	2.9E-08	NV	2.4E-04
Heptachlor Epoxide	1024-57-3	4.0E-02	4.8E-08	1.0E-08	2.8E-11	NV	1	0.05	1.3E-05	1.3E-05	5.2E-05	3.7E-03	7.8E-04	5.4E-07	NV	4.5E-03

**Appendix C, Table 3**  
**Intake and Risk Equations - Single Age**

Limited Environmental Site Assessment  
 North of West Linden Street and East of Canyon Crest Drive  
 Riverside, California

**Cancer Risk from Ingestion**

$$ELCR = Intake_{ing} * CSF$$

$$Intake_{ing} \text{ (age group x)} = \frac{[EPC]_{soil} * IR * ABS_{ing} * FI * EF * ED * C1}{BW_x * AT_{lifetime}}$$

**Cancer Risk from Dermal Absorption**

$$ELCR = DAD * CSF$$

$$DAD_{derm} \text{ (age group x)} = \frac{DA_{Event} * SA * EV * EF * ED}{BW_x * AT_{lifetime}}$$

$$DA_{Event} = [EPC]_{soil} * ABS_d * AF * C1$$

**Cancer Risk from Inhalation**

$$ELCR_{inh} = EC_{can} * IUR$$

$$EC_{can} \text{ (age group x)} = \frac{[EPC]_{PART} * ET_{Part} * EF * ED \text{ --- OR --- } [EPC]_{VAPOR} * ET_{Vap} * EF * ED}{24 * AT_{lifetime}}$$

**Noncancer Risk from Ingestion**

$$HQ = \frac{Intake_{ing}}{RfD}$$

$$Intake_{ing} = \frac{[EPC]_{soil} * IR * ABS_{ing} * FI * EF * ED * C1}{BW * AT}$$

**Noncancer Risk from Dermal Absorption**

$$HQ = \frac{DAD}{RfD}$$

$$DAD_{derm} = \frac{DA_{Event} * SA * EV * EF * ED}{BW * AT}$$

$$DA_{Event} = [EPC]_{soil} * ABS_d * AF * C1$$

**Noncancer Risk from Inhalation**

$$HQ = \frac{EC_{nc}}{RfC}$$

$$EC_{nc} = \frac{[EPC]_{PART} * ET_{Part} * EF * ED * C2 \text{ --- OR --- } [EPC]_{VAPOR} * ET_{Vap} * EF * ED * C2}{24 * AT}$$

Parameter	Value - Cancer	Value - Non-Cancer	Units
CSF	Chemical specific	--	(mg/kg-day) <sup>-1</sup>
IUR	Chemical specific	--	(ug/m <sup>3</sup> ) <sup>-1</sup>
Intake	Age/chemical specific	--	mg/kg-day
EC <sub>can</sub>	Age/chemical specific	--	(ug/m <sup>3</sup> )
ELCR	Age/chemical specific	--	unitless
RfD	--	Chemical specific	mg/kg-day
RfC	--	Chemical specific	(mg/m <sup>3</sup> )
DAD	Age/chemical specific	Age/chemical specific	mg/kg-day
DA <sub>Event</sub>	Age/chemical specific	Age/chemical specific	mg/cm <sup>2</sup> -event
EC <sub>nc</sub>	--	Age/chemical specific	mg/m <sup>3</sup>
HQ	--	Age/chemical specific	unitless
[EPC] <sub>soil</sub>	Chemical specific	Chemical specific	mg/kg
[EPC] <sub>PART</sub>	Appendix C, TABLE 4	Appendix C, TABLE 4	ug/m <sup>3</sup>
[EPC] <sub>VAPOR</sub>	Appendix C, TABLE A-X	Appendix C, TABLE A-X	ug/m <sup>3</sup>
ABS <sub>ing</sub>	Chemical specific	Chemical specific	unitless
ABS <sub>d</sub>	Chemical specific	Chemical specific	unitless
BW	80	80	kg
EF	350	350	day/year
ED	4	4	year
AT	--	1460	day
AT <sub>lifetime</sub>	25550	--	day
IR	100	100	mg/day
FI	1	1	unitless
C1	0.000001	0.000001	kg/mg
SA	6032	6032	cm <sup>2</sup>
AF	0.07	0.07	mg/cm <sup>2</sup>
EV	1	1	event/day
ET <sub>Part</sub>	24	24	hours/day
C2	0.001	0.001	mg/ug
ET <sub>Vap</sub>	24	24	hours/day

**Appendix C, Table 4**  
**Exposure Factors**

Limited Environmental Site Assessment  
 North of West Linden Street and East of Canyon Crest Drive  
 Riverside, California

**PLACE "X" IN THE APPROPRIATE YELLOW SHADED CELLS FOR THE APPROPRIATE RECEPTOR AND BASIS FOR CALCULATIONS**

SCENARIO USED TO CALCULATE RISKS				
BASIS FOR CANCER CALCULATIONS			X	
BASIS FOR NON-CANCER CALCULATIONS			X	
RECEPTOR			ADULT	
<b>Standard Parameters</b>				
Body Weight	BW	kg	80	EPA, 2014
Exposure Frequency	EF	day/year	350	Site-specific
Exposure Duration	ED	year	4	Balance of 26-yr exposure
Non-carcinogenic Averaging Time	AT	day	1460	Exposure duration expressed in days
Carcinogenic Averaging Time	AT <sub>lifetime</sub>	day	25550	70 year lifetime
<b>Incidental Ingestion of Soil</b>				
Soil Ingestion Rate	IR	mg/day	100	EPA, 2011
Fraction Ingested	FI	unitless	1.0	Site-specific
Age-Adjusted Soil Ingestion Rate	IFSadj	mg-yr/kg-day	NA	
<b>Dermal Exposure with Soil</b>				
Exposed Skin Surface Area	SA	cm <sup>2</sup>	6032	EPA, 2011
Soil Adherence Factor	AF	mg/cm <sup>2</sup>	0.07	EPA, 2011
Fraction Dermal	EV	event/day	1.0	Site-specific
Age-Adjusted Dermal Contact Factor	DFSadj	mg-yr/kg-day	NA	
<b>Particulate Inhalation</b>				
Exposure Time	ET <sub>Part</sub>	hours/day	24	Site-specific
<b>Vapor Inhalation</b>				
Exposure Time	ET <sub>Vap</sub>	hours/day	24	Site-specific

**Appendix C, Table 5**  
**Particulate to Outdoor Air EPC Calculations**  
**Soil -**  
**Resident - ADULT**

**Limited Environmental Site Assessment**  
**North of West Linden Street and East of Canyon Crest Drive**  
**Riverside, California**

**EQUATIONS:**

$EPC_{[PARTICULATE]} = EPC_{[SOIL]} \times PARTICULATE_{[AIR]} \times 1E-06 \text{ [kg/mg]}$

where:  
 $PARTICULATE_{[AIR]} = (1/PEF \times 1E+09 \text{ ug/kg}) \text{ or Measured/Modelled}$   
 and:  
 $PEF \text{ (m}^3/\text{kg)} = Q/C \times [(3600 \text{ s/hr}) / ((0.036 \times (1-V) \times (U_m/U_t)^3 \times F(x)))]$

PARAMETER/DEFINITION	UNITS	DEFAULT	Source
PARTICULATE <sub>[Air]</sub> / Particulate concentration in air	ug/m <sup>3</sup>	0.74	Calculated or measured
Measured or modeled PARTICULATE <sub>[Air]</sub>	ug/m <sup>3</sup>		Measured value
PEF / Particulate emission factor	m <sup>3</sup> /kg		Guidance value
PEF / Particulate emission factor	m <sup>3</sup> /kg	1.36E+09	Calculated here
Q/C / inverse of the mean concentration at the center of a 0.5-acre-square source	g/m <sup>2</sup> -s per kg/m <sup>3</sup>	93.77	Calculated / USEPA, 2014 [a]
V / Fraction of vegetative cover	unitless	0.5	Site-specific, estimated
U <sub>m</sub> / mean annual windspeed	m/s	4.69	Site-specific / USEPA, 2014
U <sub>t</sub> / equivalent threshold value of wind speed at 7 m	m/s	11.32	USEPA, 2014
F(x) / function dependant on U <sub>r</sub> /U <sub>t</sub> derived using Cowherd et al. (1985)	unitless	1.94E-01	Calculated / USEPA, 2014

USEPA, 2014. Regional Screening Levels.

[a] Climactic zone: Phoenix Arizona

[a] Area of Source:

Specific to size of Exposure Area

CASRN	COPC	EPC Soil (mg/kg)	EPC Particulate (ug/m <sup>3</sup> )
72-54-8	DDD	0.52	3.8E-07
72-55-9	DDE	1.4	1.0E-06
50-29-3	DDT	1.2	8.8E-07
12789-03-6	Chlordane	1.1	8.1E-07
60-57-1	Dieldrin	0.029	2.1E-08
72-20-8	Endrin	0.005	3.7E-09
76-44-8	Heptachlor	0.083	6.1E-08
1024-57-3	Heptachlor Epoxide	0.04	2.9E-08

start_depth	end_depth	sys_loc_code	sys_sample_code	sample_date	depth	report_result_unit	Chlordane	D_Chlordane	Dieldrin	D_Dieldrin	Heptachlor epoxide	D_Heptachlor epoxide	Lead	D_Lead
		COMPOSITE-01	COMPOSITE-01	3/27/2017 12:00 -		mg/kg	0.32		1	0.005	0	0.01	0	
		COMPOSITE-02	COMPOSITE-02	3/27/2017 12:00 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-03	COMPOSITE-03	3/27/2017 12:00 -		mg/kg	0.34		1	0.0061	1	0.01	0	
		COMPOSITE-04	COMPOSITE-04	3/27/2017 12:00 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-05	COMPOSITE-05	3/27/2017 12:00 -		mg/kg	0.04		1	0.005	0	0.01	0	
		COMPOSITE-05	COMPOSITE-05-DUP	3/27/2017 12:00 -		mg/kg	0.047		1	0.005	0	0.01	0	
		COMPOSITE-06	COMPOSITE-06	3/27/2017 12:00 -		mg/kg	0.034		1	0.005	0	0.0099	0	
		COMPOSITE-07	COMPOSITE-07	3/27/2017 12:00 -		mg/kg	0.066		1	0.005	0	0.01	0	
		COMPOSITE-08	COMPOSITE-08	3/27/2017 12:00 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-09	COMPOSITE-09	3/27/2017 12:00 -		mg/kg	0.39		1	0.005	0	0.0099	0	
		COMPOSITE-10	COMPOSITE-10	3/27/2017 12:00 -		mg/kg	0.05		0	0.005	0	0.0099	0	
		COMPOSITE-11	COMPOSITE-11	3/27/2017 12:00 -		mg/kg	0.2		1	0.27	1	0.0099	0	
		COMPOSITE-12	COMPOSITE-12	3/27/2017 12:00 -		mg/kg	0.37		1	0.34	1	0.0099	0	
		COMPOSITE-13	COMPOSITE-13	3/27/2017 12:00 -		mg/kg	0.05		0	0.011	1	0.0099	0	
		COMPOSITE-14	COMPOSITE-14	3/27/2017 12:00 -		mg/kg	0.68		1	0.0027	1	0.0099	0	
		COMPOSITE-15	COMPOSITE-15	3/27/2017 12:00 -		mg/kg	0.05		0	0.005	0	0.0099	0	
		COMPOSITE-16	COMPOSITE-16	3/28/2017 -		mg/kg	0.44		1	0.022	1	0.0077	1	
		COMPOSITE-17	COMPOSITE-17	3/28/2017 -		mg/kg	0.034		1	0.022	1	0.01	0	
		COMPOSITE-18	COMPOSITE-18	3/28/2017 -		mg/kg	0.055		1	0.005	0	0.0059	1	
		COMPOSITE-18	COMPOSITE-18-DUP	3/28/2017 -		mg/kg	0.063		1	0.005	0	0.024	1	
		COMPOSITE-19	COMPOSITE-19	3/28/2017 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-20	COMPOSITE-20	3/28/2017 -		mg/kg	0.78		1	0.0028	1	0.011	1	
		COMPOSITE-21	COMPOSITE-21	3/28/2017 -		mg/kg	0.064		1	0.005	0	0.01	0	
		COMPOSITE-22	COMPOSITE-22	3/28/2017 -		mg/kg	0.099		1	0.005	0	0.027	1	
		COMPOSITE-23	COMPOSITE-23	3/28/2017 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-24	COMPOSITE-24	3/28/2017 -		mg/kg	0.36		1	0.011	1	0.05	0	
		COMPOSITE-25	COMPOSITE-25	3/28/2017 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-26	COMPOSITE-26	3/28/2017 -		mg/kg	0.73		1	0.033	1	0.0081	1	
		COMPOSITE-27	COMPOSITE-27	3/28/2017 -		mg/kg	0.064		1	0.0043	1	0.01	0	
		COMPOSITE-28	COMPOSITE-28	3/28/2017 -		mg/kg	0.85		1	0.014	1	0.005	1	
		COMPOSITE-29	COMPOSITE-29	3/28/2017 -		mg/kg	0.21		1	0.005	0	0.01	0	
		COMPOSITE-30	COMPOSITE-30	3/28/2017 -		mg/kg	0.43		1	0.0022	1	0.0046	1	
		COMPOSITE-31	COMPOSITE-31	3/28/2017 -		mg/kg	0.057		1	0.005	0	0.0099	0	
		COMPOSITE-32	COMPOSITE-32	3/28/2017 -		mg/kg	1.3		1	0.013	1	0.01	1	
		COMPOSITE-33	COMPOSITE-33	3/29/2017 -		mg/kg	0.33		1	0.031	1	0.0047	1	
		COMPOSITE-33	COMPOSITE-33-DUP	3/29/2017 -		mg/kg	0.58		1	0.044	1	0.0085	1	
		COMPOSITE-34	COMPOSITE-34	3/29/2017 -		mg/kg	0.058		1	0.0052	1	0.01	0	
		COMPOSITE-35	COMPOSITE-35	3/29/2017 -		mg/kg	0.91		1	0.0043	1	0.021	1	
		COMPOSITE-36	COMPOSITE-36	3/29/2017 -		mg/kg	0.1		1	0.005	0	0.005	1	
		COMPOSITE-37	COMPOSITE-37	3/29/2017 -		mg/kg	6.7		1	0.026	1	0.12	1	
		COMPOSITE-38	COMPOSITE-38	3/29/2017 -		mg/kg	0.47		1	0.005	0	0.0065	1	
		COMPOSITE-39	COMPOSITE-39	3/29/2017 -		mg/kg	7.7		1	0.0076	1	0.093	1	
		COMPOSITE-40	COMPOSITE-40	3/29/2017 -		mg/kg	15		1	0.011	1	0.044	1	
		COMPOSITE-41	COMPOSITE-41	3/29/2017 -		mg/kg	0.21		1	0.0025	1	0.0099	0	
		COMPOSITE-42	COMPOSITE-42	3/29/2017 -		mg/kg	0.05		0	0.005	0	0.0099	0	
		COMPOSITE-43	COMPOSITE-43	3/29/2017 -		mg/kg	0.5		1	0.005	0	0.0059	1	
		COMPOSITE-44	COMPOSITE-44	3/29/2017 -		mg/kg	0.15		1	0.0049	0	0.013	1	
		COMPOSITE-45	COMPOSITE-45	3/29/2017 -		mg/kg	0.092		1	0.005	0	0.01	0	
		COMPOSITE-45	COMPOSITE-45-DUP	3/29/2017 -		mg/kg	0.11		1	0.005	0	0.01	0	
		COMPOSITE-46	COMPOSITE-46	3/29/2017 -		mg/kg	0.05		0	0.005	0	0.0099	0	
		COMPOSITE-47	COMPOSITE-47	3/29/2017 -		mg/kg	0.65		1	0.027	1	0.012	1	
		COMPOSITE-48	COMPOSITE-48	3/29/2017 -		mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-49	COMPOSITE-49	3/29/2017 -		mg/kg	0.34		1	0.062	1	0.0037	1	
		COMPOSITE-50	COMPOSITE-50	3/29/2017 -		mg/kg	0.042		1	0.011	1	0.0099	0	
		COMPOSITE-51	COMPOSITE-51	3/30/2017 -		mg/kg	0.51		1	0.0022	1	0.015	1	
		COMPOSITE-51	COMPOSITE-51-DUP	3/30/2017 -		mg/kg	0.67		1	0.0051	1	0.02	1	
		COMPOSITE-52	COMPOSITE-52	3/30/2017 -		mg/kg	0.03		1	0.005	0	0.0099	0	
		COMPOSITE-53	COMPOSITE-53	3/30/2017 -		mg/kg	0.13		1	0.0028	1	0.01	0	
		COMPOSITE-54	COMPOSITE-54	3/30/2017 -		mg/kg	0.046		1	0.005	0	0.01	0	
		COMPOSITE-55	COMPOSITE-55	3/30/2017 -		mg/kg	0.24		1	0.046	1	0.0058	1	
		COMPOSITE-56	COMPOSITE-56	3/30/2017 -		mg/kg	0.074		1	0.015	1	0.01	0	



start_depth	end_depth	sys_loc_code	sys_sample_code	sample_date	depth	report_result_unit	Chlordane	D_Chlordane	Dieldrin	D_Dieldrin	Heptachlor epoxide	D_Heptachlor epoxide	Lead	D_Lead
		COMPOSITE-57	COMPOSITE-57	3/30/2017	-	mg/kg	0.61		1	0.0053	1	0.0092	1	
		COMPOSITE-58	COMPOSITE-58	3/30/2017	-	mg/kg	0.05		0	0.005	0	0.01	0	
		COMPOSITE-59	COMPOSITE-59	3/30/2017	12:00	-	0.05		0	0.005	0	0.01	0	
		COMPOSITE-60	COMPOSITE-60	3/30/2017	12:00	-	0.05		0	0.005	0	0.01	0	
		COMPOSITE-61	COMPOSITE-61	3/30/2017	12:00	-	0.05		0	0.005	0	0.0099	0	
		COMPOSITE-62	COMPOSITE-62	3/30/2017	12:00	-	0.05		0	0.005	0	0.01	0	
0	0.5	AVOC3408	AVOC3408-01-005-01	3/27/2017	11:43	0 - 0.5 (ft)							40.4	1
0	0.5	AVOC3408	AVOC3408-02-005-01	3/27/2017	11:56	0 - 0.5 (ft)							84.5	1
0	0.5	AVOC3408	AVOC3408-03-005-01	3/27/2017	12:12	0 - 0.5 (ft)							38.6	1
0	0.5	AVOC3408	AVOC3408-04-005-01	3/27/2017	12:20	0 - 0.5 (ft)							44.6	1
0	0.5	AVOC3436	AVOC3436-01-005-01	3/29/2017	8:00	0 - 0.5 (ft)							95	1
0	0.5	AVOC3436	AVOC3436-01-005-02	3/29/2017	8:00	0 - 0.5 (ft)	0.12	1	0.008	1	0.0099	0		
0	0.5	AVOC3436	AVOC3436-02-005-01	3/29/2017	8:13	0 - 0.5 (ft)							68.1	1
0	0.5	AVOC3436	AVOC3436-02-005-02	3/29/2017	8:13	0 - 0.5 (ft)	0.69	1	0.059	1	0.0079	1		
0	0.5	AVOC3436	AVOC3436-03-005-01	3/29/2017	8:21	0 - 0.5 (ft)							36.7	1
0	0.5	AVOC3436	AVOC3436-03-005-02	3/29/2017	8:21	0 - 0.5 (ft)	0.42	1	0.029	1	0.011	1		
0	0.5	AVOC3436	AVOC3436-04-005-01	3/29/2017	8:31	0 - 0.5 (ft)							31.9	1
0	0.5	AVOC3436	AVOC3436-04-005-02	3/29/2017	8:31	0 - 0.5 (ft)	0.077	1	0.0029	1	0.0099	0		
0	0.5	AVOC3461	AVOC3461-01-005-01	3/27/2017	10:35	0 - 0.5 (ft)							32.8	1
0	0.5	AVOC3461	AVOC3461-01-005-02	3/27/2017	10:35	0 - 0.5 (ft)							150	1
0	0.5	AVOC3461	AVOC3461-02-005-01	3/27/2017	10:50	0 - 0.5 (ft)							70.6	1
0	0.5	AVOC3461	AVOC3461-02-005-02	3/27/2017	10:50	0 - 0.5 (ft)							55.9	1
0	0.5	AVOC3461	AVOC3461-03-005-01	3/27/2017	11:02	0 - 0.5 (ft)							42.1	1
0	0.5	AVOC3461	AVOC3461-03-005-02	3/27/2017	11:02	0 - 0.5 (ft)							56.5	1
0	0.5	AVOC3461	AVOC3461-04-005-01	3/27/2017	11:16	0 - 0.5 (ft)							28.5	1
0	0.5	AVOC3461	AVOC3461-04-005-02	3/27/2017	11:16	0 - 0.5 (ft)							36	1
0	0.5	AVOC3472	AVOC3472-01-005-01	3/27/2017	9:20	0 - 0.5 (ft)	0.41	1	0.005	0	0.0052	1	119	1
0	0.5	AVOC3472	AVOC3472-02-005-01	3/27/2017	9:51	0 - 0.5 (ft)	0.47	1	0.0091	1	0.0047	1	63.7	1
0	0.5	AVOC3472	AVOC3472-03-005-01	3/27/2017	10:03	0 - 0.5 (ft)	0.34	1	0.013	1	0.0077	1	35.8	1
0	0.5	AVOC3472	AVOC3472-04-005-01	3/27/2017	10:09	0 - 0.5 (ft)	0.4	1	0.005	0	0.01	0	10.3	1
0	0.5	AVOC3477	AVOC3477-01-005-01	3/29/2017	11:30	0 - 0.5 (ft)	0.27	1	0.005	0	0.0053	1	68.1	1
0	0.5	AVOC3477	AVOC3477-02-005-01	3/29/2017	11:41	0 - 0.5 (ft)	0.38	1	0.025	0	0.05	0	53.7	1
0	0.5	AVOC3477	AVOC3477-03-005-01	3/29/2017	11:54	0 - 0.5 (ft)	0.035	1	0.005	0	0.0099	0	37.7	1
0	0.5	AVOC3477	AVOC3477-04-005-01	3/29/2017	12:07	0 - 0.5 (ft)	0.11	1	0.0049	0	0.0099	0	82.9	1
0	0.5	BLAI0760	BLAI0760-01-005-01	3/27/2017	3:09	0 - 0.5 (ft)	0.23	1	0.0071	1	0.01	0	151	1
0	0.5	BLAI0760	BLAI0760-02-005-01	3/27/2017	3:17	0 - 0.5 (ft)	0.52	1	0.0041	1	0.0099	0	76.6	1
0	0.5	BLAI0760	BLAI0760-03-005-01	3/27/2017	3:28	0 - 0.5 (ft)	0.36	1	0.01	1	0.0099	0	91.8	1
0	0.5	BLAI0760	BLAI0760-04-005-01	3/27/2017	3:40	0 - 0.5 (ft)	0.89	1	0.0092	1	0.0063	1	111	1
0	0.5	BLAI0828	BLAI0828-01-005-01	3/30/2017	9:02	0 - 0.5 (ft)	0.079	1	0.005	0	0.01	0	70.8	1
0	0.5	BLAI0828	BLAI0828-02-005-01	3/30/2017	9:11	0 - 0.5 (ft)	0.19	1	0.0036	1	0.01	0	68.4	1
0	0.5	BLAI0828	BLAI0828-03-005-01	3/30/2017	9:23	0 - 0.5 (ft)	0.05	0	0.005	0	0.0099	0	11.5	1
0	0.5	BLAI0828	BLAI0828-04-005-01	3/30/2017	9:33	0 - 0.5 (ft)	0.088	1	0.005	0	0.01	0	60.6	1
0	0.5	BLAI0890	BLAI0890-01-005-01	3/30/2017	8:00	0 - 0.5 (ft)							434	1
0	0.5	BLAI0890	BLAI0890-01-005-02	3/30/2017	8:00	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0		
0	0.5	BLAI0890	BLAI0890-02-005-01	3/30/2017	8:16	0 - 0.5 (ft)							90.4	1
0	0.5	BLAI0890	BLAI0890-02-005-02	3/30/2017	8:16	0 - 0.5 (ft)	0.42	1	0.0029	1	0.0099	0		
0	0.5	BLAI0890	BLAI0890-03-005-01	3/30/2017	8:25	0 - 0.5 (ft)							63.3	1
0	0.5	BLAI0890	BLAI0890-03-005-02	3/30/2017	8:25	0 - 0.5 (ft)	0.12	1	0.005	0	0.01	0		
0	0.5	BLAI0890	BLAI0890-04-005-01	3/30/2017	8:35	0 - 0.5 (ft)							107	1
0	0.5	BLAI0890	BLAI0890-04-005-02	3/30/2017	8:35	0 - 0.5 (ft)	0.68	1	0.005	0	0.01	0		
0	0.5	BLAI0890	BLAI0890-01B-005-01	3/29/2018	13:20	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0	30.7	1
0	0.5	BLAI0890	BLAI0890-01B-005-02	3/29/2018	13:25	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0	11.6	1
0	0.5	CHERO803	CHERO803-01-005-01	3/28/2017	10:12	0 - 0.5 (ft)	0.43	1	0.005	0	0.0051	1	218	1
0	0.5	CHERO803	CHERO803-02-005-01	3/28/2017	10:25	0 - 0.5 (ft)	0.89	1	0.0086	1	0.0076	1	163	1
0	0.5	CHERO803	CHERO803-03-005-01	3/28/2017	10:37	0 - 0.5 (ft)	0.28	1	0.005	0	0.0075	1	80.5	1
0	0.5	CHERO803	CHERO803-04-005-01	3/28/2017	10:50	0 - 0.5 (ft)	0.05	0	0.005	0	0.006	1	84	1
0	0.5	CHERO803	CHERO803-02B-005-01	3/29/2018	14:35	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0	6.65	1
0	0.5	CHERO871	CHERO871-01-005-01	3/28/2017	8:54	0 - 0.5 (ft)							83.5	1
0	0.5	CHERO871	CHERO871-01-005-02	3/28/2017	8:54	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0	73.7	1
0	0.5	CHERO871	CHERO871-02-005-01	3/28/2017	9:07	0 - 0.5 (ft)							46.1	1
0	0.5	CHERO871	CHERO871-02-005-02	3/28/2017	9:07	0 - 0.5 (ft)	0.05	0	0.005	0	0.01	0	45	1

start_depth	end_depth	sys_loc_code	sys_sample_code	sample_date	depth	report_result_unit	Chlordane	D_Chlordane	Dieldrin	D_Dieldrin	Heptachlor epoxide	D_Heptachlor epoxide	Lead	D_Lead
0	0.5	CHER0871	CHER0871-03-005-01	3/28/2017 9:19	0 - 0.5 (ft)	mg/kg							177	1
0	0.5	CHER0871	CHER0871-03-005-02	3/28/2017 9:19	0 - 0.5 (ft)	mg/kg	0.037		1	0.0033	1	0.01	0	51.8
0	0.5	CHER0871	CHER0871-04-005-01	3/28/2017 9:38	0 - 0.5 (ft)	mg/kg							0	90.6
0	0.5	CHER0871	CHER0871-04-005-02	3/28/2017 9:38	0 - 0.5 (ft)	mg/kg	0.05		0	0.005	0	0.0099	0	106
0	0.5	FLOR3415	FLOR3415-01-005-01	3/28/2017 11:14	0 - 0.5 (ft)	mg/kg	0.096		1	0.005	0	0.0044	1	53.9
0	0.5	FLOR3415	FLOR3415-02-005-01	3/28/2017 11:22	0 - 0.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	58.5
0	0.5	FLOR3415	FLOR3415-03-005-01	3/28/2017 11:30	0 - 0.5 (ft)	mg/kg	0.05		0	0.005	0	0.0099	0	90.7
0	0.5	FLOR3415	FLOR3415-04-005-01	3/28/2017 11:40	0 - 0.5 (ft)	mg/kg	0.54		1	0.005	0	0.056	1	63.4
0	0.5	FLOR3475	FLOR3475-01-005-01	3/28/2017 11:56	0 - 0.5 (ft)	mg/kg	0.14		1	0.005	0	0.01	0	109
0	0.5	FLOR3475	FLOR3475-02-005-01	3/28/2017 12:10	0 - 0.5 (ft)	mg/kg	0.4		1	0.0061	1	0.014	1	88.5
0	0.5	FLOR3475	FLOR3475-03-005-01	3/28/2017 12:22	0 - 0.5 (ft)	mg/kg	0.26		1	0.005	0	0.01	0	69.1
0	0.5	FLOR3475	FLOR3475-04-005-01	3/28/2017 12:32	0 - 0.5 (ft)	mg/kg	0.045		1	0.005	0	0.01	0	89
0	0.5	GRAP0766	GRAP0766-01-005-01	3/30/2017 10:38	0 - 0.5 (ft)	mg/kg	0.24		1	0.0023	1	0.0056	1	52.8
0	0.5	GRAP0766	GRAP0766-02-005-01	3/30/2017 10:48	0 - 0.5 (ft)	mg/kg	0.92		1	0.0044	1	0.0077	1	121
0	0.5	GRAP0766	GRAP0766-03-005-01	3/30/2017 10:55	0 - 0.5 (ft)	mg/kg	0.43		1	0.005	0	0.0099	0	49.5
0	0.5	GRAP0766	GRAP0766-04-005-01	3/30/2017 11:04	0 - 0.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	14.7
0	0.5	GRAP0828	GRAP0828-01-005-01	3/30/2017 9:47	0 - 0.5 (ft)	mg/kg	0.12		1	0.0028	1	0.0099	0	51.3
0	0.5	GRAP0828	GRAP0828-02-005-01	3/30/2017 9:59	0 - 0.5 (ft)	mg/kg	0.24		1	0.051	1	0.0099	0	98.3
0	0.5	GRAP0828	GRAP0828-03-005-01	3/30/2017 10:10	0 - 0.5 (ft)	mg/kg	0.21		1	0.0071	1	0.0099	0	80
0	0.5	GRAP0828	GRAP0828-04-005-01	3/30/2017 10:19	0 - 0.5 (ft)	mg/kg	0.12		1	0.12	1	0.0038	1	57.5
0	0.5	IDAH3339	IDAH3339-01-005-01	3/30/2017 11:30	0 - 0.5 (ft)	mg/kg							1	25.2
0	0.5	IDAH3339	IDAH3339-02-005-01	3/30/2017 11:42	0 - 0.5 (ft)	mg/kg								24.1
0	0.5	IDAH3339	IDAH3339-03-005-01	3/30/2017 11:58	0 - 0.5 (ft)	mg/kg								15.2
0	0.5	IDAH3339	IDAH3339-04-005-01	3/30/2017 12:09	0 - 0.5 (ft)	mg/kg								64.4
0	0.5	KENT3433	KENT3433-01-005-01	3/28/2017 8:01	0 - 0.5 (ft)	mg/kg	0.068		1	0.005	0	0.01	0	43.5
0	0.5	KENT3433	KENT3433-02-005-01	3/28/2017 8:12	0 - 0.5 (ft)	mg/kg	0.81		1	0.0035	1	0.017	1	40.3
0	0.5	KENT3433	KENT3433-03-005-01	3/28/2017 8:20	0 - 0.5 (ft)	mg/kg	0.35		1	0.076	1	0.01	0	295
0	0.5	KENT3433	KENT3433-04-005-01	3/28/2017 8:31	0 - 0.5 (ft)	mg/kg	0.31		1	0.019	1	0.01	0	121
0	0.5	LIND0687	LIND0687-01-005-01	3/27/2017 8:21	0 - 0.5 (ft)	mg/kg	0.19		1	0.0026	1	0.01	0	31.6
0	0.5	LIND0687	LIND0687-04-005-01	3/27/2017 9:03	0 - 0.5 (ft)	mg/kg	0.6		1	0.005	0	0.0051	1	54.2
0	0.5	LIND0687	LIND0687-02-005-01	3/28/2017 16:06	0 - 0.5 (ft)	mg/kg	0.49		1	0.005	0	0.011	1	28.6
0	0.5	LIND0687	LIND0687-03-005-01	3/28/2017 16:15	0 - 0.5 (ft)	mg/kg	0.97		1	0.0063	1	0.006	1	45.8
0	0.5	LIND0741	LIND0741-01-005-01	3/29/2017 12:17	0 - 0.5 (ft)	mg/kg	0.1		1	0.005	0	0.0067	1	39.1
0	0.5	LIND0741	LIND0741-02-005-01	3/29/2017 12:23	0 - 0.5 (ft)	mg/kg	1.2		1	0.0056	1	0.037	1	45.4
0	0.5	LIND0741	LIND0741-03-005-01	3/29/2017 12:31	0 - 0.5 (ft)	mg/kg	0.98		1	0.05	0	0.17	1	44.7
0	0.5	LIND0741	LIND0741-04-005-01	3/29/2017 12:39	0 - 0.5 (ft)	mg/kg	0.63		1	0.0062	1	0.015	1	105
0	0.5	LIND0741	LIND0741-04B-005-01	3/30/2018 1:15	0 - 0.5 (ft)	mg/kg	0.25		1	0.0049	0	0.0098	0	47.3
0	0.5	PEAC0880	PEAC0880-01-005-01	3/29/2017 15:31	0 - 0.5 (ft)	mg/kg	0.057		1	0.0085	1	0.0099	0	66
0	0.5	PEAC0880	PEAC0880-02-005-01	3/29/2017 15:40	0 - 0.5 (ft)	mg/kg	0.05		0	0.0028	1	0.0099	0	15.3
0	0.5	PEAC0880	PEAC0880-03-005-01	3/29/2017 15:51	0 - 0.5 (ft)	mg/kg	0.92		1	0.18	1	0.011	1	333
0	0.5	PEAC0880	PEAC0880-04-005-01	3/29/2017 16:00	0 - 0.5 (ft)	mg/kg	0.18		1	0.018	1	0.01	0	110
0	0.5	PEAC0880	PEAC0880-03B-005-01	3/30/2018 9:10	0 - 0.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	94.4
0	0.5	PEAC0880	PEAC0880-03C-005-01	3/30/2018 9:30	0 - 0.5 (ft)	mg/kg								89.1
0	0.5	PEAC3371	PEAC3371-01-005-01	3/28/2017 15:07	0 - 0.5 (ft)	mg/kg	0.76		1	0.0042	1	0.009	1	141
0	0.5	PEAC3371	PEAC3371-02-005-01	3/28/2017 15:16	0 - 0.5 (ft)	mg/kg	0.38		1	0.0053	1	0.0084	1	70.3
0	0.5	PEAC3371	PEAC3371-03-005-01	3/28/2017 15:24	0 - 0.5 (ft)	mg/kg	0.2		1	0.005	0	0.0099	0	72.6
0	0.5	PEAC3371	PEAC3371-04-005-01	3/28/2017 15:33	0 - 0.5 (ft)	mg/kg	0.063		1	0.005	0	0.0099	0	48.9
0	0.5	PEAC3392	PEAC3392-01-005-01	3/28/2017 14:25	0 - 0.5 (ft)	mg/kg	0.075		1	0.005	0	0.01	0	56.8
0	0.5	PEAC3392	PEAC3392-02-005-01	3/28/2017 14:34	0 - 0.5 (ft)	mg/kg	0.38		1	0.0048	1	0.01	0	73.7
0	0.5	PEAC3392	PEAC3392-03-005-01	3/28/2017 14:40	0 - 0.5 (ft)	mg/kg	0.7		1	0.0035	1	0.0052	1	89.1
0	0.5	PEAC3392	PEAC3392-04-005-01	3/28/2017 14:47	0 - 0.5 (ft)	mg/kg	1.5		1	0.0041	1	0.014	1	137
0	0.5	PEAC3392	PEAC3392-04B-005-01	3/30/2018 8:10	0 - 0.5 (ft)	mg/kg	0.52		1	0.005	0	0.01	0	78.3
0	0.5	PEAC3392	PEAC3392-04C-005-01	3/30/2018 8:25	0 - 0.5 (ft)	mg/kg	0.68		1	0.005	0	0.01	0	
0	0.5	PEAC3397	PEAC3397-01-005-01	3/28/2017 13:41	0 - 0.5 (ft)	mg/kg	0.38		1	0.025	1	0.0059	1	136
0	0.5	PEAC3397	PEAC3397-02-005-01	3/28/2017 13:54	0 - 0.5 (ft)	mg/kg	0.88		1	0.015	1	0.01	1	169
0	0.5	PEAC3397	PEAC3397-03-005-01	3/28/2017 14:04	0 - 0.5 (ft)	mg/kg	0.93		1	0.055	1	0.021	1	194
0	0.5	PEAC3397	PEAC3397-04-005-01	3/28/2017 14:10	0 - 0.5 (ft)	mg/kg	0.25		1	0.022	1	0.01	0	302
0	0.5	PEAC3397	PEAC3397-03B-005-01	3/30/2018 7:15	0 - 0.5 (ft)	mg/kg	0.22		1	0.021	1	0.01	0	67.6
0	0.5	PLUM0850	PLUM0850-01-005-01	3/29/2017 14:41	0 - 0.5 (ft)	mg/kg	0.31		1	0.041	1	0.0059	1	111
0	0.5	PLUM0850	PLUM0850-02-005-01	3/29/2017 15:01	0 - 0.5 (ft)	mg/kg	0.53		1	0.016	1	0.036	1	94.2
0	0.5	PLUM0850	PLUM0850-03-005-01	3/29/2017 15:11	0 - 0.5 (ft)	mg/kg	0.9		1	0.011	1	0.0087	1	72





start_depth	end_depth	sys_loc_code	sys_sample_code	sample_date	depth	report_result_unit	Chlordane	D_Chlordane	Dieldrin	D_Dieldrin	Heptachlor epoxide	D_Heptachlor epoxide	Lead	D_Lead
	2	2.5 UTAH3384	UTAH3384-03-025-01	3/29/2017 2:23	2 - 2.5 (ft)	mg/kg							3.54	1
	3	3.5 GRAP0828	GRAP0828-04A-035-01	3/29/2018 14:11	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 LIND0741	LIND0741-04A-035-01	3/30/2018 11:05	3 - 3.5 (ft)	mg/kg	0.25		1	0.0049	0	0.0098	0	
	3	3.5 PEAC3392	PEAC3392-04A-035-01	3/30/2018 8:00	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 UTAH3304	UTAH3304-04A-035-01	3/29/2018 11:10	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 UTAH3304	UTAH3304-02A-035-01	3/29/2018 11:30	3 - 3.5 (ft)	mg/kg	0.05		0	0.024	1	0.01	0	
	3	3.5 UTAH3348	UTAH3348-04A-035-01	3/29/2018 9:30	3 - 3.5 (ft)	mg/kg	2.2		1	0.005	0	0.01	0	
	3	3.5 UTAH3348	UTAH3348-03A-035-01	3/29/2018 10:15	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 UTAH3348	UTAH3348-03A-035-02	3/29/2018 10:20	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 UTAH3348	UTAH3348-01A-035-01	3/29/2018 10:40	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.0099	0	
	3	3.5 UTAH3351	UTAH3351-01A-035-01	3/29/2018 7:57	3 - 3.5 (ft)	mg/kg	0.05		0	0.005	0	0.01	0	
	3	3.5 UTAH3351	UTAH3351-02A-035-01	3/29/2018 8:50	3 - 3.5 (ft)	mg/kg	0.12		1	0.005	0	0.01	0	
	3	3.5 UTAH3351	UTAH3351-02A-035-02	3/29/2018 8:57	3 - 3.5 (ft)	mg/kg	0.18		1	0.005	0	0.01	0	
	4	4.5 UTAH3348	UTAH3348-04A-045-01	3/29/2018 9:35	4 - 4.5 (ft)	mg/kg	0.65		1	0.005	0	0.01	0	

A	B	C	D	E	F	G	H	I	J	K	L
1	<b>UCL Statistics for Data Sets with Non-Detects</b>										
2											
3	User Selected Options										
4	Date/Time of Computation		ProUCL 5.16/21/2018 3:27:40 PM								
5	From File		2018-0621_2017-2018 UC Riverside Soil Data proUCL Query_D3_all.xls								
6	Full Precision		OFF								
7	Confidence Coefficient		95%								
8	Number of Bootstrap Operations		2000								
9											
10	<b>Chlordane</b>										
11											
12	<b>General Statistics</b>										
13	Total Number of Observations			241		Number of Distinct Observations			118		
14							Number of Missing Observations			78	
15	Number of Detects			177		Number of Non-Detects			64		
16	Number of Distinct Detects			116		Number of Distinct Non-Detects			4		
17	Minimum Detect			0.027		Minimum Non-Detect			0.049		
18	Maximum Detect			15		Maximum Non-Detect			0.5		
19	Variance Detects			3.648		Percent Non-Detects			26.56%		
20	Mean Detects			0.786		SD Detects			1.91		
21	Median Detects			0.31		CV Detects			2.429		
22	Skewness Detects			4.922		Kurtosis Detects			26.67		
23	Mean of Logged Detects			-1.258		SD of Logged Detects			1.288		
24											
25	<b>Normal GOF Test on Detects Only</b>										
26	Shapiro Wilk Test Statistic			0.39		<b>Normal GOF Test on Detected Observations Only</b>					
27	5% Shapiro Wilk P Value			0		Detected Data Not Normal at 5% Significance Level					
28	Lilliefors Test Statistic			0.365		<b>Lilliefors GOF Test</b>					
29	5% Lilliefors Critical Value			0.067		Detected Data Not Normal at 5% Significance Level					
30	<b>Detected Data Not Normal at 5% Significance Level</b>										
31											
32	<b>Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs</b>										
33	KM Mean		0.588		KM Standard Error of Mean			0.108			
34	KM SD		1.665		95% KM (BCA) UCL			0.784			
35	95% KM (t) UCL		0.766		95% KM (Percentile Bootstrap) UCL			0.774			
36	95% KM (z) UCL		0.765		95% KM Bootstrap t UCL			0.837			
37	90% KM Chebyshev UCL		0.911		95% KM Chebyshev UCL			1.057			
38	97.5% KM Chebyshev UCL		1.26		99% KM Chebyshev UCL			1.659			
39											
40	<b>Gamma GOF Tests on Detected Observations Only</b>										
41	A-D Test Statistic		9.689		<b>Anderson-Darling GOF Test</b>						
42	5% A-D Critical Value		0.81		Detected Data Not Gamma Distributed at 5% Significance Level						
43	K-S Test Statistic		0.177		<b>Kolmogorov-Smirnov GOF</b>						
44	5% K-S Critical Value		0.0731		Detected Data Not Gamma Distributed at 5% Significance Level						
45	<b>Detected Data Not Gamma Distributed at 5% Significance Level</b>										
46											
47	<b>Gamma Statistics on Detected Data Only</b>										
48	k hat (MLE)		0.606		k star (bias corrected MLE)			0.6			
49	Theta hat (MLE)		1.297		Theta star (bias corrected MLE)			1.312			
50	nu hat (MLE)		214.5		nu star (bias corrected)			212.2			
51	Mean (detects)		0.786								
52											

A	B	C	D	E	F	G	H	I	J	K	L
53	<b>Gamma ROS Statistics using Imputed Non-Detects</b>										
54	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
55	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
56	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
57	This is especially true when the sample size is small.										
58	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
59	Minimum	0.01							Mean	0.58	
60	Maximum	15							Median	0.14	
61	SD	1.671							CV	2.881	
62	k hat (MLE)	0.409							k star (bias corrected MLE)	0.407	
63	Theta hat (MLE)	1.418							Theta star (bias corrected MLE)	1.426	
64	nu hat (MLE)	197.2							nu star (bias corrected)	196.1	
65	Adjusted Level of Significance ( $\beta$ )	0.049									
66	Approximate Chi Square Value (196.06, $\alpha$ )	164.7							Adjusted Chi Square Value (196.06, $\beta$ )	164.5	
67	95% Gamma Approximate UCL (use when $n \geq 50$ )	0.691							95% Gamma Adjusted UCL (use when $n < 50$ )	0.691	
68											
69	<b>Estimates of Gamma Parameters using KM Estimates</b>										
70	Mean (KM)	0.588							SD (KM)	1.665	
71	Variance (KM)	2.772							SE of Mean (KM)	0.108	
72	k hat (KM)	0.125							k star (KM)	0.126	
73	nu hat (KM)	60.2							nu star (KM)	60.78	
74	theta hat (KM)	4.711							theta star (KM)	4.666	
75	80% gamma percentile (KM)	0.545							90% gamma percentile (KM)	1.689	
76	95% gamma percentile (KM)	3.335							99% gamma percentile (KM)	8.301	
77											
78	<b>Gamma Kaplan-Meier (KM) Statistics</b>										
79	Approximate Chi Square Value (60.78, $\alpha$ )	43.85							Adjusted Chi Square Value (60.78, $\beta$ )	43.77	
80	95% Gamma Approximate KM-UCL (use when $n \geq 50$ )	0.816							95% Gamma Adjusted KM-UCL (use when $n < 50$ )	0.817	
81											
82	<b>Lognormal GOF Test on Detected Observations Only</b>										
83	Shapiro Wilk Approximate Test Statistic	0.952							<b>Shapiro Wilk GOF Test</b>		
84	5% Shapiro Wilk P Value	2.4982E-5							Detected Data Not Lognormal at 5% Significance Level		
85	Lilliefors Test Statistic	0.0739							<b>Lilliefors GOF Test</b>		
86	5% Lilliefors Critical Value	0.067							Detected Data Not Lognormal at 5% Significance Level		
87	<b>Detected Data Not Lognormal at 5% Significance Level</b>										
88											
89	<b>Lognormal ROS Statistics Using Imputed Non-Detects</b>										
90	Mean in Original Scale	0.588							Mean in Log Scale	-1.851	
91	SD in Original Scale	1.669							SD in Log Scale	1.533	
92	95% t UCL (assumes normality of ROS data)	0.765							95% Percentile Bootstrap UCL	0.765	
93	95% BCA Bootstrap UCL	0.823							95% Bootstrap t UCL	0.835	
94	95% H-UCL (Log ROS)	0.662									
95											
96	<b>Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution</b>										
97	KM Mean (logged)	-1.786							KM Geo Mean	0.168	
98	KM SD (logged)	1.415							95% Critical H Value (KM-Log)	2.542	
99	KM Standard Error of Mean (logged)	0.0925							95% H-UCL (KM -Log)	0.575	
100	KM SD (logged)	1.415							95% Critical H Value (KM-Log)	2.542	
101	KM Standard Error of Mean (logged)	0.0925									
102											
103	<b>DL/2 Statistics</b>										
104	<b>DL/2 Normal</b>					<b>DL/2 Log-Transformed</b>					

A	B	C	D	E	F	G	H	I	J	K	L
105	Mean in Original Scale				0.586	Mean in Log Scale				-1.881	
106	SD in Original Scale				1.669	SD in Log Scale				1.528	
107	95% t UCL (Assumes normality)				0.763	95% H-Stat UCL				0.637	
108	<b>DL/2 is not a recommended method, provided for comparisons and historical reasons</b>										
109											
110	<b>Nonparametric Distribution Free UCL Statistics</b>										
111	<b>Data do not follow a Discernible Distribution at 5% Significance Level</b>										
112											
113	<b>Suggested UCL to Use</b>										
114	95% KM (Chebyshev) UCL				1.057						
115											
116	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
117	Recommendations are based upon data size, data distribution, and skewness.										
118	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										
119	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.										
120											
121	<b>Dieldrin</b>										
122											
123	<b>General Statistics</b>										
124	Total Number of Observations				241	Number of Distinct Observations				80	
125						Number of Missing Observations				78	
126	Number of Detects				110	Number of Non-Detects				131	
127	Number of Distinct Detects				77	Number of Distinct Non-Detects				6	
128	Minimum Detect				0.0022	Minimum Non-Detect				0.0049	
129	Maximum Detect				0.5	Maximum Non-Detect				0.05	
130	Variance Detects				0.00463	Percent Non-Detects				54.36%	
131	Mean Detects				0.0309	SD Detects				0.068	
132	Median Detects				0.0098	CV Detects				2.198	
133	Skewness Detects				4.719	Kurtosis Detects				25.58	
134	Mean of Logged Detects				-4.442	SD of Logged Detects				1.248	
135											
136	<b>Normal GOF Test on Detects Only</b>										
137	Shapiro Wilk Test Statistic				0.445	<b>Normal GOF Test on Detected Observations Only</b>					
138	5% Shapiro Wilk P Value				0	Detected Data Not Normal at 5% Significance Level					
139	Lilliefors Test Statistic				0.336	<b>Lilliefors GOF Test</b>					
140	5% Lilliefors Critical Value				0.0848	Detected Data Not Normal at 5% Significance Level					
141	<b>Detected Data Not Normal at 5% Significance Level</b>										
142											
143	<b>Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs</b>										
144	KM Mean		0.0159		KM Standard Error of Mean				0.00309		
145	KM SD		0.0478		95% KM (BCA) UCL				0.0224		
146	95% KM (t) UCL		0.021		95% KM (Percentile Bootstrap) UCL				0.0215		
147	95% KM (z) UCL		0.021		95% KM Bootstrap t UCL				0.0238		
148	90% KM Chebyshev UCL		0.0252		95% KM Chebyshev UCL				0.0294		
149	97.5% KM Chebyshev UCL		0.0353		99% KM Chebyshev UCL				0.0467		
150											
151	<b>Gamma GOF Tests on Detected Observations Only</b>										
152	A-D Test Statistic		6.272		<b>Anderson-Darling GOF Test</b>						
153	5% A-D Critical Value		0.806		Detected Data Not Gamma Distributed at 5% Significance Level						
154	K-S Test Statistic		0.169		<b>Kolmogorov-Smimov GOF</b>						
155	5% K-S Critical Value		0.091		Detected Data Not Gamma Distributed at 5% Significance Level						
156	<b>Detected Data Not Gamma Distributed at 5% Significance Level</b>										



A	B	C	D	E	F	G	H	I	J	K	L
157											
158	<b>Gamma Statistics on Detected Data Only</b>										
159	k hat (MLE)			0.634		k star (bias corrected MLE)			0.623		
160	Theta hat (MLE)			0.0488		Theta star (bias corrected MLE)			0.0497		
161	nu hat (MLE)			139.6		nu star (bias corrected)			137.1		
162	Mean (detects)			0.0309							
163											
164	<b>Gamma ROS Statistics using Imputed Non-Detects</b>										
165	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
166	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
167	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
168	This is especially true when the sample size is small.										
169	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
170	Minimum			0.0022		Mean			0.0196		
171	Maximum			0.5		Median			0.01		
172	SD			0.047		CV			2.404		
173	k hat (MLE)			0.971		k star (bias corrected MLE)			0.962		
174	Theta hat (MLE)			0.0201		Theta star (bias corrected MLE)			0.0203		
175	nu hat (MLE)			468.2		nu star (bias corrected)			463.7		
176	Adjusted Level of Significance ( $\beta$ )			0.049							
177	Approximate Chi Square Value (463.72, $\alpha$ )			414.8		Adjusted Chi Square Value (463.72, $\beta$ )			414.5		
178	95% Gamma Approximate UCL (use when $n \geq 50$ )			0.0219		95% Gamma Adjusted UCL (use when $n < 50$ )			0.0219		
179											
180	<b>Estimates of Gamma Parameters using KM Estimates</b>										
181	Mean (KM)			0.0159		SD (KM)			0.0478		
182	Variance (KM)			0.00228		SE of Mean (KM)			0.00309		
183	k hat (KM)			0.111		k star (KM)			0.113		
184	nu hat (KM)			53.61		nu star (KM)			54.27		
185	theta hat (KM)			0.143		theta star (KM)			0.142		
186	80% gamma percentile (KM)			0.013		90% gamma percentile (KM)			0.0443		
187	95% gamma percentile (KM)			0.0916		99% gamma percentile (KM)			0.238		
188											
189	<b>Gamma Kaplan-Meier (KM) Statistics</b>										
190	Approximate Chi Square Value (54.27, $\alpha$ )			38.35		Adjusted Chi Square Value (54.27, $\beta$ )			38.27		
191	95% Gamma Approximate KM-UCL (use when $n \geq 50$ )			0.0226		95% Gamma Adjusted KM-UCL (use when $n < 50$ )			0.0226		
192											
193	<b>Lognormal GOF Test on Detected Observations Only</b>										
194	Shapiro Wilk Approximate Test Statistic			0.928		<b>Shapiro Wilk GOF Test</b>					
195	5% Shapiro Wilk P Value			2.8495E-6		Detected Data Not Lognormal at 5% Significance Level					
196	Lilliefors Test Statistic			0.0919		<b>Lilliefors GOF Test</b>					
197	5% Lilliefors Critical Value			0.0848		Detected Data Not Lognormal at 5% Significance Level					
198	<b>Detected Data Not Lognormal at 5% Significance Level</b>										
199											
200	<b>Lognormal ROS Statistics Using Imputed Non-Detects</b>										
201	Mean in Original Scale			0.0161		Mean in Log Scale			-5.23		
202	SD in Original Scale			0.0479		SD in Log Scale			1.264		
203	95% t UCL (assumes normality of ROS data)			0.0212		95% Percentile Bootstrap UCL			0.0216		
204	95% BCA Bootstrap UCL			0.0239		95% Bootstrap t UCL			0.024		
205	95% H-UCL (Log ROS)			0.0145							
206											
207	<b>Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution</b>										
208	KM Mean (logged)			-5.158		KM Geo Mean			0.00575		

A	B	C	D	E	F	G	H	I	J	K	L
209				KM SD (logged)	1.088					95% Critical H Value (KM-Log)	2.231
210				KM Standard Error of Mean (logged)	0.0757					95% H-UCL (KM -Log)	0.0122
211				KM SD (logged)	1.088					95% Critical H Value (KM-Log)	2.231
212				KM Standard Error of Mean (logged)	0.0757						
213											
214	<b>DL/2 Statistics</b>										
215	<b>DL/2 Normal</b>					<b>DL/2 Log-Transformed</b>					
216				Mean in Original Scale	0.0159					Mean in Log Scale	-5.233
217				SD in Original Scale	0.048					SD in Log Scale	1.158
218				95% t UCL (Assumes normality)	0.021					95% H-Stat UCL	0.0124
219	<b>DL/2 is not a recommended method, provided for comparisons and historical reasons</b>										
220											
221	<b>Nonparametric Distribution Free UCL Statistics</b>										
222	<b>Data do not follow a Discernible Distribution at 5% Significance Level</b>										
223											
224	<b>Suggested UCL to Use</b>										
225				95% KM (Chebyshev) UCL	0.0294						
226											
227	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
228	Recommendations are based upon data size, data distribution, and skewness.										
229	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										
230	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.										
231											
232	<b>Heptachlor epoxide</b>										
233											
234	<b>General Statistics</b>										
235				Total Number of Observations	241					Number of Distinct Observations	62
236										Number of Missing Observations	78
237				Number of Detects	88					Number of Non-Detects	153
238				Number of Distinct Detects	57					Number of Distinct Non-Detects	6
239				Minimum Detect	0.0037					Minimum Non-Detect	0.0098
240				Maximum Detect	1.3					Maximum Non-Detect	0.2
241				Variance Detects	0.0193					Percent Non-Detects	63.49%
242				Mean Detects	0.0329					SD Detects	0.139
243				Median Detects	0.0091					CV Detects	4.227
244				Skewness Detects	8.917					Kurtosis Detects	81.89
245				Mean of Logged Detects	-4.411					SD of Logged Detects	0.983
246											
247	<b>Normal GOF Test on Detects Only</b>										
248				Shapiro Wilk Test Statistic	0.196					<b>Normal GOF Test on Detected Observations Only</b>	
249				5% Shapiro Wilk P Value	0					Detected Data Not Normal at 5% Significance Level	
250				Lilliefors Test Statistic	0.417					<b>Lilliefors GOF Test</b>	
251				5% Lilliefors Critical Value	0.0946					Detected Data Not Normal at 5% Significance Level	
252	<b>Detected Data Not Normal at 5% Significance Level</b>										
253											
254	<b>Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs</b>										
255				KM Mean	0.0161					KM Standard Error of Mean	0.00548
256				KM SD	0.0845					95% KM (BCA) UCL	0.0276
257				95% KM (t) UCL	0.0252					95% KM (Percentile Bootstrap) UCL	0.0266
258				95% KM (z) UCL	0.0252					95% KM Bootstrap t UCL	0.0589
259				90% KM Chebyshev UCL	0.0326					95% KM Chebyshev UCL	0.04
260				97.5% KM Chebyshev UCL	0.0504					99% KM Chebyshev UCL	0.0707

A	B	C	D	E	F	G	H	I	J	K	L
261											
262	<b>Gamma GOF Tests on Detected Observations Only</b>										
263	A-D Test Statistic		11		<b>Anderson-Darling GOF Test</b>						
264	5% A-D Critical Value		0.807		Detected Data Not Gamma Distributed at 5% Significance Level						
265	K-S Test Statistic		0.244		<b>Kolmogorov-Smirnov GOF</b>						
266	5% K-S Critical Value		0.1		Detected Data Not Gamma Distributed at 5% Significance Level						
267	<b>Detected Data Not Gamma Distributed at 5% Significance Level</b>										
268											
269	<b>Gamma Statistics on Detected Data Only</b>										
270	k hat (MLE)		0.618		k star (bias corrected MLE)		0.604				
271	Theta hat (MLE)		0.0533		Theta star (bias corrected MLE)		0.0544				
272	nu hat (MLE)		108.7		nu star (bias corrected)		106.3				
273	Mean (detects)		0.0329								
274											
275	<b>Gamma ROS Statistics using Imputed Non-Detects</b>										
276	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
277	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
278	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
279	This is especially true when the sample size is small.										
280	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
281	Minimum		0.0037		Mean		0.0191				
282	Maximum		1.3		Median		0.01				
283	SD		0.0844		CV		4.428				
284	k hat (MLE)		1.077		k star (bias corrected MLE)		1.066				
285	Theta hat (MLE)		0.0177		Theta star (bias corrected MLE)		0.0179				
286	nu hat (MLE)		519		nu star (bias corrected)		513.8				
287	Adjusted Level of Significance ( $\beta$ )		0.049								
288	Approximate Chi Square Value (513.83, $\alpha$ )		462.3		Adjusted Chi Square Value (513.83, $\beta$ )		462				
289	95% Gamma Approximate UCL (use when $n \geq 50$ )		0.0212		95% Gamma Adjusted UCL (use when $n < 50$ )		0.0212				
290											
291	<b>Estimates of Gamma Parameters using KM Estimates</b>										
292	Mean (KM)		0.0161		SD (KM)		0.0845				
293	Variance (KM)		0.00714		SE of Mean (KM)		0.00548				
294	k hat (KM)		0.0365		k star (KM)		0.0388				
295	nu hat (KM)		17.59		nu star (KM)		18.71				
296	theta hat (KM)		0.442		theta star (KM)		0.416				
297	80% gamma percentile (KM)		7.6885E-4		90% gamma percentile (KM)		0.0166				
298	95% gamma percentile (KM)		0.0761		99% gamma percentile (KM)		0.386				
299											
300	<b>Gamma Kaplan-Meier (KM) Statistics</b>										
301	Approximate Chi Square Value (18.71, $\alpha$ )		9.904		Adjusted Chi Square Value (18.71, $\beta$ )		9.865				
302	95% Gamma Approximate KM-UCL (use when $n \geq 50$ )		0.0305		95% Gamma Adjusted KM-UCL (use when $n < 50$ )		0.0306				
303											
304	<b>Lognormal GOF Test on Detected Observations Only</b>										
305	Shapiro Wilk Approximate Test Statistic		0.858		<b>Shapiro Wilk GOF Test</b>						
306	5% Shapiro Wilk P Value		8.281E-12		Detected Data Not Lognormal at 5% Significance Level						
307	Lilliefors Test Statistic		0.142		<b>Lilliefors GOF Test</b>						
308	5% Lilliefors Critical Value		0.0946		Detected Data Not Lognormal at 5% Significance Level						
309	<b>Detected Data Not Lognormal at 5% Significance Level</b>										
310											
311	<b>Lognormal ROS Statistics Using Imputed Non-Detects</b>										
312	Mean in Original Scale		0.0167		Mean in Log Scale		-4.83				

A	B	C	D	E	F	G	H	I	J	K	L
313			SD in Original Scale		0.0847				SD in Log Scale		0.819
314			95% t UCL (assumes normality of ROS data)		0.0257				95% Percentile Bootstrap UCL		0.0274
315			95% BCA Bootstrap UCL		0.0346				95% Bootstrap t UCL		0.0603
316			95% H-UCL (Log ROS)		0.0124						
317											
318			<b>Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution</b>								
319			KM Mean (logged)		-4.834				KM Geo Mean		0.00795
320			KM SD (logged)		0.708				95% Critical H Value (KM-Log)		1.933
321			KM Standard Error of Mean (logged)		0.0536				95% H-UCL (KM -Log)		0.0112
322			KM SD (logged)		0.708				95% Critical H Value (KM-Log)		1.933
323			KM Standard Error of Mean (logged)		0.0536						
324											
325			<b>DL/2 Statistics</b>								
326			<b>DL/2 Normal</b>				<b>DL/2 Log-Transformed</b>				
327			Mean in Original Scale		0.0163				Mean in Log Scale		-4.908
328			SD in Original Scale		0.085				SD in Log Scale		0.788
329			95% t UCL (Assumes normality)		0.0254				95% H-Stat UCL		0.0112
330			<b>DL/2 is not a recommended method, provided for comparisons and historical reasons</b>								
331											
332			<b>Nonparametric Distribution Free UCL Statistics</b>								
333			<b>Data do not follow a Discernible Distribution at 5% Significance Level</b>								
334											
335			<b>Suggested UCL to Use</b>								
336			95% KM (Chebyshev) UCL		0.04						
337											
338			Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.								
339			Recommendations are based upon data size, data distribution, and skewness.								
340			These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).								
341			However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.								
342											
343											
344			<b>Lead</b>								
345											
346			<b>General Statistics</b>								
347			Total Number of Observations		201				Number of Distinct Observations		189
348									Number of Missing Observations		105
349			Minimum		3.07				Mean		59.94
350			Maximum		434				Median		46.8
351			SD		60.67				Std. Error of Mean		4.279
352			Coefficient of Variation		1.012				Skewness		2.618
353											
354			<b>Normal GOF Test</b>								
355			Shapiro Wilk Test Statistic		0.775				<b>Shapiro Wilk GOF Test</b>		
356			5% Shapiro Wilk P Value		0				Data Not Normal at 5% Significance Level		
357			Lilliefors Test Statistic		0.174				<b>Lilliefors GOF Test</b>		
358			5% Lilliefors Critical Value		0.0629				Data Not Normal at 5% Significance Level		
359			<b>Data Not Normal at 5% Significance Level</b>								
360											
361			<b>Assuming Normal Distribution</b>								
362			<b>95% Normal UCL</b>				<b>95% UCLs (Adjusted for Skewness)</b>				
363			95% Student's-t UCL		67.01				95% Adjusted-CLT UCL (Chen-1995)		67.82
364									95% Modified-t UCL (Johnson-1978)		67.14

A	B	C	D	E	F	G	H	I	J	K	L
365											
366	<b>Gamma GOF Test</b>										
367	A-D Test Statistic			1.431		<b>Anderson-Darling Gamma GOF Test</b>					
368	5% A-D Critical Value			0.78		Data Not Gamma Distributed at 5% Significance Level					
369	K-S Test Statistic			0.0788		<b>Kolmogorov-Smirnov Gamma GOF Test</b>					
370	5% K-S Critical Value			0.0652		Data Not Gamma Distributed at 5% Significance Level					
371	<b>Data Not Gamma Distributed at 5% Significance Level</b>										
372											
373	<b>Gamma Statistics</b>										
374	k hat (MLE)			1.14		k star (bias corrected MLE)			1.126		
375	Theta hat (MLE)			52.58		Theta star (bias corrected MLE)			53.22		
376	nu hat (MLE)			458.3		nu star (bias corrected)			452.8		
377	MLE Mean (bias corrected)			59.94		MLE Sd (bias corrected)			56.48		
378						Approximate Chi Square Value (0.05)			404.5		
379	Adjusted Level of Significance			0.0488		Adjusted Chi Square Value			404.1		
380											
381	<b>Assuming Gamma Distribution</b>										
382	95% Approximate Gamma UCL (use when n>=50))			67.1		95% Adjusted Gamma UCL (use when n<50)			67.16		
383											
384	<b>Lognormal GOF Test</b>										
385	Shapiro Wilk Test Statistic			0.932		<b>Shapiro Wilk Lognormal GOF Test</b>					
386	5% Shapiro Wilk P Value			8.487E-12		Data Not Lognormal at 5% Significance Level					
387	Lilliefors Test Statistic			0.112		<b>Lilliefors Lognormal GOF Test</b>					
388	5% Lilliefors Critical Value			0.0629		Data Not Lognormal at 5% Significance Level					
389	<b>Data Not Lognormal at 5% Significance Level</b>										
390											
391	<b>Lognormal Statistics</b>										
392	Minimum of Logged Data			1.122		Mean of logged Data			3.594		
393	Maximum of Logged Data			6.073		SD of logged Data			1.106		
394											
395	<b>Assuming Lognormal Distribution</b>										
396	95% H-UCL			79.87		90% Chebyshev (MVUE) UCL			86.31		
397	95% Chebyshev (MVUE) UCL			95.17		97.5% Chebyshev (MVUE) UCL			107.5		
398	99% Chebyshev (MVUE) UCL			131.6							
399											
400	<b>Nonparametric Distribution Free UCL Statistics</b>										
401	<b>Data do not follow a Discernible Distribution (0.05)</b>										
402											
403	<b>Nonparametric Distribution Free UCLs</b>										
404	95% CLT UCL			66.98		95% Jackknife UCL			67.01		
405	95% Standard Bootstrap UCL			66.88		95% Bootstrap-t UCL			67.52		
406	95% Hall's Bootstrap UCL			68.12		95% Percentile Bootstrap UCL			67.18		
407	95% BCA Bootstrap UCL			67.97							
408	90% Chebyshev(Mean, Sd) UCL			72.78		95% Chebyshev(Mean, Sd) UCL			78.59		
409	97.5% Chebyshev(Mean, Sd) UCL			86.66		99% Chebyshev(Mean, Sd) UCL			102.5		
410											
411	<b>Suggested UCL to Use</b>										
412	95% Chebyshev (Mean, Sd) UCL			78.59							
413											
414	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
415	Recommendations are based upon data size, data distribution, and skewness.										
416	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										

	A	B	C	D	E	F	G	H	I	J	K	L
417	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
418												

GIS FILE PATH: G:\131648 UCR\Global\GIS\Maps\2018\_05\131648\_003\_0002 SITE PLAN SOIL SAMPLES.mxd — USER: dfm — LAST SAVED: 5/7/2018 1:41:49 PM



**LEGEND**  
[Dashed Line] SITE BOUNDARY (APPROXIMATE)

**NOTES**  
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.  
2. AERIAL IMAGERY SOURCE: ESRI



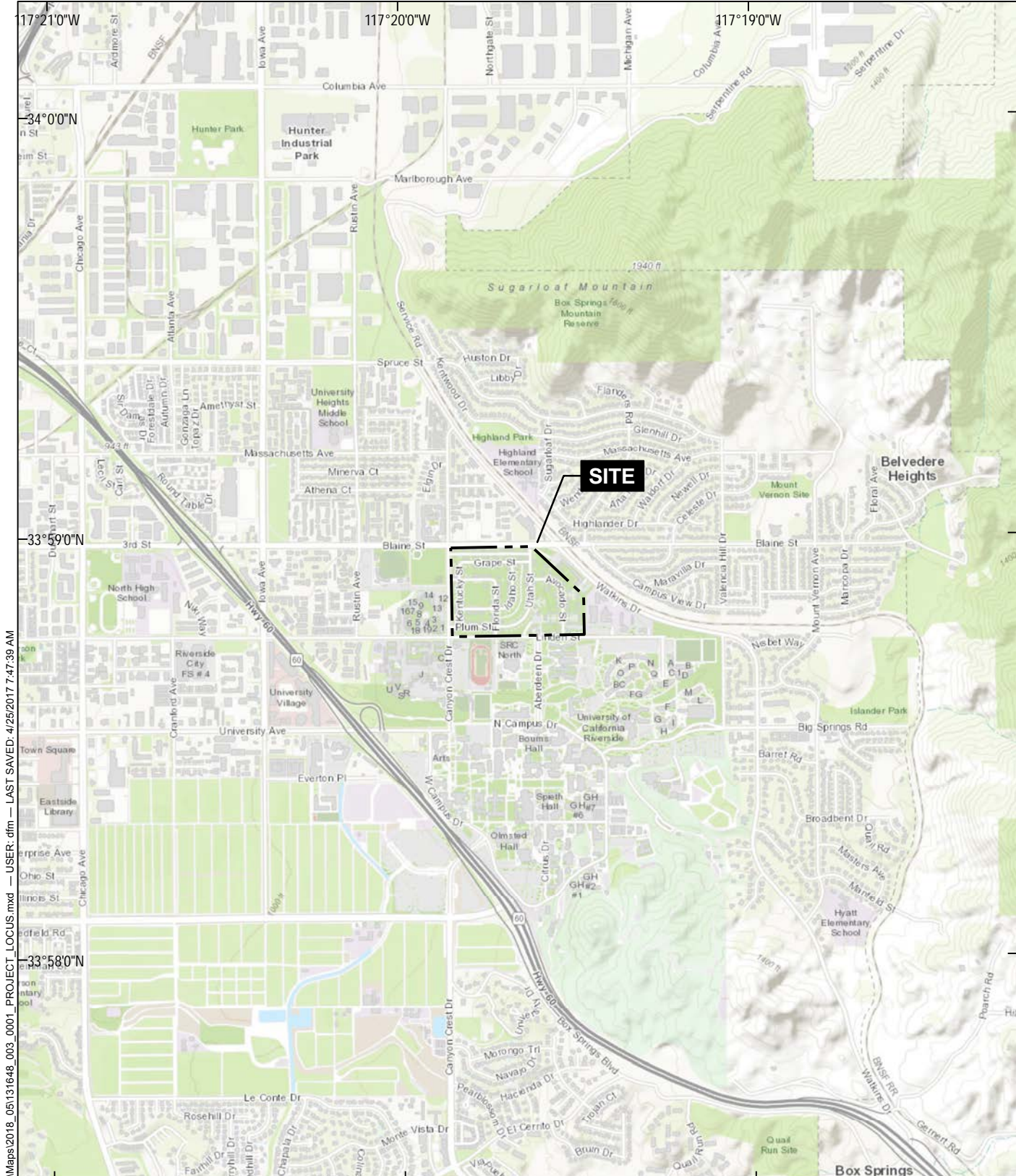
0 300 600  
SCALE IN FEET

**HALEY ALDRICH** NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE RIVERSIDE, CALIFORNIA

**SITE PLAN**

MAY 2018

**FIGURE 2**



GIS FILE PATH: G:\131648\_UCR\Global\GIS\Maps\2018\_05\131648\_003\_0001\_PROJECT\_LOCUS.mxd — USER: dfm — LAST SAVED: 4/25/2017 7:47:39 AM



MAP SOURCE: ESRI  
 SITE COORDINATES: 33°58'52"N 117°19'41"W

**HALEY  
 ALDRICH**

NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 MAY 2018

**FIGURE 1**



**REPORT ON**  
**ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
**UC RIVERSIDE - NORTH DISTRICT DEVELOPMENT**  
**SOUTH OF WEST LINDEN STREET, EAST OF ABERDEEN DRIVE**  
**RIVERSIDE, CALIFORNIA**

by Haley & Aldrich, Inc.  
Costa Mesa, California

for American Campus Communities  
Austin, Texas

File No. 131648-003  
May 2018





HALEY & ALDRICH, INC.  
3187 Red Hill Ave  
Suite 155  
Costa Mesa, CA 92626  
714.371.1800

May 11, 2018  
File No. 131648-003

American Campus Communities  
12700 Hill Country Boulevard, Suite T-200  
Austin, Texas 78738

Attention: Mr. Kyle McDonald

Subject: ASTM Phase I Environmental Site Assessment  
UC Riverside – North District Development  
North of West Linden Street and East of Canyon Crest Drive  
Riverside, California

Ladies and Gentlemen:

The enclosed report presents the results of a Phase I Environmental Site Assessment (Phase I) conducted at the above-referenced property, located at the University of California Riverside – North District Development, located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California (herein referred to as the “subject site”). This work was performed by Haley & Aldrich, Inc. (Haley & Aldrich), in accordance with our proposal to American Campus Communities dated January 12, 2018 (“Agreement”) as authorized on March 30, 2018. This Phase I was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule).

The objective of a Phase I is to assess whether known and suspect “recognized environmental conditions” (REC), historical RECs (HREC), or controlled RECs (CREC) are associated with the subject site, as defined in the ASTM E 1527-13 Standard.

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact us if you have any questions or comments.

American Campus Communities

May 11, 2018

Page 2

Sincerely yours,  
HALEY & ALDRICH, INC.



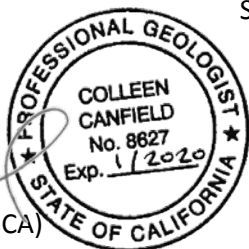
Mathew T. Raithel  
Senior Technical Specialist



Robert K. Scott, P.G. 5334 (CA), CHg  
Senior Associate Hydrogeologist



Colleen Canfield, P.G. 8627 (CA)  
Senior Project Manager



Enclosures

\\haleyaldrich.com\share\cos\_common\131648 UCR North District American Campus\003 Phase 1B North District\Deliverables\Environmental\Phase\_\2018\_0511\_HAI\_ASTM\_Phase\_1B\_F.docx

## Executive Summary

Haley & Aldrich, Inc. (Haley & Aldrich) has performed a Phase I Environmental Site Assessment (Phase I) of the University of California Riverside (UCR) - North District Development property in Riverside, California (herein referred to as the “subject site”). The scope of work is described and conditioned by our proposal dated January 12, 2018. This Phase I was performed for American Campus Communities who seeks to demolish existing parking lots, driveways, and structures, and redevelop with four, 7-story, L-shaped and C-shaped residence halls, parking lots, and landscaping and hardscaping. This Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and [All Appropriate Inquiries \(AAI\) Rule](#)<sup>1</sup>.

### SUBJECT SITE DESCRIPTION

The subject site is bounded by Canyon Crest Drive to the west, West Linden Street to the south, UCR campus facilities to the east, and Blaine Street to the north. The main UCR campus is located to the south of the subject site, across West Linden Street.

Currently, the approximately 55-acre subject site is occupied by the Canyon Crest Student Housing development, a complex of single-story student housing units located north of the main UCR campus. Storage and maintenance facilities, including permanent structures and modular units, are present in the northwestern portions of the site. A park with a playground is present in the western portion of the subject site, south of Cherry Street. There are nine asphalt-paved residential streets within the development in addition to several gravel roads. Based on our review of readily available historical information and aerial photographs, much of the existing development was constructed as military housing in 1940, and prior to that time, the subject site was covered with citrus groves.

A Limited Phase II Environmental Site Investigation was conducted by Haley & Aldrich dated March 2018 to assess previous potential use of organochlorine pesticides (OCPs), arsenic, and lead at the subject site due to previous agricultural activities in the 1950s. The results of the investigation indicated that OCPs and lead concentrations in soil at the subject site are above Department of Toxic Substances Control (DTSC) modified screening levels for residential land use, and additional evaluation was recommended.

### OBJECTIVE

The objective of a Phase I is to assess whether “[recognized environmental conditions](#)” (REC), [historical RECs](#) (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the “[business environmental risk](#)” associated with the subject site. Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of the client's intention to

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<sup>1</sup> American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) (“ASTM E 1527-13 Standard”). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.

and redevelop the site with four, 7-story, L-shaped and C-shaped residence halls, parking lots, and landscaping and hardscaping.

## RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an REC in part as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

Two RECs were identified in connection with the subject site.

REC #1: Historical use of lead-based paint

Based on the age of the structures located at the subject site, there is a potential that lead-based paint was used historically at the subject site. Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017 (Haley & Aldrich, 2017). Soil samples were collected at the subject site and analyzed for lead to evaluate the potential presence of lead in soil. Based on the findings of the 2017 investigation, soil samples collected and analyzed at the subject site contained lead above the DTSC modified screening level for residential land use.

REC #2: Historical use of termiticides

Based on the age of the structures located at the subject site, there is a potential that organochlorine pesticides (OCPs) as termiticides were used historically at the subject site. Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017 (Haley & Aldrich, 2017). Soil samples were collected at the subject site and analyzed for OCPs to evaluate the potential presence of these chemicals in soil. Based on the findings of the 2017 investigation, soil samples collected and analyzed at the subject site contained OCPs above their respective DTSC modified screening levels for residential land use.

## CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

## HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

HRECs were not identified in connection with the subject site.

### **DE MINIMIS CONDITIONS**

The ASTM E 1527-13 Standard defines *de minimis* conditions as those conditions which “do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.” The ASTM E 1527-13 Standard notes that “conditions determined to be *de minimis* are not recognized environmental conditions.”

*De minimis* conditions were not identified in connection with the subject site.

### **SUMMARY**

In summary, we identified one REC and no HRECs or CRECs during this Phase I. The remainder of this report contains additional information regarding the Phase I, the resulting findings summarized above, and limitations affecting this report.

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1	Project Locus
2	Site Plan

# 1. Introduction

This report presents the results of an ASTM Phase I (Phase I) conducted at the University of California Riverside (UCR) - North District Development in Riverside, California (herein referred to as the “subject site”). The approximately 55-acre subject site is occupied by the Canyon Crest Student Housing development is located northeast of the intersection of Canyon Crest Drive and West Linden Street, Riverside, California, as shown on the Project Locus, Figure 1. This Phase I was conducted in consideration of American Campus Communities’ intention to demolish existing parking lots, driveways, and structures, and redevelop with four, 7-story, L-shaped and C-shaped residence halls, parking lots, and landscaping and hardscaping.

## 1.1 OBJECTIVE

The objective of a Phase I is to assess whether “[recognized environmental conditions](#)” (REC), [historical RECs \(HREC\)](#), and [controlled RECs \(CREC\)](#) are associated with the subject site by evaluating site history, interviews, existing observable conditions, current site use, and current and former uses of adjoining properties as well as potential releases at surrounding properties that may impact the subject site. Our conclusions are intended to help the user evaluate the “[business environmental risk](#)” associated with the subject site.

RECs are defined in the ASTM E 1527-13 Standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or under conditions that pose a [material threat](#) of a future release to the environment.” The definitions of RECs, HRECs, and CRECs are included in the Glossary section of this report.

## 1.2 SCOPE OF SERVICES

This work was performed by (Haley & Aldrich) and this Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and All [Appropriate Inquiries \(AAI\)](#) Rule<sup>2</sup> and in accordance with our proposal to American Campus Communities dated January 12, 2018 (“Agreement”) as authorized on March 30, 2018. The Phase I limitations are attached hereto as Appendix A.

As part of this Phase I, Haley & Aldrich conducted visual observations of site conditions and of abutting property use and interviewed a [key site manager](#) (site reconnaissance); reviewed federal, state, tribal, and local environmental database information, federal and state environmental files, previous reports (if identified and provided), and site historical use records; and formulated conclusions regarding the potential presence and impact of RECs.

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<sup>2</sup> American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) (“ASTM E 1527-13 Standard”). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.

### **1.3 NON-SCOPE CONSIDERATIONS**

The ASTM E 1527-13 Standard includes the following list of “additional issues” that are non-scope considerations outside of the scope of the ASTM Phase I practice: asbestos-containing materials, biological agents, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, and mold. These items were not included in this Phase I of the subject site.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, our assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-13 Standard as “electrical or hydraulic equipment known or likely to contain PCBs...to the extent visually and or physically observed or identified from the interview or records review.”

### **1.4 LIMITING CONDITIONS/DEVIATIONS**

Haley & Aldrich completed this Phase I in substantial conformance with the ASTM E 1527-13 Standard. In our opinion, no additions were made to or deviations and deletions made from the ASTM work scope in completing this Phase I.

### **1.5 USER RESPONSIBILITIES**

The completion of this Phase I is only one component of the process required to satisfy the AAI Rule. In addition, the user must adhere to a set of user responsibilities as defined by the ASTM E 1527-13 Standard and the AAI Rule. User responsibilities are discussed in Section 6.6 of this report. A user seeking protection from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability as an innocent landowner, bona fide prospective purchaser, or contiguous property owner must complete all components of the AAI process in addition to meeting ongoing obligations. AAI components, CERCLA liability relief, and ongoing obligations are discussed in the AAI Rule and in Appendix XI of the ASTM E 1527-13 Standard.

## 2. Site Description

A description of the subject site is detailed in the sections below. Refer to Figure 1 for a project locus and Figure 2 for a site plan showing relevant site features and adjacent properties.

### 2.1 SITE OWNERSHIP, LOCATION, AND VICINITY DESCRIPTION

Site Description		
Owner/Operator	University of California Riverside 900 University Avenue Riverside, California 92521	
Current Site Use	Canyon Crest Student Housing	
Size	Approximately 55 Acres	
USGS 7.5 Minute Topographic Map	Riverside East, 2012	
Site County	Riverside	
Parcel Information	Portion of 251-180-006	
Utilities	Water:	City of Riverside Public Utilities
	Sewerage:	City of Riverside Public Utilities
	Electricity:	City of Riverside Public Utilities
	Gas/Oil/LPG:	Southern California Gas Company
Heating/Cooling System	None	
Site Vicinity Description		
General Area Description	Residential/UCR Campus	
Adjoining Property Description	North:	Blaine Street and Retail Stores
	East:	Parking Lot 28 and the UCR Fleet Services Department
	South:	West Linden Street and UCR Campus
	West:	Canyon Crest Drive, student apartments, and athletic fields

### 2.2 PHYSICAL SETTING

Subject site geology and hydrology were evaluated based on readily available public information or references, and/or our experience and understanding of subsurface conditions in the vicinity of the subject site. In addition, Haley & Aldrich conducted a geotechnical investigation for the subject site dated March 6, 2018. It is unknown to what extent localized variations in groundwater depth and flow occur on the subject site.

Physical Setting		Source
Topography Summary	The subject site is generally flat.	1
Site Elevation	Approximately El. 1,080 feet above mean sea level	2
Overburden Soils	The subject site is primarily underlain by layers of poorly graded sand and silty sand. The sands are generally fine-to medium-grained, with some coarse sand and fine gravel occurring in some layers, including poorly graded sand with silt, and poorly graded sand with clay. The sands are typically medium dense to dense.	3
Depth to Groundwater	Unknown. Groundwater was not encountered at the subject site within any of the hollow-stem auger borings advanced to a maximum depth of 51.5 feet bgs in January 2018.	3
Surface Water Flow Direction	Surface water appears to flow towards the south, based on observed surface topography.	1
Regional Groundwater Flow Direction	Unknown	
Nearest Surface Water Body	The Gage Canal is located approximately 3,000 feet west of the subject site.	4

Sources:

1. *Site Reconnaissance, March 7, 2018.*
2. *EDR Radius Map, January 2018*
3. *Geotechnical Investigation, UC Riverside – Phase 1B Development, prepared by Haley & Aldrich dated March 6, 2018.*
4. *EDR Topographic Map, 2018*

Environmentally Sensitive Areas		Source
Floodplain	No	1
Mapped Wetlands	No	1
Aquifer Protection Area/District	No	1
Groundwater Classification	The subject site is located within the Riverside Hydrologic Area of the Middle Santa Ana River Basin Hydrologic Unit. Groundwater within this area is reported to have municipal, agricultural, and industrial beneficial uses.	2

Sources:

1. *EDR Radius Map*
2. *Water Quality Control Plan, San Ana River Basin (8), Santa Ana Regional Water Quality Control Board. 1995 (Updated February 2016).*

### 3. Previous Reports

Following is a summary of previously prepared reports for the subject site that were reviewed for this Phase I. Information contained in these reports is included herein. Relevant excerpts from these reports are included in Appendix B.

Based on our review of the Phase I prepared for the subject site by the University of California Office of the President – Risk Services dated September 20, 2016 (UCR, 2016), the following environmental concerns were identified at the subject site:

- Previous potential use of lead-based paint at the subject site due to the age of the residences;
- Previous potential use of termiticides at the subject site due to the age of the residences; and
- Previous potential use of arsenic at the subject site due to previous agricultural activities dating prior to the 1950s.

Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017 (Haley & Aldrich, 2017). Soil samples were collected at the subject site and analyzed for organochlorine pesticides (OCPs), lead, and arsenic to evaluate the potential presence of these chemicals in soil due to the previous activities noted above. Soil sample analytical results were used to evaluate potential risk to human health.

Based on the findings of the 2017 investigation, arsenic concentrations in soil samples were less than the California Department of Toxic Substances Control (DTSC) Schools Program screening level of 12 mg/kg (DTSC, 2008) and are considered to represent naturally occurring background concentrations. Therefore, additional assessment of arsenic was not conducted for this investigation.

Based on the findings of the 2017 investigation, soil samples collected and analyzed for lead and OCPs were above DTSC modified screening levels for residential land use (DTSC, 2018). Lead was detected at concentrations ranging up to 434 milligrams per kilogram. Chlordane and dieldrin were detected at concentrations ranging up to 11,000 micrograms per kilogram (ug/kg), 500 ug/kg, and 1,300 ug/kg respectively. Therefore, additional assessment was conducted in March 2018 to delineate lead and OCPs near a few structures that were previously assessed to conservatively estimate the volume of soil that may require removal around all structures during demolition activities.

## 4. Site History

Haley & Aldrich assessed past usage of the subject site and adjoining properties through a review of:

- Topographic maps dated 1901, 1942, 1947, 1953, 1967, 1980, and 2012;
- Aerial photographs dated 1931, 1938, 1949, 1953, 1967, 1975, 1978, 1985, 1989, 1994, 2006, 2010, and 2014;
- City directories dated 1921-2014;
- Previous reports; and
- Interviews with subject site personnel.

Copies of information obtained from historical references reviewed are included in Appendix C. Unless otherwise noted below, per the ASTM standard, sources were reviewed dating back to 1940 or first developed use, whichever is earlier, and at 5-year intervals if the use of the property has changed within the time period.

### 4.1 SUBJECT SITE

The subject site was reportedly citrus groves and vacant land, prior to the construction of bungalow-style residences built for military housing in 1940. In 1955, the University of California purchased the land and used it for family student housing. The residences are currently vacant.

The table below provides a detailed summary of pertinent information from the historical sources reviewed:

Dates	Description of Subject Site	Sources
1930s	Citrus groves.	Aerial Photographs, Topographic Maps
1940s - Present	Military/student housing residential units and roads have been constructed.	Aerial photograph, previous reports

### 4.2 ADJOINING PROPERTIES

The table below provides a summary of pertinent information from the historical sources reviewed regarding adjacent properties:

Dates	Description of Adjacent Properties	Sources
1930s	North: W. Blaine Street and citrus groves. South: Citrus groves. East: Citrus groves. West: Citrus groves.	Aerial Photographs, Topographic Maps
1940s	North: Same as above. South: Same as above. East: Same as above. West: Same as above.	Aerial Photographs
1950s	North: Same as above. South: Citrus groves are no longer present, and the surrounding property has been graded. East: Same as above. West: Citrus groves are no longer present, and the surrounding property has been graded.	Aerial Photographs
1960s	North: Commercial buildings have been constructed north of the subject site. South: UCR buildings and athletic fields. East: UCR buildings appear. West: Same as above	Aerial Photographs
1970s – 1980s	North: More commercial buildings constructed. South: Same as above. East: Same as above. West: Same as above.	Aerial Photographs
1990s - Present	North: Same as above. South: Same as above. East: Same as above West: Same as above.	Aerial Photographs



## 5. Environmental Records Review

### 5.1 ENVIRONMENTAL DATABASE RECORDS SEARCH

Haley & Aldrich used the electronic database service, Environmental Data Resources (EDR) to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced agency records, located within the ASTM-specified approximate minimum search distances as shown in the table below. A description of each database searched is in Section 11.2 of this report. The complete environmental database report is provided in Appendix D. Pertinent information obtained from the database is summarized in Section 5.3 below.

Database Searched	Approximate Minimum Search Distance	Subject Site Listed?	Number of Sites within Search Distance <sup>1</sup>
1. NPL Sites	1 mile	No	0
2. Delisted NPL Sites	0.5 mile	No	0
3. CERCLIS <sup>2</sup> Sites	0.5 mile	No	0
4. CERCLIS-NFRAP <sup>2</sup> Sites	0.5 mile	No	1
5. Federal ERNS	Site only	No	Not Applicable
6. RCRA non-CORRACTS TSD Facilities	0.5 mile	No	1
7. RCRA CORRACTS TSD Facilities	1 mile	No	1
8. RCRA Generators	Site & Adjoining	No	1
9. Federal Institutional/Engineering Controls	Site Only	No	Not Applicable
10. State/Tribal Equivalent NPL Sites	1 mile	No	1
11. State/Tribal Equivalent CERCLIS <sup>2</sup> Sites	0.5 mile	No	5
12. State/Tribal Registered Storage Tanks	Site & Adjoining	No	2
13. State/Tribal Landfills and Solid Waste Disposal Sites	0.5 mile	No	0
14. State/Tribal Leaking Storage Tanks	0.5 mile	No	17
15. State/Tribal Institutional Controls/Engineering Controls	Site Only	No	Not Applicable
16. State/Tribal Voluntary Cleanup Sites	0.5 mile	No	0
17. State/Tribal Brownfield Sites	0.5 mile	No	0
18. Orphan Site List <sup>3</sup>	Site & Adjoining	No	2

Notes:

1. Some sites may be included on multiple databases.

2. The US EPA retired the CERCLIS database in October 2013. In January 2016, the Superfund Enterprise Management System (SEMS), which replaces the CERCLIS database, became active. The CERCLIS database records search included as part of this assessment includes currently ascertainable data from the SEMS and SEMS-Archive databases as reported through the database vendor.
3. Haley & Aldrich also searched the [Orphan Site](#) List provided in the database report for the subject site and sites adjoining the subject site. Orphan sites are those that, due to incorrect or incomplete addresses, could not be mapped.

## 5.2 ADDITIONAL ENVIRONMENTAL RECORDS OR FILE REVIEW

To supplement the environmental record search, we contacted the following state and local government agencies and searched applicable online databases. Relevant information obtained is included in the appropriate sections of the report and/or discussed in Section 5.3 below. Adjacent properties were also included in requests for additional information if a significant incident or release was identified. Those adjacent properties reviewed for this assessment include:

- UC Riverside Fleet Services / UC Riverside Central Steam Plant, 3401 Watkins Drive

Agency	Request Sent or Files Searched		Files Exist and are Available for Review	Files Reviewed
	Subject Site	Adjoining Properties		
SARWQCB <sup>1</sup>	Yes	Yes	Yes	Yes, for nearby property
DTSC <sup>2</sup>	Yes	No	No	No
County of Riverside DEH <sup>3,4</sup>	Yes	Yes	No	No

**Notes:**

1. The Santa Ana Regional Water Quality Control Board (SARWQCB) maintains information regarding environmental concerns, and regarding soil and water contamination issues.
2. The California Department of Toxic Substances Control (DTSC) maintains information regarding hazardous substance storage and storage tank use, and regarding soil and water contamination issues.
3. The County of Riverside Department of Environmental Health (DEH) maintains information regarding hazardous substance storage, storage tank use, water wells, and septic systems.
4. To date, no responses have been received from the Freedom of Information Act (FOIA) requests noted above. Based on the information obtained through our interviews with key site personnel, and our review of other records, it does not appear that responses to the FOIA requests should affect our conclusions regarding RECs on the site. However, when a response is received, it will be forwarded to American Campus Communities and, if it affects our conclusions regarding the site, American Campus Communities will be informed.

## 5.3 DETAILED DESCRIPTION OF RELEVANT INFORMATION

### 5.3.1 Subject Site

One site was listed in the database report that is likely associated with the subject site.

Listing	Description	Potential Impact
T-Mobile West Corporation IE04479A, 680 W Linden Riverside, CA, Map ID 9	This site is listed on the FINDS database for radio/telephone communications, likely associated with the UCR radio station to the northwest of the subject site. Releases were not identified.	Not a REC.

### 5.3.2 Nearby Sites

Two sites were listed in the database report within the applicable search radii or identified in regulatory records reviews. Due to their location with respect to the subject site (on the opposite side of a hydrogeologic barrier, distance from the site, location of the site relative to inferred groundwater flow, etc.), or their status (closed out release, etc.), several of the sites are not likely to adversely affect the subject site and are not discussed herein. Only those sites adjacent to the subject site and sites with a potential to have impacted the subject site are discussed below. The complete database report and relevant records review information is included in Appendix D.

Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
E-Z Serve #070135, 811 Blaine Street	LUST	A release of gasoline impacted soil only. The case was closed in 1992. Since groundwater was not impacted, this release is not likely to impact the subject site.	Not a REC.
UC Riverside Fleet Services / UC Riverside Central Steam Plant, 3401 Watkins Drive Map ID E22 0.16 miles east of the subject site	LUST, UST, HIST UST, CHMIRS	This facility is located on the north side of Linden Street, northeast of the subject site. Three USTs were removed from the subject site in the 1997 (10,000-gallon gasoline UST, a 6,000-gallon gasoline UST, and a 500-gallon waste oil UST). Soil samples during the UST excavation activities indicated that a release had occurred, and a LUST case was opened. The following maximum concentrations were detected in the UST excavation: 1,300 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (TPH) gasoline, 21 mg/kg toluene, 16 mg/kg ethylbenzene, and 120 mg/kg xylenes.	Not a REC.

Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
UC Riverside Fleet Services / UC Riverside Central Steam Plant, 3401 Watkins Drive Map ID E22 0.16 miles east of the subject site  (Continued)		Benzene and methyl tert-butyl ether were not detected in the soil samples. Six borings were advanced up to 60 feet bgs to delineate the release. These constituents were not detected in the deepest soil samples collected from these borings, indicating that groundwater had not been impacted. The case was closed by the DEH on October 6, 2000.  The CHMIRS listing was reportedly a release of hydraulic oil from a Pepsi trailer truck.  Due to the distance from the subject site, and since groundwater was not impacted, this release is not likely to impact the subject site.	

**5.4 VAPOR MIGRATION**

The ASTM 1527-13 standard states that "for the purposes of this practice, "migrate" and "migration" refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface". Thus, this section specifies whether or not we perceive a risk of vapor migration to the subject site.

To assess vapor migration risk, we conducted a detailed review and analysis of the site-specific environmental database report and/or other reasonably ascertainable records to assess whether:

1. Off-site properties have documented chlorinated volatile organic compound (VOC) contamination located within 100 feet of the subject property, or
2. Off-site properties have documented volatile petroleum hydrocarbon contamination within 30 feet of the subject property.

Based on our records review, it is unlikely that a potential source of vapor migration currently exists beneath the subject site.

## 6. Site Reconnaissance and Key Personnel Interview(s)

A site visit to observe subject site conditions was conducted by Mathew Raitchel and Carly Nemanic of Haley & Aldrich on March 7, 2018. Access to the subject site was provided by UCR.

Haley & Aldrich also observed the exterior portions of the subject site, including the property boundaries, and observed adjoining property conditions from the subject site boundaries and/or public thoroughfares. No weather-related conditions or other conditions that would limit our ability to observe the subject site or adjoining properties occurred during our site visit.

An interview with Amanda Grey, Environmental Health & Safety Manager of UCR, the [key site manager](#), was performed in conjunction with the site visit. Per the ASTM Standard, past owners, operators, and occupants of the subject site who are likely to have material information regarding the potential for contamination at the subject property shall be contacted to the extent that they can be identified and that the information likely to be obtained is not duplicative of information already obtained from other sources. Haley & Aldrich was not provided with contact information in order interview past owners and/or operators at the subject site. Based upon historical data collected from other sources, this potential data gap is not expected to adversely impact the results of this assessment.

The findings of the site visit and interviews are discussed below. Site photographs are included in Appendix E.

ASTM E 1527-13 Standard Section 10.8 requires that, prior to the site visit, the current subject site owner or key site manager and user, if different from the current owner or key site manager, be asked if there are any helpful documents that can be made available for review. Documents were not provided. Provided information is listed below.

### 6.1 CURRENT USE OF THE PROPERTY

The subject site is currently occupied by the Canyon Crest Student Housing Development and the KUCR radio station. The housing units are currently vacant.

### 6.2 GENERAL DESCRIPTION OF STRUCTURES

Structures on the subject site consist of single-story student housing units. Storage and maintenance facilities, including permanent structures and modular units, are present in the northwestern portions of the site. A park with a playground is present in the western portion of the site, south of Cherry Street.

### 6.3 USE, STORAGE, AND DISPOSAL OF PETROLEUM PRODUCTS AND HAZARDOUS MATERIALS

The use, storage and/or disposal of petroleum products or hazardous materials was not observed or reported at the subject site, with one exception. Paint was stored in up to 5-gallon capacity containers within a covered and fenced area in the central portion of the subject site. The area is asphalt, and evidence of staining or leaking was not observed on the asphalt surface.

## 6.4 OTHER SUBJECT SITE OBSERVATIONS

The table below summarizes items that were observed and/or reported at the subject site during the site visit other than those items related to use, storage, and disposal of petroleum or hazardous materials (described in Section 6.3 above). If items were observed or reported, they are further described either in the table or below.

Description	Observed or Reported at Time of Site Visit	Observations/Comments
Potable Water Supply	No	
Nearest Drinking Water Source	No	Drinking water is provided by the City of Riverside Public Utilities.
Sewage Disposal System	No	Sanitary sewer service is provided by the City of Riverside Public Utilities.
Septic System	No	
Unidentified Storage Containers	No	
Wastewater Discharge	No	
Stormwater Discharge	No	
Odors	No	
PCBs Associated with Electrical or Hydraulic Equipment	No	
Elevators (Traction or Hydraulic)	No	
Vehicle Maintenance Lifts	No	
Emergency Generators	No	
Sprinkler System Pumps	No	
Heating System	No	
Cooling System	No	
Stains or Corrosion on Floors, Walls, or Ceilings	No	
Floor Drains	No	
Sumps	No	
Catch Basins	No	
Pits, Ponds, Lagoons, and Pools of Liquid	No	
Stained Soil or Pavement	No	
Stressed Vegetation	No	
Solid Waste and Evidence of Waste Filling	No	
Dry Wells	No	

Description	Observed or Reported at Time of Site Visit	Observations/Comments
Monitoring Wells	No	
Water Supply Wells	No	
Irrigation Wells	No	
Injection Wells	No	
Abandoned Wells	No	

## 6.5 ADJOINING PROPERTY OBSERVATIONS

Adjoining properties are campus residence halls and apartments, parking lots, campus fleet services, and commercial/retail properties. Current adjoining properties are not anticipated to adversely impact the subject site.

## 6.6 USER RESPONSIBILITIES

The AAI Rule requires that the User of the report consider the following:

- Whether the user has specialized knowledge about previous ownership or uses of the subject site that may be material to identifying RECs;
- whether the user has determined that the subject site’s Title contains environmental liens or other information related to the environmental condition of the property, including engineering and institutional controls and Activity and Use Limitations (AULs), as defined by ASTM;
- whether the user is aware of commonly known or reasonably ascertainable information about the subject site including whether or not the presence of contamination is likely on the subject site and to what degree it can be detected; and
- whether the user has prior knowledge that the price of the subject site has been reduced for environmentally related reasons.

While such information is not required to be provided by the environmental professional(s), the information can assist the environmental professional in identifying recognized environmental conditions. The “All Appropriate Inquiries” Final Rule (40 CFR Part 312) requires that these tasks be performed by or on behalf of a party seeking to qualify for an LLP to CERCLA liability.

Haley & Aldrich was not provided with a completed user responsibilities questionnaire; however, we do not anticipate this to affect the conclusions of this report.

## 7. Findings and Opinions

### 7.1 DATA GAPS

Our ability to identify and evaluate RECs at the subject site is conditioned upon [data gaps](#) identified as part of this Phase I. No significant data gaps were identified during the performance of this Phase I. Thus, it is our opinion that sufficient information was obtained to identify subject site conditions indicative of releases or threatened releases of hazardous substances and petroleum hydrocarbons. Our opinion is limited by the conditions prevailing at the time our work is performed and the applicable regulatory requirements in effect.

### 7.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a REC in part as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

Our opinion regarding a REC's potential impact on the subject site is based on the scope of our work, the information obtained during our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of the client's intended use for the subject site.

Two RECs were identified in connection with the subject site.

REC #1: Historical use of lead-based paint

Based on the age of the structures located at the subject site, there is a potential that lead-based paint was used historically at the subject site. Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017 (Haley & Aldrich, 2017). Soil samples were collected at the subject site and analyzed for lead to evaluate the potential presence of lead in soil. Based on the findings of the 2017 investigation, soil samples collected and analyzed at the subject site contained lead above the DTSC modified screening level for residential land use.

REC #2: Historical use of termiticides

Based on the age of the structures located at the subject site, there is a potential that organochlorine pesticides (OCPs) as termiticides were used historically at the subject site. Haley & Aldrich conducted a “Preliminary Limited Environmental Site Investigation” dated June 9, 2017 (Haley & Aldrich, 2017). Soil samples were collected at the subject site and analyzed for OCPs to evaluate the potential presence of these chemicals in soil. Based on the findings of the 2017 investigation, soil samples collected and analyzed at the subject site contained OCPs above their respective DTSC modified screening levels for residential land use.



### 7.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

### 7.4 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC as an environmental condition “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

HRECs were not identified in connection with the subject site.

### 7.5 DE MINIMIS CONDITIONS

The ASTM E 1527-13 Standard defines *de minimis* conditions as those conditions which “do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.” The ASTM E 1527-13 Standard notes that “conditions determined to be *de minimis* are not recognized environmental conditions.”

*De minimis* conditions were not identified in connection with the subject site.

## 8. Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527 of UC Riverside - North District Development, in Riverside, California, the property. Any exceptions to or deletions from, this practice are described in Section 1.4 of this report.

This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the property except for the following:

- REC #1: Historical use of lead-based paint
- REC #2: Historical use of termiticides

## 9. Environmental Professional Certification

The undersigned declare the following:

We declare that, to the best of our professional knowledge and belief, we meet the definition of [Environmental Professional](#) as defined in §312.10 of 40 CFR Part 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Mathew T. Raithel  
Senior Technical Specialist



Robert K. Scott, P.G. 5334 (CA), CHg  
Senior Associate Hydrogeologist



## 10. Credentials

This Phase I report was prepared by Mathew Raithel, under the direct supervision of Robert K. Scott, who served as the Environmental Professional(s) for this project. Qualification information for the project personnel is provided below.

**Mathew T. Raithel**  
**Senior Technical Specialist**

This report was prepared by Mathew Raithel, who served as the project scientist for this project. Mr. Raithel has over 20 years of experience managing and conducting Phase I and Phase II environmental site assessments and investigations throughout Southern California and Arizona, including commercial and industrial facilities and linear projects such as electrical transmission lines and natural gas pipelines.

**Robert K. Scott, P.G. 5334 (CA), C.Hg.**  
**Senior Client Leader**

Robert Scott has over 29 years of experience in investigation, remediation, and closure of a wide range of contaminated sites, including large contaminated industrial properties. Mr. Scott is currently the program manager for redevelopment of over 10 large industrial properties in Southern California involving soil excavation, facility decommissioning, demolition, and construction oversight. He specializes in remedial investigations/feasibility studies, evaluation of remedial alternatives, hydrogeologic investigations, health risk assessment, contaminant fate and transport assessment and modeling, regulatory compliance, water resources studies, remediation of sites contaminated with petroleum hydrocarbons, chlorinated hydrocarbons, PCBs, OCPs and metals. Mr. Scott is also a recognized expert in the investigation and remediation of burn ash sites.

## 11. Glossary and Other Descriptions

### 11.1 GLOSSARY

**All Appropriate Inquiry (AAI)** — that inquiry constituting “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in CERCLA, 42 U.S.C §9601(35)(B), that will qualify a party to a commercial real estate transaction for one of threshold criteria for satisfying the LLPs to CERCLA liability (42 U.S.C §9601(35)(A) & (B), §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense.

**Business Environmental Risk** — a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.

**Controlled Recognized Environmental Condition (CREC)** — a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

**Data Gap** — a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

**De Minimis Conditions** — conditions which do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

**Environmental Professional** — a person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b).

**Historical Recognized Environmental Condition (HREC)** — a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

**Key Site Manager** — the person identified by the owner or operator of a property as having good knowledge of the uses and physical characteristics of the property.

**Material Threat** — a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a hazardous substance and which shows evidence of damage. The damage would represent a material threat if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

**Orphan Site** — (not ASTM E 1527-13 definition) — sites that could not be mapped due to poor or inadequate address information.

**Recognized Environmental Condition (REC)** — the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

## 11.2 DESCRIPTIONS OF DATABASES SEARCHED

Numerous regulatory databases were searched during this Phase I. Each database reviewed is described in the database report presented in Appendix D. Those databases required by the ASTM E 1527-13 Standard are identified below.

1. **NPL Sites:** The National Priorities List (NPL) is a list of contaminated sites that are considered the highest priority for cleanup by the U.S. Environmental Protection Agency (USEPA).
2. **Delisted NPL Sites:** The Delisted National Priorities List (NPL) is a list of formal NPL sites formerly considered the highest priority for cleanup by the USEPA that met the criteria of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) for deletion from the NPL because a no further response was appropriate.
3. **CERCLIS Sites:** The Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list identifies sites which are suspected to have contamination and require additional investigation to assess whether they should be considered for inclusion on the NPL.
4. **CERCLIS-NFRAP Sites:** CERCLIS-NFRAP status indicates that a site was once on the CERCLIS List but has No Further Response Actions Planned (NFRAP). Sites on the CERCLIS-NFRAP List were removed from the CERCLIS List in February 1995 because, after an initial investigation was performed, no contamination was found, contamination was removed quickly, or the contamination was not significant enough to warrant NPL status.
5. **Federal ERNS:** The Federal Emergency Response Notification System (ERNS) list tracks information on reported releases of oil and hazardous materials.
6. **RCRA non-CORRACTS TSD facilities:** The Resource Conservation and Recovery Act (RCRA) non-CORRACTS TSD Facilities List tracks facilities which treat, store, or dispose of hazardous waste and are not associated with corrective action activity.
7. **RCRA CORRACTS TSD facilities:** The RCRA CORRACTS TSD Facilities list catalogues facilities that treat, store, or dispose of hazardous waste and have been associated with corrective action activity.

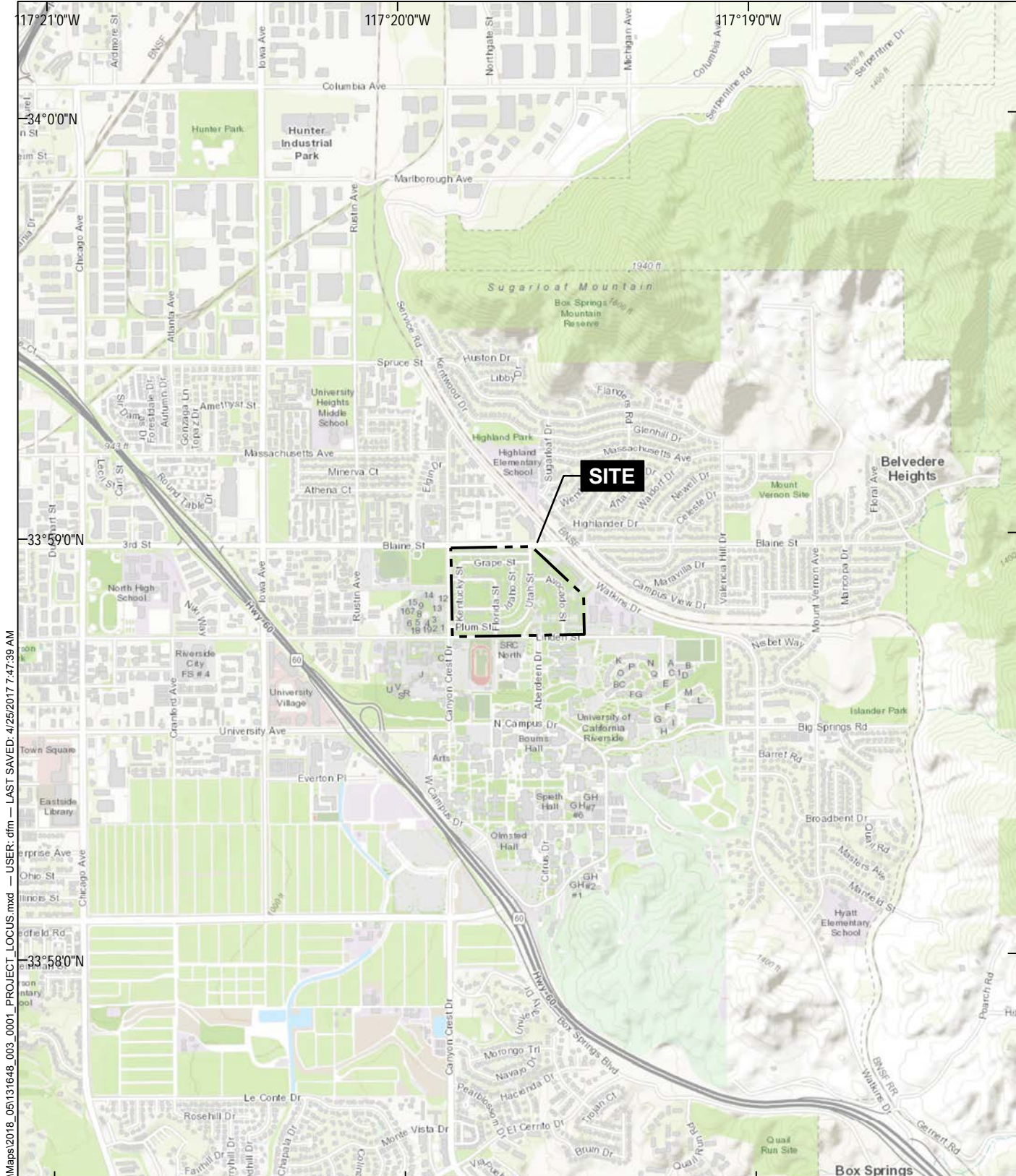
8. **RCRA Generators:** The RCRA Generator list is maintained by the USEPA to track facilities that generate hazardous waste.
9. **Federal Institutional Controls/Engineering Controls:** The Federal Institutional Control list and Engineering Control list are maintained by the USEPA. Some Institutional Control and Engineering Control information may not be made publicly available and therefore will not be included on this registry.
10. **State and Tribal Equivalent NPL/CERCLIS Sites:** The (ASTM E 1527-13 Standard) requires searching “State and Tribal Equivalent NPL Sites.” In California, the equivalent NPL is the Response, which is maintained by the Department of Toxic Substances Control.
11. **State and Tribal Equivalent CERCLIS Sites:**  
The (ASTM E 1527-13 Standard) requires searching “State and Tribal Equivalent CERCLIS Sites.” In California, the equivalent CERCLIS is the ENVIROSTOR database, which is maintained by the Department of Toxic Substances Control.
12. **State and Tribal Registered Storage Tanks:** The SWRCB maintains a list of aboveground and underground storage tanks registered with the SWRCB.
13. **State and Tribal Landfills and Solid Waste Disposal Sites:** DTSC maintains a list of regulated waste disposal sites.
14. **State and Tribal Leaking Storage Tanks:** SWRCB maintains a list of Leaking Storage Tanks (LUST/LAST). The LUST/LAST lists are a listing of release sites that have an Underground or Aboveground Storage Tank listed as the source.
15. **State and Tribal Institutional Controls/Engineering Controls:** DTSC maintains a list of sites with Institutional controls or Engineering controls in place.
16. **State and Tribal Voluntary Cleanup Sites:** DTSC maintains a list of Voluntary Cleanup sites.
17. **State and Tribal Brownfield Sites:** DTSC maintains a list of Brownfield sites which includes properties where redevelopment or re-use may be compromised by the presence or presumed presence of hazardous materials or petroleum.

## 12. References

1. Topographic Map, Riverside East, United States Geological Survey 7.5-minute series, 2012.
2. Haley & Aldrich, Inc., site visit conducted by Mathew Raithel and Carly Nemanic on March 7, 2018.
3. Amanda Grey of UCR, interview with Haley & Aldrich, April 18, 2018.
4. Environmental Data Resources, Database Report, dated January 24, 2018.
5. California Department of Toxic Substances Control, 2018. Human and Ecological Risk Office (HERO) HHRA Note Number 3: DTSC-modified Screening Levels (DTSC-SLs). January.
6. Haley & Aldrich, 2017. Preliminary Limited Environmental Site Investigation. June 9.
7. Haley & Aldrich, 2018. Geotechnical Investigation, UC Riverside – Phase 1B Development. March 6.
8. Santa Ana Regional Water Quality Control Board, 1995. Water Quality Control Plan, San Ana River Basin (8). Updated February 2016.
9. University of California Office of the President, 2016. Phase 1 Preliminary Site Assessment Due Diligence Report of Campus Related Property. September 20.



## FIGURES



GIS FILE PATH: G:\131648\_UCR\Global\GIS\Maps\2018\_05\131648\_003\_0001\_PROJECT\_LOCUS.mxd — USER: dfm — LAST SAVED: 4/25/2017 7:47:39 AM



MAP SOURCE: ESRI  
 SITE COORDINATES: 33°58'52"N 117°19'41"W

**HALEY  
 ALDRICH**

NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 MAY 2018

**FIGURE 1**

GIS FILE PATH: G:\131648 UCR\Global\GIS\Maps\2018\_05\131648\_003\_0002 SITE PLAN SOIL SAMPLES.mxd — USER: dfm — LAST SAVED: 5/7/2018 1:41:49 PM



**LEGEND**  
[Dashed Box] SITE BOUNDARY (APPROXIMATE)

**NOTES**  
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.  
2. AERIAL IMAGERY SOURCE: ESRI



**HALEY ALDRICH** NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE RIVERSIDE, CALIFORNIA

**SITE PLAN**

MAY 2018

**FIGURE 2**

## **APPENDIX A**

### **Phase I Environmental Site Assessment Limitations**

## APPENDIX A

### Haley & Aldrich, Inc. Limitations

Environmental site assessment (“ESA”) reports prepared by Haley & Aldrich, Inc. (Haley & Aldrich) are for the sole and exclusive use of its Client. Haley & Aldrich represents that the ESA was prepared in accordance with the ASTM International Standard E1527-13 entitled “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (“ASTM E 1527 13”). The findings, opinions, conclusions and information contained in the ASTM E 1527-13 ESA are limited to, and solely based upon, information reasonably ascertainable by Haley & Aldrich at the time the ASTM E 1527-13 ESA was completed.

All users of this ASTM E 1527-13 ESA are bound to the terms and conditions and limitations contained in the accompanying Proposal, Terms & Conditions, and Limitations for this ASTM E 1527-13 ESA. The findings, opinions, conclusions and information contained in this report are based solely on the Scope of Services provided pursuant to the Proposal and its attachments and the information reasonably ascertainable by Haley & Aldrich at the time the ASTM E 1527-13 ESA was completed. Haley & Aldrich has not performed any additional observations, investigations, studies, or other testing not specified in the Scope of Services. Haley & Aldrich shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Scope of Services.

This ASTM E 1527-13 ESA is prepared for the exclusive use of Haley & Aldrich’s client in connection with the subject property for the purpose of assessing the potential or existing environmental contamination liabilities associated with the subject property. There are no intended beneficiaries other than Haley & Aldrich’s client. Haley & Aldrich shall owe no duty whatsoever to any other person or entity by issuing the ASTM E 1527-13 ESA. Use of this ASTM E 1527-13 ESA by any person or entity, including by Haley & Aldrich’s client, for a purpose other than for the purpose of assessing the potential or existing environmental contamination liabilities associated with the subject property is expressly prohibited unless such person or entity obtains written authorization from Haley & Aldrich indicating that the ASTM E 1527-13 ESA is adequate for such other use. Use of this ASTM E 1527-13 ESA by any person or entity for such other purpose without written authorization by Haley & Aldrich shall be at such person’s or entity’s sole risk and shall be without legal exposure or liability to Haley & Aldrich.

Haley & Aldrich may authorize third-party reliance on the ASTM E 1527-13 ESA by providing reliance letters to third party(ies) provided that the third party(ies) agree: (1) to use the ASTM E 1527-13 ESA only for the purpose of assessing the potential or existing environmental contamination liabilities associated with real property; (2) to be bound by the terms and conditions and limitations contained in the ASTM E 1527-13 ESA and the Proposal and its attachments, Terms & Conditions, and Limitations; (3) to accept the form and substance of Haley & Aldrich’s reliance letter; and (4) to deliver to Haley & Aldrich a signed copy of a reliance letter by an authorized representative of the relying party, within thirty (30) days after said reliance letter is provided to the relying party, signifying the relying party’s acceptance of the aforementioned conditions. Upon Haley & Aldrich’s receipt of the signed reliance letter by the relying party(ies), the relying party(ies) will be authorized to rely on Haley & Aldrich’s ASTM E 1527-13 ESA for the limited purpose of identifying potential or existing environmental contamination liabilities associated with the subject property. The relying party(ies) agrees to bind each of its respective successors and assigns to the aforementioned terms and conditions.

This ASTM E 1527-13 ESA reflects site conditions observed and described by records available to Haley & Aldrich as of the date of ASTM E 1527-13 ESA preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the ASTM E 1527-13 ESA. Accordingly, Haley & Aldrich's client and any other party to whom the ASTM E 1527-13 ESA is provided recognize and agree that Haley & Aldrich shall bear no liability for deviations from observed conditions or available records after the time of ASTM E 1527-13 ESA preparation. Haley & Aldrich makes no express or implied representation that the information contained in the ASTM E 1527-13 ESA has continued viability after 180 days of the ASTM E 1527-13 ESA's completion date, and any use or reliance on the ASTM E 1527-13 ESA after 180 days of the ASTM E 1527-13 ESA's completion date by Haley & Aldrich's client or any other authorized person or entity will be at that party's sole risk and without liability to Haley & Aldrich.

Notwithstanding anything contained herein, Haley & Aldrich shall not be liable for any claim or damage arising from environmental contamination liabilities that occurred on the subject property after the effective date of the ASTM E 1527-13 ESA. Likewise, Haley & Aldrich shall not be liable for any existing or future property owner's failure to satisfy any continuing obligation for CERCLA liability protection or under the Federal Environmental Protection Agency's All Appropriate Inquiries rule.

## **APPENDIX B**

### **Previous Reports**

**REPORT ON**  
PRELIMINARY LIMITED ENVIRONMENTAL SITE INVESTIGATION  
NORTH DISTRICT PREDEVELOPMENT STUDIES  
NORTH OF WEST LINDEN STREET AND EAST OF CANYON CREST DRIVE  
RIVERSIDE, CALIFORNIA

by Haley & Aldrich, Inc.  
Costa Mesa, California

for University of California, Riverside  
Riverside, California

File No. 128685-006  
June 2017







HALEY & ALDRICH, INC.  
2033 N. Main Street  
Suite 309  
Walnut Creek, CA 94596  
925.949.1012

June 9, 2017  
File No. 128685-006

University of California, Riverside  
900 University Avenue  
Environmental Health & Safety  
Riverside, California 92521

Attention: Mr. Drew Hecht

Subject: Preliminary Limited Environmental Site Investigation  
North District Predevelopment Studies  
North of West Linden Street and East of Canyon Crest Drive  
Riverside, California

Ladies and Gentlemen:

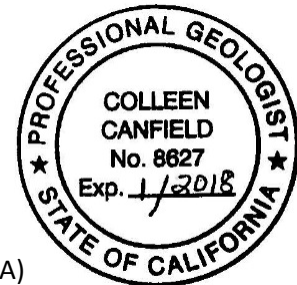
Enclosed is our preliminary limited environmental site investigation report for the proposed North District development located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California. The site is bounded by West Blaine Street to the north, Canyon Crest Drive to the west, West Linden Street to the south, and University of California Riverside (UCR) campus facilities to the east. The main UCR campus is located to the south of the site, across West Linden Street.

We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely yours,  
HALEY & ALDRICH, INC.

Mathew T. Raithel  
Senior Technical Specialist

Colleen Canfield, P.G. 8627 (CA)  
Associate Geologist | Senior Project Manager



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# 1. Introduction

This report presents the results of our preliminary limited environmental site investigation for the proposed North District development (Site) located northeast of the intersection of Canyon Crest Drive and West Linden Street, in Riverside, California. The site is bounded by West Blaine Street to the north, Canyon Crest Drive to the west, West Linden Street to the south, and University of California Riverside (UCR) campus facilities to the east, as shown on Figures 1 and 2. The main UCR campus is located to the south of the site, across West Linden Street.

## 1.1 BACKGROUND AND EXISTING SITE CONDITIONS

Currently, the approximately 55-acre site is occupied by Canyon Crest Student Housing, a complex of single-story student housing units located north of the main UCR campus. Storage and maintenance facilities, including permanent structures and modular units, are present in the northwest and southeast portions of the site. Typical residential above and underground utilities are present throughout the development. A large park and playground is located in the western portion of the site, south of Cherry Street. There are nine asphalt-paved residential streets and several gravel roads. Based on our review of readily available historical information and aerial photographs, much of the existing development was constructed as military housing in 1940, before which time the Site was occupied by citrus groves.

## 1.2 PROJECT DESCRIPTION

The proposed project is still in the conceptual planning stage and details are still being developed. We understand that the proposed project is expected to include redevelopment of the existing housing complex with new multi-story housing units.

## 1.3 PURPOSE

Based on our review of the Phase I Environmental Site Assessment prepared for the Site, the following environmental concerns are identified at the Site:

- Previous potential use of lead-based paint at the site due to the age of the residences;
- Previous potential use of termiticides at the site due to the age of the residences; and
- Previous potential use of arsenic at the site due to previous agricultural activities dating prior to the 1950s.

Soil sampling was conducted to evaluate whether these historical activities may have impacted soil. Soil sample analytical results were used to evaluate potential risk to human health.

## 2. Scope of Work

The scope of work was developed based on the following California Department of Toxic Substances Control (DTSC) guidance documents, collectively referred to as the DTSC Guidance:

- “Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers” dated 9 June 2006; and
- “Interim Guidance for Sampling Agricultural Properties (Third Revision)” dated 30 April 2008.

The DTSC Guidance recommends that a minimum of four soil samples be collected from around each residential structure. We recommended modifying this approach and collected soil samples from around 30 structures as a preliminary limited investigation, as described below.

The preliminary limited environmental site investigation consisted of collecting soil samples at depths 0.5 feet below ground surface (bgs) and 2.5 feet bgs using a hand auger at 30 residences at the Site, submitting soil samples for environmental analysis, evaluating soil sample analytical data, and preparing a preliminary limited site investigation report that summarizes our findings and preliminary recommendations.

### 3. Field Investigation

Soil sampling activities were conducted at the Site on March 27 through March 30, 2017. A total of 120 soil boring locations were hand augured at the Site by Interphase Environmental under the oversight of Haley & Aldrich. The locations of the soil borings are shown on Figure 2. Thirty (30) residences were selected for soil sampling activities; residences with both observed paint peeling and less visually observed paint peeling were selected. Four soil borings were advanced using a hand auger at each of the 30 selected residences (for a total of 120 soil boring locations). Soil borings were advanced within two feet of the residential structure. Locations were biased towards areas with visually peeling paint and areas of structural drainage. Soil samples were collected using the hand auger or slide hammer at 0-0.5 feet bgs and 2-2.5 feet bgs from each soil boring in laboratory-provided glass sample containers or acetate sleeves (for a total of 240 soil samples plus 14 duplicate samples). The soil samples were stored in a chilled ice chest and transported to Eurofins Calscience, a California-certified environmental laboratory, under chain of custody protocol.

The soil samples were analyzed for the following based on the DTSC guidance:

- Each of the 0-0.5 foot samples, including 12 duplicate samples (total of 132 soil samples), were initially analyzed for lead by United States Environmental Protection Agency (USEPA) Method 6010. Based on the results of the 0-0.5 foot samples, 48 of the 2-2.5 foot samples were analyzed for lead (see Section 4.1).
- Twenty (20) of the 0-0.5 foot samples, including two duplicate samples (total of 22 soil samples), were analyzed for arsenic by USEPA Method 6010.
- Up to four discrete samples collected at similar depths from each residential property were composited into one composite soil sample (the discrete soil samples were composited into a total of 61 composite soils samples). The 61 composite soil samples (31 composite samples from 0-0.5 feet bgs and 30 composite samples from 2-2.5 feet bgs) and including six duplicate samples (total of 67 composite soil samples) were analyzed for organochlorine pesticides (OCP) following USEPA Method 8081. Based on the results of these samples, 152 discrete soil samples were also analyzed for OPCs (see Section 4.3).

The hand auger and slide hammer were decontaminated between sample collection by washing with a tri-sodium phosphate-based detergent and tap water, followed by successive rinses with tap water, and a final rinse in deionized water. Decontamination water was transferred into a 55-gallon Department of Transportation (DOT)-approved drum and stored on-Site pending offsite disposal. Soil borings were backfilled with the soil cuttings.

## 4. Soil Sample Results

Soil analytical results are summarized in Tables 1 and 2. Laboratory reports are included in Appendix A.

Soil results are summarized below.

### 4.1 LEAD RESULTS

Table 1 is a summary of lead results for the discrete soil samples. Detected lead concentrations ranged between 3.07 and 434 milligrams per kilogram (mg/kg). Lead was detected at a concentration greater than the DTSC modified screening level for residential soil of 80 mg/kg in 48 of the surface (0-0.5 feet bgs) soil samples. Therefore, the subsurface (2-2.5 feet bgs) samples for these 48 locations were analyzed for lead. The subsurface soil samples analyzed did not exhibit lead concentrations greater than 80 mg/kg. Therefore, it appears that lead concentrations greater than 80 mg/kg are limited to the upper two feet of soil based on the sampling and analysis performed.

Figure 3 shows the shallow (0-0.5 feet bgs) soil sample locations that exceed the lead screening level of 80 mg/kg.

### 4.2 ARSENIC RESULTS

Table 1 is a summary of arsenic results for the discrete soil samples. Detected arsenic concentrations ranged between 1.85 and 7.65 mg/kg. These concentrations are less than the DTSC Schools Program screening level of 12 mg/kg (DTSC, 2008). Based on these results, additional arsenic analysis was not performed.

### 4.3 ORGANOCHLORINE PESTICIDE RESULTS

Table 2 is a summary of OCP results for the composite soil samples. The detected concentrations of OCPs in the composite soil samples were compared to respective threshold screening values for composite samples in Table 8 of the DTSC Interim Guidance document (DTSC, 2006) to determine whether further analysis of discrete samples was required.

Composited OCP samples exceeding the DTSC screening values for the respective composite grouping were re-analyzed as discrete samples. Based on this comparison, the discrete samples were analyzed from 35 of the composite samples.

Table 1 is a summary of OCP results for the discrete soil samples. The following OCPs and maximum concentrations were detected in discrete soil samples:

- 4,4-DDD' = 520 mg/kg
- 4,4-DDE' = 1,400 mg/kg
- 4,4-DDT' = 1,200 mg/kg
- Chlordane = 11,000 mg/kg
- Dieldrin = 500 mg/kg
- Endrin Ketone = 5 mg/kg

- Heptachlor = 28 mg/kg
- Heptachlor epoxide = 1,300 mg/kg

The following OCPs exceed the DTSC modified screening level for residential soil: chlordane, dieldrin, and heptachlor epoxide. Fifty (50) discrete soil samples exceeded the DTSC modified screening levels for residential soil. Figure 3 shows the soil samples with OCP concentrations that exceed the DTSC modified screening levels for residential soil.



## **5. Preliminary Human Health Screening Risk Evaluation**

This section presents the results of a preliminary human health screening risk evaluation (HHSE) using the OCP concentrations measured in soil samples to estimate human health risk for resident at the Site. The HHSE was conducted using methodology presented in the “Preliminary Endangerment Assessment (PEA) Guidance Manual,” prepared by the California Department of Toxic Substance Control (DTSC) and dated January 1994 (revised October 2015; DTSC, 2015).

### **5.1 HAZARD IDENTIFICATION (CHEMICALS OF POTENTIAL CONCERN SELECTION)**

Chemicals of potential concern (COPCs) were identified as any OPC detected above the laboratory detection limit.

### **5.2 EXPOSURE ASSESSMENT**

The exposure assessment includes a description of the most sensitive receptors, their possible exposure pathways (i.e., how they may come into contact with the COPCs at the Site), derivation of exposure point concentrations, and estimation of chemical intakes by the receptors.

#### **5.2.1 Potential Receptors and Exposure Pathways**

The receptor with the greatest potential exposure –which is the future on-Site resident– was evaluated for possible exposures to Site-related OCP impacts. The following potentially complete exposure pathways were evaluated:

- Incidental ingestion of soil;
- Inhalation of fugitive dust and VOCs in ambient air; and
- Dermal contact with soil.

It was conservatively assumed that resident would be present at the Site for 24 hours per day, 350 days per year, for 26 years (6 years as a child, and 20 years as an adult).

#### **5.2.2 Exposure Point Concentrations**

The maximum detected OCPs in soil at the Site were used to estimate exposure point concentration concentrations (EPCs) for the on-Site resident.

#### **5.2.3 Estimation of Chemical Intakes and Exposure Concentrations**

COPC intakes and exposure concentrations were estimated using the methodology in the PEA Guidance Manual (DTSC, 2015).

### **5.3 TOXICITY ASSESSMENT**

The toxicity values used to identify the California toxicity values is based on the recommendations in the Preliminary Endangerment Assessment (PEA) Guidance Manual (DTSC, 2015).

## 5.4 SUMMARY OF RISK CHARACTERIZATION RESULTS

A summary of the estimated risk results is presented below; the associated risk calculations are presented in Appendix B.

The total non-cancer hazard for each receptor is presented as an estimated total hazard index (HI) and the total cancer risk for each receptor is presented as an estimated cumulative incremental lifetime cancer risk (ILCR).

### 5.4.1 Total Noncancer Hazard Index

Most environmental programs employ an HI of unity (i.e., 1) as an acceptable target for risk decisions. The most explicit directive comes from the federal Superfund program (USEPA, 1990), which is also Cal/EPA policy. This directive specifies an HI of 1 as the acceptable target for risk management decisions. This noncancer risk threshold was used in this HHSE for each receptor as the acceptable total HI to assess whether exposure to COPCs at the Site may pose an adverse noncarcinogenic effect.

### 5.4.2 Cumulative Incremental Lifetime Cancer Risk

A total ILCR of  $10^{-6}$  and  $10^{-4}$  corresponds to theoretical probability of 1 chance in 1 million to 1 chance in ten thousand, which is in addition to or excess of the background cancer risk. Potential risk estimates between  $10^{-6}$  and  $10^{-4}$  require risk management decisions based on site-specific land use/exposure scenarios and may or may not require remediation or mitigation (USEPA, 1990). It is generally accepted in the regulatory community that risk estimates equal to or less than  $10^{-6}$  do not require remediation or mitigation measures.

California Proposition 65 (1986, Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65, Health and Safety Code Section 25249.5 et seq.) requires specific notification and warning for exposure to carcinogens above the “no significant risk level,” which is based on a  $10^{-5}$  excess lifetime cancer risk.

A cumulative ILCR threshold of  $10^{-6}$  was used in the HHSE to assess whether exposure to COPCs at the Site may pose an unacceptable cumulative ILCR for the residential receptors. These target cumulative ILCR values are within the range of ILCRs considered to be acceptable.

### 5.4.3 Summary of Risk Characterization Results

Based on the results of this HHSE and using DTSC default exposure assumptions for the future on-Site resident and maximum COPC concentrations in indoor air concentrations, the ILCR is  $6 \times 10^{-5}$  and the total HI is 2. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is greater than the acceptable total HI of 1. Therefore, mitigation is necessary to protect the future on-Site resident.

## 6. Conclusions and Preliminary Recommendations

Based on our review of the soil samples results for the Site, we present the following preliminary conclusions and recommendations.

- DTSC modified screening levels for residential soil were exceeded in soil collected from 27 of the 30 houses sampled.
- Lead was detected at a concentration greater than the DTSC modified screening level for residential soil of 80 mg/kg in 48 of the surface (0-0.5 feet bgs) soil samples. The subsurface (2-2.5 feet bgs) soil samples analyzed did not exhibit lead concentrations greater than 80 mg/kg. Therefore, it appears that lead concentrations greater than 80 mg/kg are limited to the upper two feet of soil based on the sampling and analysis performed. Lead concentrations exceeded the DTSC modified screening level for residential soil at 25 of the 30 houses sampled.
- Detected arsenic concentrations are less than the DTSC Schools Program screening level of 12 mg/kg (DTSC, 2008).
- OCPs were detected in discrete soil samples at concentrations greater than the DTSC modified screening levels for residential soil in 39 of the discrete surface soil samples and 11 of the discrete subsurface samples. OCP concentrations exceeded the DTSC modified screening level for residential soil at 22 of the 30 houses sampled. Based on the results of this HHSE for the future on-Site resident, the cumulative ILCR is greater than the acceptable cumulative ILCR threshold of  $1 \times 10^{-6}$ , and the total HI is greater than the acceptable total HI of 1. Therefore, mitigation is necessary to protect the future on-Site resident.
- We recommend additional soil sampling and analysis prior to or during demolition and/or grading activities at all structures located on the property to identify the lateral extent of lead concentrations in soil and the lateral and vertical extent of OCP concentrations in soil greater than the DTSC modified screening levels and to ensure proper removal of the soil that exceeds these levels.

## References

California Department of Toxic Substances Control (DTSC), 2015. Preliminary Endangerment Assessment Guidance Manual. January 1994, revised October 2015.

California Department of Toxic Substances Control (DTSC), 2008. Interim Guidance for Sampling Agricultural Properties (Third Revision). April 30.

California Department of Toxic Substances Control (DTSC), 2006. Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers. June 9.

California Office of Environmental Health Hazard Assessment (OEHHA), 1986. Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), Health and Safety Code Section 25249.5 et seq.

United States Environmental Protection Agency (USEPA), 1990. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule. 40 CFR Part 300.

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## **TABLES**

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3408	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436	AVOC3436
			AVOC3408-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-02-025-01 03/27/2017 2.0-2.5 ft N	AVOC3408-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3408-04-005-01 03/27/2017 0.0-0.5 ft N	AVOC3436-01-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-01-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-01-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-02-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-02-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-02-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-03-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-03-005-02 03/29/2017 0.0-0.5 ft FD	AVOC3436-03-025-01 03/29/2017 2.0-2.5 ft N	AVOC3436-04-005-01 03/29/2017 0.0-0.5 ft N	AVOC3436-04-005-02 03/29/2017 0.0-0.5 ft FD
<b>Inorganics</b>																		
Arsenic	mg/kg		3.82	--	--	--	--	7.44	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	40.4	84.5	8.05	38.6	44.6	95.0	--	14.9	68.1	--	--	36.7	--	--	31.9	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	--	15	3.5 J	--	< 5.0	< 5.0	--	47	< 5.0	--	< 5.0	
4,4'-DDE	ug/kg	2000	--	--	--	--	--	5.3	< 5.0	--	14	< 5.0	--	78	< 5.0	--	< 5.0	
4,4'-DDT	ug/kg	1900	--	--	--	--	--	< 4.9	< 5.0	--	43	5.0	--	20	< 5.0	--	< 5.0	
Aldrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
alpha-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
beta-BHC	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Chlordane	ug/kg	440	--	--	--	--	--	120	< 50	--	690	57	--	420	< 50	--	77	
delta-BHC	ug/kg		--	--	--	--	--	< 9.9	< 9.9	--	< 10	< 10	--	< 10	< 10	--	< 9.9	
Dieldrin	ug/kg	34	--	--	--	--	--	8.0	2.4 J	--	59	5.2	--	29	< 5.0	--	2.9 J	
Endosulfan I	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan II	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endosulfan sulfate	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin aldehyde	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Endrin ketone	ug/kg	19000	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
gamma-BHC (Lindane)	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Heptachlor	ug/kg	130	--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	2.2 J	< 5.0	--	< 5.0	
Heptachlor epoxide	ug/kg	70	--	--	--	--	--	< 9.9	< 9.9	--	7.9 J	< 10	--	11	< 10	--	< 9.9	
Methoxychlor	ug/kg		--	--	--	--	--	< 4.9	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	
Toxaphene	ug/kg		--	--	--	--	--	< 99	< 99	--	< 100	< 100	--	< 100	< 100	--	< 99	

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3436	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3461	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3472	AVOC3477
			AVOC3436-04-025-01 03/29/2017 2.0-2.5 ft N	AVOC3461-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-01-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-01-025-01 03/27/2017 2.0-2.5 ft N	AVOC3461-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-02-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-03-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3461-04-005-01 03/27/2017 0.0-0.5 ft N	AVOC3461-04-005-02 03/27/2017 0.0-0.5 ft FD	AVOC3472-01-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-01-025-01 03/27/2017 0.0-0.5 ft N	AVOC3472-02-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-03-005-01 03/27/2017 0.0-0.5 ft N	AVOC3472-04-005-01 03/27/2017 2.0-2.5 ft N	AVOC3477-01-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	3.45	3.87	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	--	32.8	150	3.50	70.6	55.9	42.1	56.5	28.5	36.0	119	5.51	63.7	35.8	10.3	68.1
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 4.9	--	--	--	--	--	--	--	--	--	2.8 J	--	3.3 J	< 4.9	14	21
4,4'-DDE	ug/kg	2000	< 4.9	--	--	--	--	--	--	--	--	--	34	--	20	39	85	130
4,4'-DDT	ug/kg	1900	< 4.9	--	--	--	--	--	--	--	--	--	61	--	40	5.6	19	87
Aldrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10
beta-BHC	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Chlordane	ug/kg	440	< 4.9	--	--	--	--	--	--	--	--	--	410	--	470	340	400	270
delta-BHC	ug/kg		< 9.9	--	--	--	--	--	--	--	--	--	< 9.9	--	< 10	< 9.9	< 10	< 10
Dieldrin	ug/kg	34	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	9.1	13	< 5.0	< 5.0
Endosulfan I	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endosulfan II	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	--	--	--	--	--	--	--	--	--	5.2 J	--	4.7 J	7.7 J	< 10	5.3 J
Methoxychlor	ug/kg		< 4.9	--	--	--	--	--	--	--	--	--	< 5.0	--	< 5.0	< 4.9	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	--	--	--	--	--	--	--	--	--	< 99	--	< 100	< 99	< 100	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	AVOC3477	AVOC3477	AVOC3477	AVOC3477	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0760	BLAI0828	BLAI0828	BLAI0828	BLAI0828	BLAI0828
			AVOC3477-02-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-03-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-005-01 03/29/2017 0.0-0.5 ft N	AVOC3477-04-025-01 03/29/2017 2.0-2.5 ft N	BLAI0760-01-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-01-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-02-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-03-025-01 03/27/2017 2.0-2.5 ft N	BLAI0760-04-005-01 03/27/2017 0.0-0.5 ft N	BLAI0760-04-025-01 03/27/2017 2.0-2.5 ft N	BLAI0828-01-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-02-025-01 03/30/2017 2.0-2.5 ft N	BLAI0828-03-005-01 03/30/2017 0.0-0.5 ft N	BLAI0828-04-005-01 03/30/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	6.55	--	--	--	--	--	--	1.85	--	--	--	--
Lead	mg/kg	80	53.7	37.7	82.9	21.5	151	6.87	76.6	91.8	19.0	111	7.59	70.8	68.4	13.7	11.5	60.6
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 25	12	6.5	--	6.6	--	13	24 J	--	56	--	< 5.0	4.4 J	--	< 5.0	12
4,4'-DDE	ug/kg	2000	360	28	21	--	66	--	63	170	--	680	--	9.5	120	--	6.2	16
4,4'-DDT	ug/kg	1900	250	23	24	--	2.2 J	--	4.0 J	20	--	160	--	9.6	82	--	< 5.0	12
Aldrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
beta-BHC	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	380	35 J	110	--	230	--	520	360	--	890	--	79	190	--	< 50	88
delta-BHC	ug/kg		< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	< 10	--	< 10	< 10	--	< 9.9	< 10
Dieldrin	ug/kg	34	< 25	< 5.0	< 4.9	--	7.1	--	4.1 J	10	--	9.2	--	< 5.0	3.6 J	--	< 5.0	< 5.0
Endosulfan I	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 50	< 9.9	< 9.9	--	< 10	--	< 9.9	< 9.9	--	6.3 J	--	< 10	< 10	--	< 9.9	< 10
Methoxychlor	ug/kg		< 25	< 5.0	< 4.9	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		< 500	< 99	< 99	--	< 100	--	< 99	< 99	--	< 100	--	< 100	< 100	--	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.



**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	BLAI0890	CHERO803	CHERO803	CHERO803	CHERO803	CHERO803
			BLAI0890-01-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-01-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-01-025-01 03/30/2017 2.0-2.5 ft N	BLAI0890-02-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-02-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-02-025-01 03/30/2017 2.0-2.5 ft N	BLAI0890-03-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-03-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-04-005-01 03/30/2017 0.0-0.5 ft N	BLAI0890-04-005-02 03/30/2017 0.0-0.5 ft FD	BLAI0890-04-025-01 03/30/2017 2.0-2.5 ft N	CHERO803-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-02-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-03-005-01 03/28/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		2.78	--	--	--	--	--	--	--	--	--	--	6.19	--	--	--	--
Lead	mg/kg	80	434	--	5.90	90.4	--	8.10	63.3	--	107	--	8.33	218	6.00	163	26.7	80.5
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
4,4'-DDE	ug/kg	2000	--	13	--	--	10	--	--	42	--	100	--	38	--	18	--	2.3 J
4,4'-DDT	ug/kg	1900	--	42	--	--	41	--	--	56	--	92	--	30	--	11	--	2.5 J
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
alpha-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	420	--	--	120	--	680	--	430	--	890	--	280
delta-BHC	ug/kg		--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	< 10	--	< 10	--	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	2.9 J	--	--	< 5.0	--	< 5.0	--	< 5.0	--	8.6	--	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	< 10	--	--	< 9.9	--	--	< 10	--	< 10	--	5.1 J	--	7.6 J	--	7.5 J
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Toxaphene	ug/kg		--	< 100	--	--	< 99	--	--	< 100	--	< 100	--	< 100	--	< 100	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	CHERO803	CHERO803	CHERO803	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	CHERO871	FLOR3415	FLOR3415
			CHERO803-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO803-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO803-04-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-01-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-01-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-01-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-02-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-02-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-03-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-03-025-01 03/28/2017 2.0-2.5 ft N	CHERO871-04-005-01 03/28/2017 0.0-0.5 ft N	CHERO871-04-005-02 03/28/2017 0.0-0.5 ft FD	CHERO871-04-025-01 03/28/2017 2.0-2.5 ft N	FLOR3415-01-005-01 03/28/2017 0.0-0.5 ft N	FLOR3415-02-005-01 03/28/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	2.99	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	5.93	84.0	5.01	83.5	73.7	5.65	46.1	45.0	177	51.8	7.80	90.6	106	6.88	53.9	58.5
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	3.2 J	--	--	5.4	--	--	6.5	--	6.7	--	--	< 5.0	--	< 5.0	< 5.0
4,4'-DDE	ug/kg	2000	--	53	--	--	52	--	--	35	--	15	--	--	24	--	6.9	< 5.0
4,4'-DDT	ug/kg	1900	--	7.3	--	--	12	--	--	7.9	--	25	--	--	13	--	2.7 J	10
Aldrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
alpha-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
beta-BHC	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Chlordane	ug/kg	440	--	< 50	--	--	< 50	--	--	< 50	--	37 J	--	--	< 50	--	96	< 50
delta-BHC	ug/kg		--	< 9.9	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	< 10	< 10
Dieldrin	ug/kg	34	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	3.3 J	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan I	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan II	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin aldehyde	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor	ug/kg	130	--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	--	6.0 J	--	--	< 10	--	--	< 10	--	< 10	--	--	< 9.9	--	4.4 J	< 10
Methoxychlor	ug/kg		--	< 5.0	--	--	< 5.0	--	--	< 5.0	--	< 5.0	--	--	< 5.0	--	< 5.0	< 5.0
Toxaphene	ug/kg		--	< 99	--	--	< 100	--	--	< 100	--	< 100	--	--	< 99	--	< 100	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	FLOR3415	FLOR3415	FLOR3415	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	FLOR3475	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766	GRAP0766
			FLOR3415-03-005-01 03/28/2017 0.0-0.5 ft N	FLOR3415-03-025-01 03/28/2017 2.0-2.5 ft N	FLOR3415-04-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-01-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-01-025-01 03/28/2017 2.0-2.5 ft N	FLOR3475-02-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-02-025-01 03/28/2017 2.0-2.5 ft N	FLOR3475-03-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-04-005-01 03/28/2017 0.0-0.5 ft N	FLOR3475-04-025-01 03/28/2017 2.0-2.5 ft N	GRAP0766-01-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-02-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-02-025-01 03/30/2017 2.0-2.5 ft N	GRAP0766-03-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-04-005-01 03/30/2017 0.0-0.5 ft N	GRAP0766-04-025-01 03/30/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	4.75	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	90.7	6.70	63.4	109	6.56	88.5	6.51	69.1	89.0	3.95	52.8	121	6.03	49.5	14.7	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	5.5	--	35	--	23	2.4 J	--	35	66	--	11	2.5 J	< 5.0
4,4'-DDE	ug/kg	2000	2.7 J	--	80	24	--	240	--	46	12	--	700	270	--	110	38	< 5.0
4,4'-DDT	ug/kg	1900	< 5.0	--	40	7.1	--	160	--	120	7.9	--	270	400	--	54	6.6	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	--	540	140	--	400	--	260	45 J	--	240	920	--	430	< 50	< 50
delta-BHC	ug/kg		< 9.9	--	< 10	< 10	--	< 10	--	< 10	< 10	--	< 9.9	< 10	--	< 9.9	< 10	< 9.9
Dieldrin	ug/kg	34	< 5.0	--	< 5.0	< 5.0	--	6.1	--	< 5.0	< 5.0	--	2.3 J	4.4 J	--	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	7.5	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	3.0 J	--	2.2 J	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	--	56	< 10	--	14	--	< 10	< 10	--	5.6 J	7.7 J	--	< 9.9	< 10	< 9.9
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	--	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	--	< 100	< 100	--	< 100	--	< 100	< 100	--	< 99	< 100	--	< 99	< 100	< 99

Yellow shading indicates the soil sample results exceeded the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	GRAP0828	IDAH3339	IDAH3339	IDAH3339	IDAH3339	KENT3433	KENT3433	KENT3433	KENT3433
			GRAP0828-01-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-01-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-02-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-02-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-03-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-03-025-01 03/30/2017 2.0-2.5 ft N	GRAP0828-04-005-01 03/30/2017 0.0-0.5 ft N	GRAP0828-04-025-01 03/30/2017 2.0-2.5 ft N	IDAH3339-01-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-02-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-03-005-01 03/30/2017 0.0-0.5 ft N	IDAH3339-04-005-01 03/30/2017 0.0-0.5 ft N	KENT3433-01-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-02-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-03-025-01 03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		3.95	--	--	--	--	--	--	--	--	--	--	--	2.91	--	--	--
Lead	mg/kg	80	51.3	--	98.3	--	80.0	--	57.5	--	25.2	24.1	15.2	64.4	43.5	40.3	295	4.95
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	15	< 5.0	4.5 J	< 5.0	20	< 5.0	3.1 J	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
4,4'-DDE	ug/kg	2000	9.6	< 5.0	120	28	95	11	22	5.4	--	--	--	--	7.6	6.2	13	--
4,4'-DDT	ug/kg	1900	18	< 5.0	75	16	38	6.1	5.1	3.3 J	--	--	--	--	6.7	6.7	15	--
Aldrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
alpha-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
beta-BHC	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Chlordane	ug/kg	440	120	< 5.0	240	47 J	210	27 J	120	28 J	--	--	--	--	68	810	350	--
delta-BHC	ug/kg		< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 9.9	< 9.9	--	--	--	--	< 10	< 10	< 10	--
Dieldrin	ug/kg	34	2.8 J	< 5.0	51	9.7	7.1	< 5.0	120	40	--	--	--	--	< 5.0	3.5 J	76	--
Endosulfan I	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan II	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endosulfan sulfate	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin aldehyde	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Endrin ketone	ug/kg	19000	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
gamma-BHC (Lindane)	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor	ug/kg	130	< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Heptachlor epoxide	ug/kg	70	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	3.8 J	< 9.9	--	--	--	--	< 10	17	< 10	--
Methoxychlor	ug/kg		< 4.9	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	--	--	--	--	< 5.0	< 5.0	< 5.0	--
Toxaphene	ug/kg		< 99	< 99	< 99	< 100	< 99	< 100	< 99	< 99	--	--	--	--	< 100	< 100	< 100	--

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	KENT3433	KENT3433	LIND0687	LIND0687	LIND0687	LIND0687	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	LIND0741	PEAC0880	PEAC0880
			KENT3433-04-005-01 03/28/2017 0.0-0.5 ft N	KENT3433-04-025-01 03/28/2017 2.0-2.5 ft N	LIND0687-01-005-01 03/27/2017 0.0-0.5 ft N	LIND0687-02-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-03-005-01 03/28/2017 0.0-0.5 ft N	LIND0687-04-005-01 03/27/2017 0.0-0.5 ft N	LIND0741-01-005-01 03/29/2017 0.0-0.5 N	LIND0741-01-025-01 03/29/2017 2.0-2.5 N	LIND0741-02-005-01 03/29/2017 0.0-0.5 N	LIND0741-02-025-01 03/29/2017 2.0-2.5 N	LIND0741-03-005-01 03/29/2017 0.0-0.5 N	LIND0741-03-025-01 03/29/2017 2.0-2.5 N	LIND0741-04-005-01 03/29/2017 0.0-0.5 N	LIND0741-04-025-01 03/29/2017 2.0-2.5 N	PEAC0880-01-005-01 03/29/2017 0.0-0.5 ft N	PEAC0880-01-025-01 03/29/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	2.49	--	--	--	3.31	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	121	5.02	31.6	54.2	28.6	45.8	39.1	--	45.4	--	44.7	--	105	41.2	66.0	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	--	< 5.0	< 5.0	90	88	15	< 4.9	21	8.9	110	< 25	< 5.0	< 4.9	< 4.9	< 5.0
4,4'-DDE	ug/kg	2000	73	--	< 5.0	18	6.9	24	120	< 4.9	620	140	1,200	380	180	130	6.1	< 5.0
4,4'-DDT	ug/kg	1900	27	--	5.8	16	2.4 J	< 4.9	26	< 4.9	370	82	640	190	49	22	3.5 J	< 5.0
Aldrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
alpha-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Chlordane	ug/kg	440	310	--	190	600	490 J	970	100	< 49	1,200	260	980	220 J	630	480	57	< 50
delta-BHC	ug/kg		< 10	--	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 99	< 50	< 9.9	< 9.9	< 9.9	< 10
Dieldrin	ug/kg	34	19	--	2.6 J	< 5.0	< 5.0	6.3	< 5.0	< 4.9	5.6	4.0 J	< 50	< 25	6.2	2.9 J	8.5	< 5.0
Endosulfan I	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	2.6 J	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	6.2	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	--	< 10	5.1 J	11	6.0 J	6.7 J	< 9.9	37	25	170	< 50	15	12	< 9.9	< 10
Methoxychlor	ug/kg		< 5.0	--	< 5.0	< 5.0	< 5.0	< 4.9	< 5.0	< 4.9	< 5.0	< 5.0	< 50	< 25	< 5.0	< 4.9	< 4.9	< 5.0
Toxaphene	ug/kg		< 100	--	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99	< 990	< 500	< 99	< 99	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC0880	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3371	PEAC3392	PEAC3392	PEAC3392	PEAC3392	PEAC3392
			03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N	03/28/2017 0.0-0.5 ft N	03/28/2017 2.0-2.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	7.65	--	--	--	--	2.77	--	--	--	--
Lead	mg/kg	80	15.3	--	333	34.6	110	8.69	141	21.6	70.3	72.6	48.9	56.8	--	73.7	--	89.1
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	< 5.0	12	3.7 J	3.8 J	< 5.0	49	--	59	18	17	11	< 5.0	18 J	< 5.0	110
4,4'-DDE	ug/kg	2000	< 5.0	9.5	110	20	15	< 5.0	18	--	21	5.9	32	2.8 J	< 5.0	< 5.0	< 5.0	9.2
4,4'-DDT	ug/kg	1900	< 5.0	3.6 J	59	8.0	10	< 5.0	4.2 J	--	4.3 J	5.3	< 5.0	4.8 J	< 5.0	4.4 J	< 5.0	< 5.0
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	440	< 50	83	920	130	180	< 50	760	--	380	200	63	75	< 50	380	41 J	700
delta-BHC	ug/kg		< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	--	< 10	< 9.9	< 9.9	< 10	< 10	< 9.9	< 10	< 10
Dieldrin	ug/kg	34	2.8 J	29	180	34	18	< 5.0	4.2 J	--	5.3	< 5.0	< 5.0	< 5.0	< 5.0	4.8 J	< 5.0	3.5 J
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	< 9.9	< 10	11	< 9.9	< 10	< 10	9.0 J	--	8.4 J	< 9.9	< 9.9	< 10	< 10	< 10	< 9.9	5.2 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg		< 99	< 100	< 100	< 99	< 100	< 100	< 100	--	< 100	< 99	< 99	< 100	< 100	< 100	< 99	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PEAC3392	PEAC3392	PEAC3392	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PEAC3397	PLUM0850	PLUM0850	PLUM0850	PLUM0850	PLUM0850
			PEAC3392-03-025-01 03/28/2017 2.0-2.5 ft N	PEAC3392-04-005-01 03/28/2017 0.0-0.5 ft N	PEAC3392-04-025-01 03/28/2017 2.0-2.5 ft N	PEAC3397-01-005-01 03/28/2017 0.0-0.5 ft N	PEAC3397-01-025-01 03/28/2017 2.0-2.5 ft N	PEAC3397-02-005-01 03/28/2017 0.0-0.5 ft N	PEAC3397-02-025-01 03/28/2017 2.0-2.5 ft N	PEAC3397-03-005-01 03/28/2017 0.0-0.5 ft N	PEAC3397-03-025-01 03/28/2017 2.0-2.5 ft N	PEAC3397-04-005-01 03/28/2017 0.0-0.5 ft N	PEAC3397-04-025-01 03/28/2017 2.0-2.5 ft N	PEAC3397-04-005-01 03/28/2017 0.0-0.5 ft N	PEAC3397-04-025-01 03/28/2017 2.0-2.5 ft N	PLUM0850-01-005-01 03/29/2017 0.0-0.5 ft N	PLUM0850-01-025-01 03/29/2017 2.0-2.5 ft N	PLUM0850-02-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	--	5.53	--	--	--	--
Lead	mg/kg	80	20.6	137	25.2	136	13.8	169	34.2	194	32.1	302	10.7	111	3.88	94.2	3.07	72.0
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	130	54	39	--	81	--	54	--	52	--	32	--	16	--	< 5.0
4,4'-DDE	ug/kg	2000	< 5.0	26	7.3	22	--	120	--	43	--	38 J	--	15	--	400	--	17
4,4'-DDT	ug/kg	1900	< 5.0	4.6 J	< 5.0	36	--	55	--	200	--	170	--	16	--	210	--	8.5
Aldrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
alpha-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
beta-BHC	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Chlordane	ug/kg	440	120	1,500	540	380	--	880	--	930	--	250	--	310	--	530	--	900
delta-BHC	ug/kg		< 10	< 9.9	< 10	< 9.9	--	< 10	--	< 10	--	< 10	--	< 9.9	--	< 10	--	< 10
Dieldrin	ug/kg	34	< 5.0	4.1 J	< 5.0	25	--	15	--	55	--	22	--	41	--	16	--	11
Endosulfan I	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan II	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	3.4 J	--	< 5.0	--	< 5.0	--	3.3 J	--	< 5.0
Heptachlor epoxide	ug/kg	70	< 10	14	< 10	5.9 J	--	10	--	21	--	< 10	--	5.9 J	--	36	--	8.7 J
Methoxychlor	ug/kg		< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0	--	< 5.0
Toxaphene	ug/kg		< 100	< 99	< 100	< 99	--	< 100	--	< 100	--	< 100	--	< 99	--	< 100	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	PLUM0850	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3304	UTAH3351	UTAH3351	UTAH3351
			PLUM0850-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3304-01-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-01-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-01-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-02-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-02-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-02-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-03-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-03-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-03-025-01 03/27/2017 2.0-2.5 ft N	UTAH3304-04-005-01 03/27/2017 0.0-0.5 ft N	UTAH3304-04-005-02 03/27/2017 0.0-0.5 ft FD	UTAH3304-04-025-01 03/27/2017 2.0-2.5 ft N	UTAH3315-01-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-01-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-02-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	5.69	5.67	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	mg/kg	80	51.6	52.9	48.8	--	31.1	31.0	--	47.9	46.0	--	38.3	37.4	--	124	25.3	40.4
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	4.7 J	< 49	< 5.0	< 5.0
4,4'-DDE	ug/kg	2000	3.2 J	320	--	< 5.0	1,400	--	130	230	--	2.3 J	730	--	90	38 J	3.4 J	36
4,4'-DDT	ug/kg	1900	2.5 J	130	--	< 5.0	1,200	--	270	74	--	< 5.0	130	--	3.4 J	< 49	< 5.0	5.3
Aldrin	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
alpha-BHC	ug/kg		< 10	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	< 9.9	< 99	< 9.9	< 9.9
beta-BHC	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Chlordane	ug/kg	440	32 J	490	--	< 50	300	--	< 250	130	--	< 50	< 250	--	110	6,400	790	1,600
delta-BHC	ug/kg		< 10	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	< 9.9	< 99	< 9.9	< 9.9
Dieldrin	ug/kg	34	12	240	--	< 5.0	500	--	56	52	--	< 5.0	32	--	67	< 49	< 5.0	27
Endosulfan I	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endosulfan II	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	3.6 J
gamma-BHC (Lindane)	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Heptachlor epoxide	ug/kg	70	13	< 50	--	< 9.9	< 200	--	< 50	< 50	--	< 10	< 50	--	8.5 J	< 99	5.3 J	11
Methoxychlor	ug/kg		< 5.0	< 25	--	< 5.0	< 100	--	< 25	< 25	--	< 5.0	< 25	--	< 5.0	< 49	< 5.0	< 5.0
Toxaphene	ug/kg		< 100	< 500	--	< 99	< 2,000	--	< 500	< 500	--	< 100	< 500	--	< 99	< 990	< 99	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.



**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3351	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3318	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323	UTAH3323
			UTAH3315-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3315-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3315-04-025-01 03/29/2017 2.0-2.5 ft N	UTAH3318-01-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-02-025-01 03/27/2017 2.0-2.5 ft N	UTAH3318-03-005-01 03/27/2017 0.0-0.5 ft N	UTAH3318-04-005-01 03/27/2017 0.0-0.5 ft N	UTAH3323-01-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-01-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-02-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3323-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3323-04-005-01 03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	--	--	--	--	--	--	4.08	--	--	--	--	--
Lead	mg/kg	80	--	27.6	--	103	8.27	61.8	144	14.5	65.0	37.7	169	69.1	240	4.67	31.4	54.9
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	< 5.0	190	< 4.9	520	< 5.0	< 5.0	6.6	--	4.4 J	< 5.0	< 5.0	--	26	--	4.0 J	< 5.0
4,4'-DDE	ug/kg	2000	9.9	76	< 4.9	74	2.8 J	28	17	--	13	10	21	--	440	--	28	130
4,4'-DDT	ug/kg	1900	< 5.0	87	< 4.9	19 J	< 5.0	8.9	14	--	6.6	< 5.0	38	--	190	--	16	150
Aldrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
alpha-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
beta-BHC	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Chlordane	ug/kg	440	560	3,500	56	9,500	160	150	390	--	44 J	43 J	330	--	210	--	110	660
delta-BHC	ug/kg		< 9.9	< 100	< 9.9	< 50	< 9.9	< 10	< 10	--	< 10	< 10	< 10	--	< 10	--	< 9.9	< 9.9
Dieldrin	ug/kg	34	5.0		< 4.9	14 J	< 5.0	< 5.0	5.3	--	< 5.0	< 5.0	< 5.0	--	5.6	--	2.4 J	< 5.0
Endosulfan I	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan II	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endosulfan sulfate	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin aldehyde	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Endrin ketone	ug/kg	19000	< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
gamma-BHC (Lindane)	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor	ug/kg	130	< 5.0	< 50	< 4.9	28	< 5.0	< 5.0	< 5.0	--	< 5.0	2.8 J	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Heptachlor epoxide	ug/kg	70	4.0 J	69 J	< 9.9	86	< 9.9	9.7 J	7.4 J	--	< 10	20	6.5 J	--	< 10	--	< 9.9	8.9 J
Methoxychlor	ug/kg		< 5.0	< 50	< 4.9	< 25	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9	< 5.0
Toxaphene	ug/kg		< 99	< 1,000	< 99	< 500	< 99	< 100	< 100	--	< 100	< 100	< 100	--	< 100	--	< 99	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3334	UTAH3334	UTAH3334	UTAH3334	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3348	UTAH3384	UTAH3384	UTAH3384	UTAH3384	
			03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/30/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 2.0-2.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft N	03/29/2017 0.0-0.5 ft FD	03/29/2017 0.0-0.5 ft N
<b>Inorganics</b>																		
Arsenic	mg/kg		--	--	--	--	2.20	--	--	--	--	--	--	--	2.99	--	--	--
Lead	mg/kg	80	56.7	46.8	7.89	47.2	37.6	--	95.0	57.7	25.9	--	143	21.4	54.6	--	133	--
<b>Pesticides</b>																		
4,4'-DDD	ug/kg	2300	--	--	--	--	< 5.0	< 5.0	< 5.0	3.9 J	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
4,4'-DDE	ug/kg	2000	--	--	--	--	5.2	17	14	2.3 J	20	2.8 J	20	22	--	22	--	120
4,4'-DDT	ug/kg	1900	--	--	--	--	< 5.0	< 5.0	9.9	6.8	< 5.0	< 5.0	22	14	--	25	--	81
Aldrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
alpha-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
beta-BHC	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Chlordane	ug/kg	440	--	--	--	--	490	740	1,000	230	4,600	980	11,000	9,200	--	98	--	300
delta-BHC	ug/kg		--	--	--	--	< 9.9	< 9.9	< 9.9	< 10	< 9.9	< 10	< 10	< 10	--	< 9.9	--	< 9.9
Dieldrin	ug/kg	34	--	--	--	--	< 5.0	2.7 J	9.3	4.7 J	20	2.2 J	20	12	--	< 5.0	--	9.9
Endosulfan I	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan II	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endosulfan sulfate	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin aldehyde	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Endrin ketone	ug/kg	19000	--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
gamma-BHC (Lindane)	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Heptachlor	ug/kg	130	--	--	--	--	< 5.0	< 5.0	4.2 J	< 5.0	23	< 5.0	14	7.9	--	< 5.0	--	< 4.9
Heptachlor epoxide	ug/kg	70	--	--	--	--	6.5 J	19	5.9 J	< 10	44 J	29	29	16	--	4.0 J	--	32
Methoxychlor	ug/kg		--	--	--	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	--	< 4.9
Toxaphene	ug/kg		--	--	--	--	< 99	< 99	< 99	< 100	< 99	< 100	< 100	< 100	--	< 99	--	< 99

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 1**  
DISCRETE SOIL SAMPLE RESULTS  
NORTH DISTRICT REDEVELOPMENT STUDIES  
RIVERSIDE, CALIFORNIA

Analyte	Unit	DTSC Modified Screening Level	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384	UTAH3384
			UTAH3384-02-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-03-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-03-005-02 03/29/2017 0.0-0.5 ft FD	UTAH3384-03-025-01 03/29/2017 2.0-2.5 ft N	UTAH3384-04-005-01 03/29/2017 0.0-0.5 ft N	UTAH3384-04-005-02 03/29/2017 0.0-0.5 ft FD
<b>Inorganics</b>								
Arsenic	mg/kg		--	--	--	--	--	--
Lead	mg/kg	80	7.35	82.3	--	3.54	64.5	--
<b>Pesticides</b>								
4,4'-DDD	ug/kg	2300	--	--	29 J	--	--	5.6
4,4'-DDE	ug/kg	2000	--	--	110	--	--	14
4,4'-DDT	ug/kg	1900	--	--	69	--	--	3.7 J
Aldrin	ug/kg		--	--	< 50	--	--	< 5.0
alpha-BHC	ug/kg		--	--	< 99	--	--	< 10
beta-BHC	ug/kg		--	--	< 50	--	--	< 5.0
Chlordane	ug/kg	440	--	--	< 500	--	--	98
delta-BHC	ug/kg		--	--	< 99	--	--	< 10
Dieldrin	ug/kg	34	--	--	< 50	--	--	< 5.0
Endosulfan I	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan II	ug/kg		--	--	< 50	--	--	< 5.0
Endosulfan sulfate	ug/kg		--	--	< 50	--	--	< 5.0
Endrin	ug/kg		--	--	< 50	--	--	< 5.0
Endrin aldehyde	ug/kg		--	--	< 50	--	--	< 5.0
Endrin ketone	ug/kg	19000	--	--	< 50	--	--	< 5.0
gamma-BHC (Lindane)	ug/kg		--	--	< 50	--	--	< 5.0
Heptachlor	ug/kg	130	--	--	< 50	--	--	< 5.0
Heptachlor epoxide	ug/kg	70	--	--	1,300	--	--	13
Methoxychlor	ug/kg		--	--	< 50	--	--	< 5.0
Toxaphene	ug/kg		--	--	< 990	--	--	< 100

Yellow shading indicates the soil sample results exceed the DTSC Modified Screening Level for residential soil.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-01	COMPOSITE-02	COMPOSITE-03	COMPOSITE-04	COMPOSITE-05	COMPOSITE-05-dup	COMPOSITE-06	COMPOSITE-07	COMPOSITE-08	COMPOSITE-09	COMPOSITE-10	COMPOSITE-11	COMPOSITE-12-Dup	COMPOSITE-13	COMPOSITE-14
					03/27/2017 Lind0687-01-005-01 Lind0687-04-005-01	03/27/2017 Lind0687-01-025-01 Lind0687-02-025-01 Lind0687-03-025-01 Lind0687-04-025-01	03/27/2017 Avoc3472-01-005-01 Avoc3472-02-005-01 Avoc3472-03-005-01 Avoc3472-04-005-01	03/27/2017 Avoc3472-01-025-01 Avoc3472-02-025-01 Avoc3472-03-025-01 Avoc3472-04-025-01	03/27/2017 Avoc3461-01-005-01 Avoc3461-02-005-01 Avoc3461-03-005-01 Avoc3461-04-005-01	03/27/2017 Avoc3461-01-005-02 Avoc3461-02-005-02 Avoc3461-03-005-02 Avoc3461-04-005-02	03/27/2017 Avoc3461-01-025-01 Avoc3461-02-025-01 Avoc3461-03-025-01 Avoc3461-04-025-01	03/27/2017 Avoc3408-01-005-01 Avoc3408-02-005-01 Avoc3408-03-005-01 Avoc3408-04-005-01	03/27/2017 Avoc3408-01-025-01 Avoc3408-02-025-01 Avoc3408-03-025-01 Avoc3408-04-025-01	03/27/2017 Utah3318-01-005-01 Utah3318-02-005-01 Utah3318-03-005-01 Utah3318-04-005-01	03/27/2017 Utah3318-01-025-01 Utah3318-02-025-01 Utah3318-03-025-01 Utah3318-04-025-01	03/27/2017 Utah3304-01-005-01 Utah3304-02-005-01 Utah3304-03-005-01 Utah3304-04-005-01	03/27/2017 Utah3304-01-005-02 Utah3304-02-005-02 Utah3304-03-005-02 Utah3304-04-005-02	03/27/2017 Utah3304-01-025-01 Utah3304-02-025-01 Utah3304-03-025-01 Utah3304-04-025-01	03/27/2017 Blai0760-01-005-01 Blai0760-02-005-01 Blai0760-03-005-01 Blai0760-04-005-01
N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	FD	N	N
Pesticides																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.7 J	4.4 J	< 5.0	7.7	< 5.0	< 5.0	< 5.0	89	61	13	< 5.0
4,4'-DDE	ug/kg	800	530	400	7.1	< 5.0	42	< 5.0	29	34	6.3	97	14	10	2.7 J	920	890	32	140
4,4'-DDT	ug/kg	800	530	400	8.0	< 5.0	30	< 5.0	13	12	3.6 J	35	< 5.0	9.9	< 5.0	470	370	46	57
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	320	< 5.0	340	< 5.0	40 J	47 J	34 J	66	< 5.0	390	< 5.0	200	370	< 5.0	680
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	< 5.0	6.1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	270	340	11	2.7 J
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99	< 99	< 99	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-15	COMPOSITE-16	COMPOSITE-17	COMPOSITE-18	COMPOSITE-18-Dup	COMPOSITE-19	COMPOSITE-20	COMPOSITE-21	COMPOSITE-22	COMPOSITE-23	COMPOSITE-24	COMPOSITE-25	COMPOSITE-26	COMPOSITE-27	COMPOSITE-28
					03/27/2017 Blai0760-01-025-01 Blai0760-02-025-01 Blai0760-03-025-01 Blai0760-04-025-01 N	03/28/2017 Kent3433-01-005-01 Kent3433-02-005-01 Kent3433-03-005-01 Kent3433-04-005-01 N	03/28/2017 Kent3433-01-025-01 Kent3433-02-025-01 Kent3433-03-025-01 Kent3433-04-025-01 N	03/28/2017 Cher0871-01-005-01 Cher0871-02-005-01 Cher0871-03-005-01 Cher0871-04-005-01 N	03/28/2017 Cher0871-01-005-02 Cher0871-02-005-02 Cher0871-03-005-02 Cher0871-04-005-02 FD	03/28/2017 Cher0871-01-025-01 Cher0871-02-025-01 Cher0871-03-025-01 Cher0871-04-025-01 N	03/28/2017 Cher0803-01-005-01 Cher0803-02-005-01 Cher0803-03-005-01 Cher0803-04-005-01 N	03/28/2017 Cher0803-01-025-01 Cher0803-02-025-01 Cher0803-03-025-01 Cher0803-04-025-01 N	03/28/2017 Flor3415-01-005-01 Flor3415-02-005-01 Flor3415-03-005-01 Flor3415-04-005-01 N	03/28/2017 Flor3415-01-025-01 Flor3415-02-025-01 Flor3415-03-025-01 Flor3415-04-025-01 N	03/28/2017 Flor3475-01-005-01 Flor3475-02-005-01 Flor3475-03-005-01 Flor3475-04-005-01 N	03/28/2017 Flor3475-01-025-01 Flor3475-02-025-01 Flor3475-03-025-01 Flor3475-04-025-01 N	03/28/2017 Peac3397-01-005-01 Peac3397-02-005-01 Peac3397-03-005-01 Peac3397-04-005-01 N	03/28/2017 Peac3397-01-025-01 Peac3397-02-025-01 Peac3397-03-025-01 Peac3397-04-025-01 N	03/28/2017 Peac3392-01-005-01 Peac3392-02-005-01 Peac3392-03-005-01 Peac3392-04-005-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	< 5.0	< 5.0	< 5.0	4.5 J	< 5.0	< 5.0	< 5.0	2.6 J	< 5.0	< 25	< 5.0	28	3.6 J	< 5.0
4,4'-DDE	ug/kg	800	530	400	9.4	45	3.0 J	55	55	< 5.0	37	< 5.0	9.0	4.6 J	180	4.3 J	57	4.7 J	7.3
4,4'-DDT	ug/kg	800	530	400	4.5 J	25	< 5.0	34	45	< 5.0	13	< 5.0	18	5.5	140	< 5.0	71	2.2 J	3.0 J
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	< 50	440	34 J	55	63	< 50	780	64	99	< 50	360	< 50	730	64	850
delta-BHC	ug/kg				< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	22	2.2 J	< 5.0	< 5.0	< 5.0	2.8 J	< 5.0	< 5.0	< 5.0	11 J	< 5.0	33	4.3 J	14
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 9.9	7.7 J	< 10	5.9 J	24	< 10	11	< 10	27	< 10	< 50	< 10	8.1 J	< 10	5.0 J
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-29 03/28/2017	COMPOSITE-30 03/28/2017	COMPOSITE-31 03/28/2017	COMPOSITE-32 03/28/2017	COMPOSITE-33 03/29/2017	COMPOSITE-33-Dup 03/29/2017	COMPOSITE-34 03/29/2017	COMPOSITE-35 03/29/2017	COMPOSITE-36 03/29/2017	COMPOSITE-37 03/29/2017	COMPOSITE-38 03/29/2017	COMPOSITE-39 03/29/2017	COMPOSITE-40 03/29/2017	COMPOSITE-41 03/29/2017	COMPOSITE-42 03/29/2017
					Peac3392-01-025-01 Peac3392-02-025-01 Peac3392-03-025-01 Peac3392-04-025-01 N	Peac3371-01-005-01 Peac3371-02-005-01 Peac3371-03-005-01 Peac3371-04-005-01 N	Peac3371-01-025-01 Peac3371-02-025-01 Peac3371-03-025-01 Peac3371-04-025-01 N	Lind0687-02-005-01 Lind0687-03-005-01 N	Avoc3436-01-005-01 Avoc3436-02-005-01 Avoc3436-03-005-01 Avoc3436-04-005-01 N	Avoc3436-01-005-02 Avoc3436-02-005-02 Avoc3436-03-005-02 Avoc3436-04-005-02 FD	Avoc3436-01-025-01 Avoc3436-02-025-01 Avoc3436-03-025-01 Avoc3436-04-025-01 N	Utah3323-01-005-01 Utah3323-02-005-01 Utah3323-03-005-01 Utah3323-04-005-01 N	Utah3323-01-025-01 Utah3323-02-025-01 Utah3323-03-025-01 Utah3323-04-025-01 N	Utah3315-01-005-01 Utah3315-02-005-01 Utah3315-03-005-01 Utah3315-04-005-01 N	Utah3315-01-025-01 Utah3315-02-025-01 Utah3315-03-025-01 Utah3315-04-025-01 N	Utah3348-01-005-01 Utah3348-02-005-01 Utah3348-03-005-01 Utah3348-04-005-01 N	Utah3348-01-025-01 Utah3348-02-025-01 Utah3348-03-025-01 Utah3348-04-025-01 N	Avoc3477-01-005-01 Avoc3477-02-005-01 Avoc3477-03-005-01 Avoc3477-04-005-01 N	Avoc3477-01-025-01 Avoc3477-02-025-01 Avoc3477-03-025-01 Avoc3477-04-025-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	< 5.0	<b>8.7</b>	< 5.0	< 5.0	< 5.0	<b>9.2</b>	< 5.0	<b>74</b>	<b>10</b>	<b>420</b>	<b>30</b>	<b>320</b>	<b>410</b>	<b>37</b>	< 5.0
4,4'-DDE	ug/kg	800	530	400	< 5.0	<b>33</b>	<b>2.6 J</b>	<b>16</b>	<b>3.1 J</b>	<b>37</b>	<b>2.4 J</b>	<b>380</b>	<b>34</b>	<b>190</b>	<b>9.1</b>	<b>32</b>	<b>21</b>	<b>100</b>	<b>11</b>
4,4'-DDT	ug/kg	800	530	400	< 5.0	<b>4.3 J</b>	<b>2.6 J</b>	<b>33</b>	<b>20</b>	<b>29</b>	<b>5.2</b>	<b>250</b>	<b>11</b>	<b>65</b>	< 5.0	<b>4.2 J</b>	<b>12</b>	<b>51</b>	<b>3.1 J</b>
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	<b>210</b>	<b>430</b>	<b>57</b>	<b>1,300</b>	<b>330</b>	<b>580</b>	<b>58</b>	<b>910</b>	<b>100</b>	<b>6,700</b>	<b>470</b>	<b>7,700</b>	<b>15,000</b>	<b>210</b>	< 50
delta-BHC	ug/kg				< 10	< 10	< 9.9	< 10	< 9.9	< 10	< 10	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 9.9
Dieldrin	ug/kg	16	10	5	< 5.0	<b>2.2 J</b>	< 5.0	<b>13</b>	<b>31</b>	<b>44</b>	<b>5.2</b>	<b>4.3 J</b>	< 5.0	<b>26</b>	< 5.0	<b>7.6</b>	<b>11</b>	<b>2.5 J</b>	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<b>83</b>	<b>64</b>	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	<b>4.6 J</b>	< 9.9	<b>10</b>	<b>4.7 J</b>	<b>8.5 J</b>	< 10	<b>21</b>	<b>5.0 J</b>	<b>120</b>	<b>6.5 J</b>	<b>93</b>	<b>44 J</b>	< 9.9	< 9.9
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 99	< 100	< 99	< 100	< 100	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 99

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-43	COMPOSITE-44	COMPOSITE-45	COMPOSITE-45-Dup	COMPOSITE-46	COMPOSITE-47	COMPOSITE-48	COMPOSITE-49	COMPOSITE-50	COMPOSITE-51	COMPOSITE-51-Dup	COMPOSITE-52	COMPOSITE-53	COMPOSITE-54	COMPOSITE-55
					03/29/2017 Lind0741-01-005-01 Lind0741-02-005-01 Lind0741-03-005-01 Lind0741-04-005-01 N	03/29/2017 Lind0741-01-025-01 Lind0741-02-025-01 Lind0741-03-025-01 Lind0741-04-025-01 N	03/29/2017 Utah3384-01-005-01 Utah3384-02-005-01 Utah3384-03-005-01 Utah3384-04-005-01 N	03/29/2017 Utah3384-01-005-02 Utah3384-02-005-02 Utah3384-03-005-02 Utah3384-04-005-02 FD	03/29/2017 Utah3384-01-025-01 Utah3384-02-025-01 Utah3384-03-025-01 Utah3384-04-025-01 N	03/29/2017 Plum0850-01-005-01 Plum0850-02-005-01 Plum0850-03-005-01 Plum0850-04-005-01 N	03/29/2017 Plum0850-01-025-01 Plum0850-02-025-01 Plum0850-03-025-01 Plum0850-04-025-01 N	03/29/2017 Peac0880-01-005-01 Peac0880-02-005-01 Peac0880-03-005-01 Peac0880-04-005-01 N	03/29/2017 Peac0880-01-025-01 Peac0880-02-025-01 Peac0880-03-025-01 Peac0880-04-025-01 N	03/30/2017 Blai0890-01-005-01 Blai0890-02-005-01 Blai0890-03-005-01 Blai0890-04-005-01 N	03/30/2017 Blai0890-01-005-02 Blai0890-02-005-02 Blai0890-03-005-02 Blai0890-04-005-02 FD	03/30/2017 Blai0890-01-025-01 Blai0890-02-025-01 Blai0890-03-025-01 Blai0890-04-025-01 N	03/30/2017 Blai0828-01-005-01 Blai0828-02-005-01 Blai0828-03-005-01 Blai0828-04-005-01 N	03/30/2017 Blai0828-01-025-01 Blai0828-02-025-01 Blai0828-03-025-01 Blai0828-04-025-01 N	03/30/2017 Grap0828-01-005-01 Grap0828-02-005-01 Grap0828-03-005-01 Grap0828-04-005-01 N
<b>Pesticides</b>																			
4,4'-DDD	ug/kg	1150	760	575	7.4	11	5.0	7.5	< 5.0	17	< 5.0	5.8	< 5.0	25	14	< 5.0	12	9.4	22
4,4'-DDE	ug/kg	800	530	400	180	48	37	37	< 5.0	110	< 5.0	32	5.0	38	32	4.2 J	49	29	61
4,4'-DDT	ug/kg	800	530	400	11	14	13	13	< 5.0	19	< 5.0	12	< 5.0	30	17	< 5.0	6.7	3.5 J	8.6
Aldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
beta-BHC	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	500	150	92	110	< 5.0	650	< 5.0	340	42 J	510	670	30 J	130	46 J	240
delta-BHC	ug/kg				< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10	< 9.9	< 10	< 10	< 9.9	< 10	< 10	< 10
Dieldrin	ug/kg	16	10	5	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	27	< 5.0	62	11	2.2 J	5.1	< 5.0	2.8 J	< 5.0	46
Endosulfan I	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				5.9 J	13	< 10	< 10	< 9.9	12	< 10	3.7 J	< 9.9	15	20	< 9.9	< 10	< 10	5.8 J
Methoxychlor	ug/kg				< 5.0	< 4.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100	< 99	< 100	< 100	< 99	< 100	< 100	< 100

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.

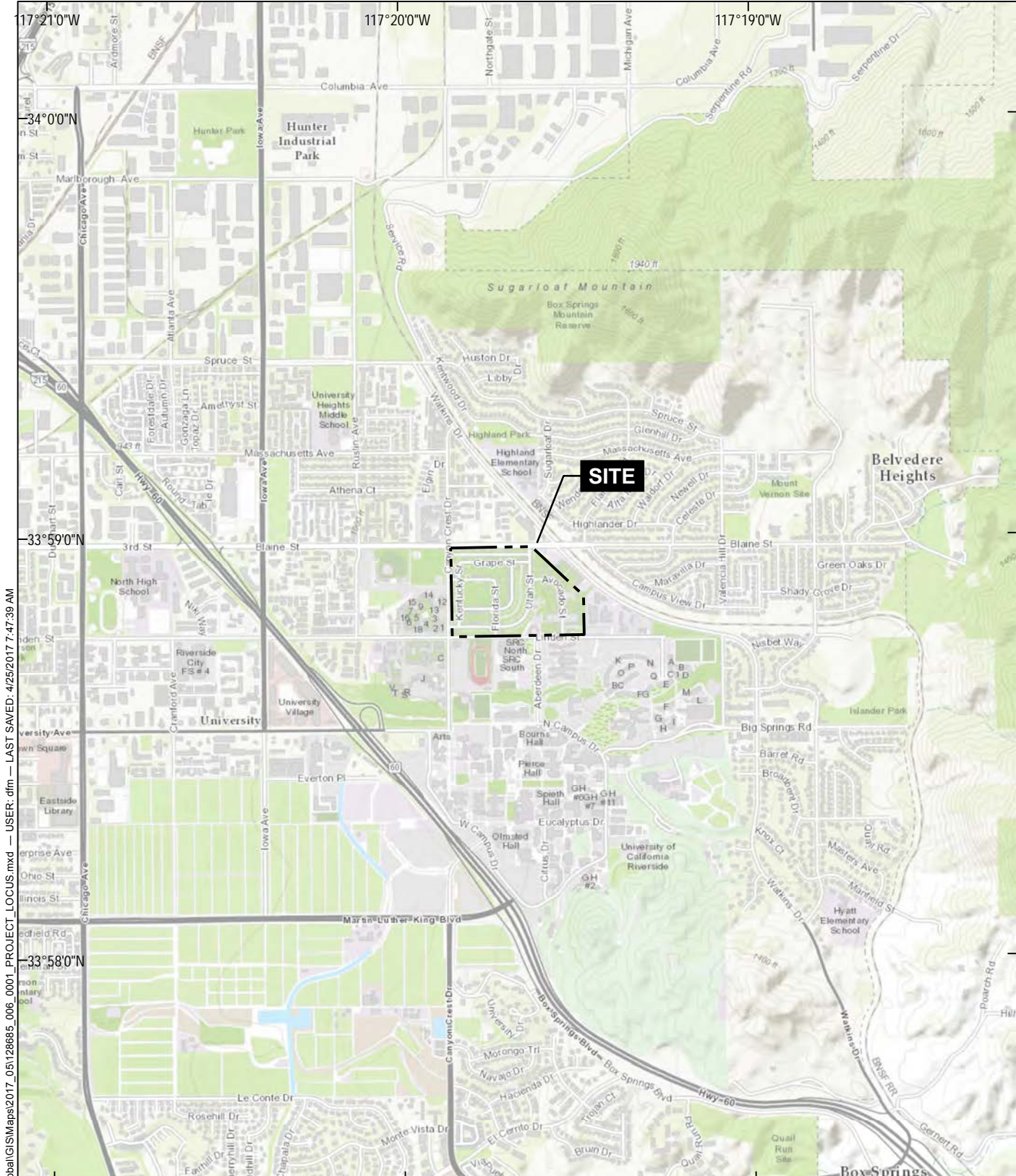
**TABLE 2**  
 COMPOSITE SOIL SAMPLE RESULTS  
 NORTH DISTRICT PREDEVELOPMENT STUDIES  
 RIVERSIDE, CALIFORNIA

Analyte	Sample ID Date Discrete Samples  Unit	DTSC Modified Screening Level 2 Sample Composite	DTSC Modified Screening Level 3 Sample Composite	DTSC Modified Screening Level 4 Sample Composite	COMPOSITE-56	COMPOSITE-57	COMPOSITE-58	COMPOSITE-59	COMPOSITE-60	COMPOSITE-61	COMPOSITE-62
					03/30/2017 Grap0828-01-025-01 Grap0828-02-025-01 Grap0828-03-025-01 Grap0828-04-025-01 N	03/30/2017 Grap0766-01-005-01 Grap0766-02-005-01 Grap0766-03-005-01 N	03/30/2017 Grap0766-01-025-01 Grap0766-02-025-01 Grap0766-03-025-01 N	03/30/2017 Idah3339-01-005-01 Idah3339-02-005-01 Idah3339-03-005-01 Idah3339-04-005-01 N	03/30/2017 Idah3339-01-025-01 Idah3339-02-025-01 Idah3339-03-025-01 Idah3339-04-025-01 N	03/30/2017 Utah3334-01-005-01 Utah3334-02-005-01 Utah3334-03-005-01 Utah3334-04-005-01 N	03/30/2017 Utah3334-01-025-01 Utah3334-02-025-01 Utah3334-03-025-01 Utah3334-04-025-01 N
<b>Pesticides</b>											
4,4'-DDD	ug/kg	1150	760	575	7.1	55	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4,4'-DDE	ug/kg	800	530	400	25	300	15	2.9 J	< 5.0	5.0	< 5.0
4,4'-DDT	ug/kg	800	530	400	2.7 J	160	9.1	< 5.0	< 5.0	7.8	< 5.0
Aldrin	ug/kg	16	10	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
alpha-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
beta-BHC	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlordane	ug/kg	215	140	105	74	610	< 50	< 50	< 50	< 50	< 50
delta-BHC	ug/kg				< 10	< 10	< 10	< 10	< 10	< 9.9	< 10
Dieldrin	ug/kg	16	10	5	15	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan I	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan II	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endosulfan sulfate	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin aldehyde	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Endrin ketone	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
gamma-BHC (Lindane)	ug/kg	250	160	125	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor	ug/kg	60	40	20	< 5.0	2.2 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Heptachlor epoxide	ug/kg				< 10	9.2 J	< 10	< 10	< 10	< 9.9	< 10
Methoxychlor	ug/kg				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toxaphene	ug/kg				< 100	< 100	< 100	< 100	< 100	< 99	< 100

Yellow shading indicates the composite sample results exceed the composite DTSC Modified Screening Level for the specific organochlorine pesticide.



## FIGURES



GIS FILE PATH: G:\128685\_UC Riverside\Global\GIS\Maps\2017\_05\128685\_006\_0001\_PROJECT\_LOCUS.mxd — USER: dfm — LAST SAVED: 4/25/2017 7:47:39 AM



MAP SOURCE: ESRI  
 SITE COORDINATES: 33°58'52"N 117°19'41"W

**HALEY  
 ALDRICH**

PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 MAY 2017

**FIGURE 1**



GIS FILE PATH: G:\128885 UC Riverside\Gis\Map\2017 US128885\_006\_0002 SITE PLAN.mxd - USER: dlm - LAST SAVED: 5/20/17 6:40:42 AM

**LEGEND**  
 ◆ SAMPLE LOCATION  
 [---] SITE BOUNDARY (APPROXIMATE)

**NOTES**  
 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

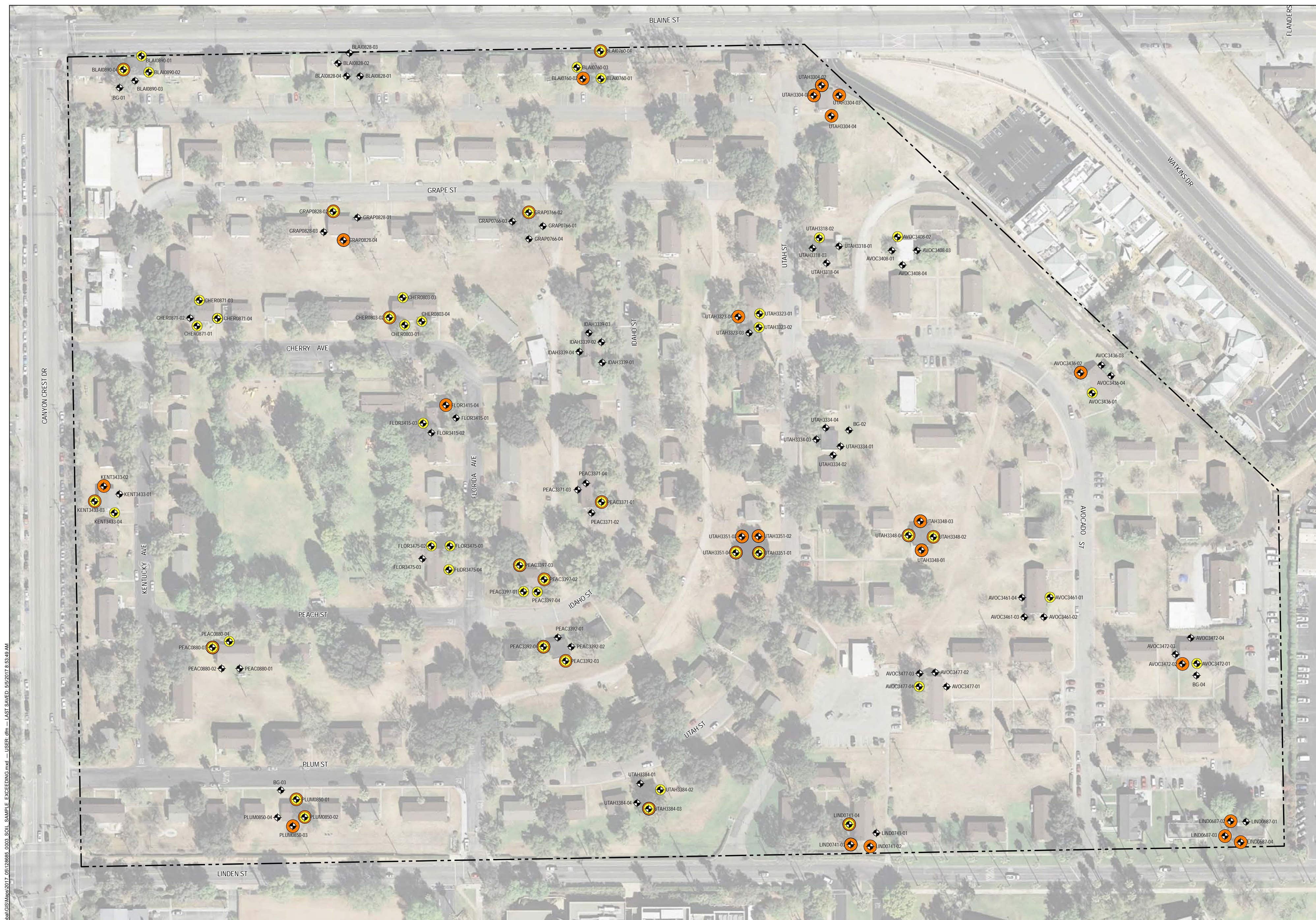


0 100 200  
 SCALE IN FEET

**HALEY ALDRICH**  
 PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA  
**SITE MAP AND  
 SOIL SAMPLE LOCATIONS**

MAY 2017

FIGURE 2



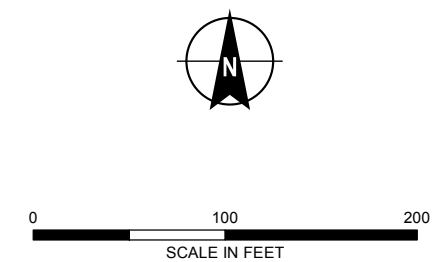
GIS FILE PATH: G:\128685\_LUC\Riverside\Gobbin\GIS\Map\2017\_0512\28685\_003\_SOIL\_SAMPLE\_LOC\_EXCEEDING.mxd -- USER: dlm -- LAST SAVED: 5/5/2017 8:53:49 AM

- LEGEND**
- SOIL SAMPLE LOCATION EXCEEDS ORGANOCHELRINE PESTICIDE DTSC MODIFIED SCREENING LEVELS
  - SOIL SAMPLE LOCATION EXCEEDS LEAD DTSC MODIFIED SCREENING LEVEL
  - ⊕ SAMPLE LOCATION
  - SITE BOUNDARY (APPROXIMATE)

**NOTES**

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

Chemical	Unit	DTSC Modified Screening Level
Lead	mg/kg	80
4,4'-DDD	ug/kg	2,300
4,4'-DDE	ug/kg	2,000
4,4'-DDT	ug/kg	1,900
Chlordane	ug/kg	440
Dieldrin	ug/kg	34
Endrin ketone	ug/kg	19,000
Heptachlor	ug/kg	130
Heptachlor epoxide	ug/kg	70



**HALEY ALDRICH**

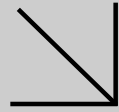
PRELIMINARY GEOTECHNICAL INVESTIGATION  
 NORTH DISTRICT FAMILY HOUSING PROJECT  
 NORTH OF WEST LINDEN STREET AND  
 EAST OF CANYON CREST DRIVE  
 RIVERSIDE, CALIFORNIA

**SOIL SAMPLES LOCATIONS EXCEEDING  
 DTSC MODIFIED SCREENING LEVELS**

MAY 2017 FIGURE 3

## **APPENDIX A**

### **Laboratory Test Results**



**WORK ORDER NUMBER: 17-03-2035**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** UC Riverside North District / 128685-006  
2.0

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/07/2017 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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 Work Order Number: 17-03-2035

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/28/17. They were assigned to Work Order 17-03-2035.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2035
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:
	Date/Time Received: 03/28/17 13:00
	Number of Containers: 80

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Lind0687-01-005-01	17-03-2035-1	03/27/17 08:21	1	Solid
Lind0687-01-025-01	17-03-2035-2	03/27/17 08:29	1	Solid
Lind0687-02-025-01	17-03-2035-3	03/27/17 08:41	1	Solid
Lind0687-03-025-01	17-03-2035-4	03/27/17 08:56	1	Solid
Lind0687-04-005-01	17-03-2035-5	03/27/17 09:03	1	Solid
Lind0687-04-025-01	17-03-2035-6	03/27/17 09:07	1	Solid
Avoc3472-01-005-01	17-03-2035-7	03/27/17 09:20	1	Solid
Avoc3472-01-025-01	17-03-2035-8	03/27/17 09:27	1	Solid
Avoc3472-02-005-01	17-03-2035-9	03/27/17 09:51	1	Solid
Avoc3472-02-025-01	17-03-2035-10	03/27/17 09:55	1	Solid
Avoc3472-03-005-01	17-03-2035-11	03/27/17 10:03	1	Solid
Avoc3472-03-025-01	17-03-2035-12	03/27/17 10:07	1	Solid
Avoc3472-04-005-01	17-03-2035-13	03/27/17 10:09	1	Solid
Avoc3472-04-025-01	17-03-2035-14	03/27/17 10:11	1	Solid
Avoc3461-01-005-01	17-03-2035-15	03/27/17 10:35	1	Solid
Avoc3461-01-005-02	17-03-2035-16	03/27/17 10:35	1	Solid
Avoc3461-01-025-01	17-03-2035-17	03/27/17 10:40	1	Solid
Avoc3461-02-005-01	17-03-2035-18	03/27/17 10:50	1	Solid
Avoc3461-02-005-02	17-03-2035-19	03/27/17 10:50	1	Solid
Avoc3461-02-025-01	17-03-2035-20	03/27/17 10:56	1	Solid
Avoc3461-03-005-01	17-03-2035-21	03/27/17 11:02	1	Solid
Avoc3461-03-005-02	17-03-2035-22	03/27/17 11:02	1	Solid
Avoc3461-03-025-01	17-03-2035-23	03/27/17 11:08	1	Solid
Avoc3461-04-005-01	17-03-2035-24	03/27/17 11:16	1	Solid
Avoc3461-04-005-02	17-03-2035-25	03/27/17 11:16	1	Solid
Avoc3461-04-025-01	17-03-2035-26	03/27/17 11:24	1	Solid
Avoc3408-01-005-01	17-03-2035-27	03/27/17 11:43	1	Solid
Avoc3408-01-025-01	17-03-2035-28	03/27/17 11:52	1	Solid
Avoc3408-02-005-01	17-03-2035-29	03/27/17 11:56	1	Solid
Avoc3408-02-025-01	17-03-2035-30	03/27/17 12:04	1	Solid
Avoc3408-03-005-01	17-03-2035-31	03/27/17 12:12	1	Solid
Avoc3408-03-025-01	17-03-2035-32	03/27/17 12:16	1	Solid
Avoc3408-04-005-01	17-03-2035-33	03/27/17 12:20	1	Solid
Avoc3408-04-025-01	17-03-2035-34	03/27/17 12:24	1	Solid
Utah3318-01-005-01	17-03-2035-35	03/27/17 12:33	1	Solid
Utah3318-01-025-01	17-03-2035-36	03/27/17 12:38	1	Solid
Utah3318-02-005-01	17-03-2035-37	03/27/17 12:46	1	Solid
Utah3318-02-025-01	17-03-2035-38	03/27/17 12:50	1	Solid
Utah3318-03-005-01	17-03-2035-39	03/27/17 12:55	1	Solid
Utah3318-03-025-01	17-03-2035-40	03/27/17 12:59	1	Solid
Utah3318-04-005-01	17-03-2035-41	03/27/17 13:06	1	Solid
Utah3318-04-025-01	17-03-2035-42	03/27/17 13:10	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	17-03-2035
3187 Red Hill Avenue, Suite 155	Project Name:	UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:	
	Date/Time Received:	03/28/17 13:00
	Number of Containers:	80

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Utah3304-01-005-01	17-03-2035-43	03/27/17 14:09	1	Solid
Utah3304-01-005-02	17-03-2035-44	03/27/17 14:09	1	Solid
Utah3304-01-025-01	17-03-2035-45	03/27/17 14:13	1	Solid
Utah3304-02-005-01	17-03-2035-46	03/27/17 14:20	1	Solid
Utah3304-02-005-02	17-03-2035-47	03/27/17 14:20	1	Solid
Utah3304-02-025-01	17-03-2035-48	03/27/17 14:24	1	Solid
Utah3304-03-005-01	17-03-2035-49	03/27/17 14:30	1	Solid
Utah3304-03-005-02	17-03-2035-50	03/27/17 14:30	1	Solid
Utah3304-03-025-01	17-03-2035-51	03/27/17 14:36	1	Solid
Utah3304-04-005-01	17-03-2035-52	03/27/17 14:48	1	Solid
Utah3304-04-005-02	17-03-2035-53	03/27/17 14:48	1	Solid
Utah3304-04-025-01	17-03-2035-54	03/27/17 14:52	1	Solid
Blai0760-01-005-01	17-03-2035-55	03/27/17 15:09	1	Solid
Blai0760-01-025-01	17-03-2035-56	03/27/17 15:12	1	Solid
Blai0760-02-005-01	17-03-2035-57	03/27/17 15:17	1	Solid
Blai0760-02-025-01	17-03-2035-58	03/27/17 15:20	1	Solid
Blai0760-03-005-01	17-03-2035-59	03/27/17 15:28	1	Solid
Blai0760-03-025-01	17-03-2035-60	03/27/17 15:34	1	Solid
Blai0760-04-005-01	17-03-2035-61	03/27/17 15:40	1	Solid
Blai0760-04-025-01	17-03-2035-62	03/27/17 15:44	1	Solid
EB-032717	17-03-2035-63	03/27/17 16:05	2	Aqueous
Composite-01	17-03-2035-64	03/27/17 00:00	1	Solid
Composite-02	17-03-2035-65	03/27/17 00:00	1	Solid
Composite-03	17-03-2035-66	03/27/17 00:00	1	Solid
Composite-04	17-03-2035-67	03/27/17 00:00	1	Solid
Composite-05	17-03-2035-68	03/27/17 00:00	1	Solid
Composite-05-dup	17-03-2035-69	03/27/17 00:00	1	Solid
Composite-06	17-03-2035-70	03/27/17 00:00	1	Solid
Composite-07	17-03-2035-71	03/27/17 00:00	1	Solid
Composite-08	17-03-2035-72	03/27/17 00:00	1	Solid
Composite-09	17-03-2035-73	03/27/17 00:00	1	Solid
Composite-10	17-03-2035-74	03/27/17 00:00	1	Solid
Composite-11	17-03-2035-75	03/27/17 00:00	1	Solid
Composite-12	17-03-2035-76	03/27/17 00:00	1	Solid
Composite-13	17-03-2035-77	03/27/17 00:00	1	Solid
Composite-14	17-03-2035-78	03/27/17 00:00	1	Solid
Composite-15	17-03-2035-79	03/27/17 00:00	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/28/17

Attn: Colleen Canfield

Page 1 of 4

### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Lind0687-01-005-01 (17-03-2035-1)						
Arsenic	2.49		0.773	mg/kg	EPA 6010B	EPA 3050B
Lead	31.6		0.515	mg/kg	EPA 6010B	EPA 3050B
Lind0687-04-005-01 (17-03-2035-5)						
Lead	54.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Avoc3472-01-005-01 (17-03-2035-7)						
Lead	119		0.498	mg/kg	EPA 6010B	EPA 3050B
Avoc3472-02-005-01 (17-03-2035-9)						
Lead	63.7		0.508	mg/kg	EPA 6010B	EPA 3050B
Avoc3472-03-005-01 (17-03-2035-11)						
Lead	35.8		0.521	mg/kg	EPA 6010B	EPA 3050B
Avoc3472-04-005-01 (17-03-2035-13)						
Lead	10.3		0.498	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-01-005-01 (17-03-2035-15)						
Arsenic	3.45		0.721	mg/kg	EPA 6010B	EPA 3050B
Lead	32.8		0.481	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-01-005-02 (17-03-2035-16)						
Arsenic	3.87		0.735	mg/kg	EPA 6010B	EPA 3050B
Lead	150		0.490	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-02-005-01 (17-03-2035-18)						
Lead	70.6		0.495	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-02-005-02 (17-03-2035-19)						
Lead	55.9		0.513	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-03-005-01 (17-03-2035-21)						
Lead	42.1		0.503	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-03-005-02 (17-03-2035-22)						
Lead	56.5		0.515	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-04-005-01 (17-03-2035-24)						
Lead	28.5		0.483	mg/kg	EPA 6010B	EPA 3050B
Avoc3461-04-005-02 (17-03-2035-25)						
Lead	36.0		0.505	mg/kg	EPA 6010B	EPA 3050B
Avoc3408-01-005-01 (17-03-2035-27)						
Arsenic	3.82		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	40.4		0.498	mg/kg	EPA 6010B	EPA 3050B
Avoc3408-02-005-01 (17-03-2035-29)						
Lead	84.5		0.518	mg/kg	EPA 6010B	EPA 3050B
Avoc3408-03-005-01 (17-03-2035-31)						
Lead	38.6		0.488	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/28/17

Attn: Colleen Canfield

Page 2 of 4

### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Avoc3408-04-005-01 (17-03-2035-33)						
Lead	44.6		0.518	mg/kg	EPA 6010B	EPA 3050B
Utah3318-01-005-01 (17-03-2035-35)						
Lead	61.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Utah3318-02-005-01 (17-03-2035-37)						
Lead	144		0.513	mg/kg	EPA 6010B	EPA 3050B
Utah3318-03-005-01 (17-03-2035-39)						
Lead	65.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Utah3318-04-005-01 (17-03-2035-41)						
Lead	37.7		0.495	mg/kg	EPA 6010B	EPA 3050B
Utah3304-01-005-01 (17-03-2035-43)						
Arsenic	5.69		0.758	mg/kg	EPA 6010B	EPA 3050B
Lead	52.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Utah3304-01-005-02 (17-03-2035-44)						
Arsenic	5.67		0.725	mg/kg	EPA 6010B	EPA 3050B
Lead	48.8		0.483	mg/kg	EPA 6010B	EPA 3050B
Utah3304-02-005-01 (17-03-2035-46)						
Lead	31.1		0.488	mg/kg	EPA 6010B	EPA 3050B
Utah3304-02-005-02 (17-03-2035-47)						
Lead	31.0		0.505	mg/kg	EPA 6010B	EPA 3050B
Utah3304-03-005-01 (17-03-2035-49)						
Lead	47.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3304-03-005-02 (17-03-2035-50)						
Lead	46.0		0.508	mg/kg	EPA 6010B	EPA 3050B
Utah3304-04-005-01 (17-03-2035-52)						
Lead	38.3		0.508	mg/kg	EPA 6010B	EPA 3050B
Utah3304-04-005-02 (17-03-2035-53)						
Lead	37.4		0.521	mg/kg	EPA 6010B	EPA 3050B
Blai0760-01-005-01 (17-03-2035-55)						
Arsenic	6.55		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	151		0.493	mg/kg	EPA 6010B	EPA 3050B
Blai0760-02-005-01 (17-03-2035-57)						
Lead	76.6		0.508	mg/kg	EPA 6010B	EPA 3050B
Blai0760-03-005-01 (17-03-2035-59)						
Lead	91.8		0.476	mg/kg	EPA 6010B	EPA 3050B
Blai0760-04-005-01 (17-03-2035-61)						
Lead	111		0.526	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2035	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/28/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-01 (17-03-2035-64)						
Chlordane	320		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	7.1		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.0		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-03 (17-03-2035-66)						
Chlordane	340		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	42		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	30		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	6.1		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-05 (17-03-2035-68)						
Chlordane	40	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.7	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	29		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	13		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-05-dup (17-03-2035-69)						
Chlordane	47	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.4	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	34		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	12		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-06 (17-03-2035-70)						
Chlordane	34	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	6.3		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.6	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-07 (17-03-2035-71)						
Chlordane	66		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	7.7		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	97		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	35		25	ug/kg	EPA 8081A	EPA 3545
Composite-08 (17-03-2035-72)						
4,4'-DDE	14		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-09 (17-03-2035-73)						
Chlordane	390		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	10		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	9.9		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-10 (17-03-2035-74)						
4,4'-DDE	2.7	J	2.2*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
Project Name: UC Riverside North District / 128685-006 2.0  
Received: 03/28/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Composite-11 (17-03-2035-75)						
Chlordane	200		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	89		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	920		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	470		250	ug/kg	EPA 8081A	EPA 3545
Dieldrin	270		50	ug/kg	EPA 8081A	EPA 3545
Composite-12 (17-03-2035-76)						
Chlordane	370		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	61		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	890		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	370		250	ug/kg	EPA 8081A	EPA 3545
Dieldrin	340		50	ug/kg	EPA 8081A	EPA 3545
Composite-13 (17-03-2035-77)						
4,4'-DDD	13		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	46		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	11		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-14 (17-03-2035-78)						
Chlordane	680		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	140		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	57		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.7	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-15 (17-03-2035-79)						
4,4'-DDE	9.4		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.5	J	2.2*	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-01-005-01	17-03-2035-1-A	03/27/17 08:21	Solid	ICP 7300	03/29/17	03/30/17 11:22	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.49		0.773		1.03	
Lead		31.6		0.515		1.03	
Lind0687-04-005-01	17-03-2035-5-A	03/27/17 09:03	Solid	ICP 7300	03/29/17	03/30/17 11:23	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		54.2		0.503		1.01	
Avoc3472-01-005-01	17-03-2035-7-A	03/27/17 09:20	Solid	ICP 7300	03/29/17	03/30/17 11:26	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		119		0.498		0.995	
Avoc3472-02-005-01	17-03-2035-9-A	03/27/17 09:51	Solid	ICP 7300	03/29/17	03/30/17 11:27	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		63.7		0.508		1.02	
Avoc3472-03-005-01	17-03-2035-11-A	03/27/17 10:03	Solid	ICP 7300	03/29/17	03/30/17 11:28	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		35.8		0.521		1.04	
Avoc3472-04-005-01	17-03-2035-13-A	03/27/17 10:09	Solid	ICP 7300	03/29/17	03/30/17 11:29	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		10.3		0.498		0.995	
Avoc3461-01-005-01	17-03-2035-15-A	03/27/17 10:35	Solid	ICP 7300	03/29/17	03/30/17 11:30	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.45		0.721		0.962	
Lead		32.8		0.481		0.962	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3461-01-005-02	17-03-2035-16-A	03/27/17 10:35	Solid	ICP 7300	03/29/17	03/30/17 11:31	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.87		0.735		0.980	
Lead		150		0.490		0.980	
Avoc3461-02-005-01	17-03-2035-18-A	03/27/17 10:50	Solid	ICP 7300	03/29/17	03/30/17 11:31	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		70.6		0.495		0.990	
Avoc3461-02-005-02	17-03-2035-19-A	03/27/17 10:50	Solid	ICP 7300	03/29/17	03/30/17 11:32	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		55.9		0.513		1.03	
Avoc3461-03-005-01	17-03-2035-21-A	03/27/17 11:02	Solid	ICP 7300	03/29/17	03/30/17 11:33	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		42.1		0.503		1.01	
Avoc3461-03-005-02	17-03-2035-22-A	03/27/17 11:02	Solid	ICP 7300	03/29/17	03/30/17 11:34	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		56.5		0.515		1.03	
Avoc3461-04-005-01	17-03-2035-24-A	03/27/17 11:16	Solid	ICP 7300	03/29/17	03/30/17 11:38	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		28.5		0.483		0.966	
Avoc3461-04-005-02	17-03-2035-25-A	03/27/17 11:16	Solid	ICP 7300	03/29/17	03/30/17 11:38	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		36.0		0.505		1.01	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3408-01-005-01	17-03-2035-27-A	03/27/17 11:43	Solid	ICP 7300	03/29/17	03/30/17 11:39	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.82		0.746		0.995	
Lead		40.4		0.498		0.995	
Avoc3408-02-005-01	17-03-2035-29-A	03/27/17 11:56	Solid	ICP 7300	03/29/17	03/30/17 11:40	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		84.5		0.518		1.04	
Avoc3408-03-005-01	17-03-2035-31-A	03/27/17 12:12	Solid	ICP 7300	03/29/17	03/30/17 11:41	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		38.6		0.488		0.976	
Avoc3408-04-005-01	17-03-2035-33-A	03/27/17 12:20	Solid	ICP 7300	03/29/17	03/30/17 11:42	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		44.6		0.518		1.04	
Utah3318-01-005-01	17-03-2035-35-A	03/27/17 12:33	Solid	ICP 7300	03/29/17	03/30/17 11:43	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		61.8		0.505		1.01	
Utah3318-02-005-01	17-03-2035-37-A	03/27/17 12:46	Solid	ICP 7300	03/29/17	03/30/17 11:43	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		144		0.513		1.03	
Utah3318-03-005-01	17-03-2035-39-A	03/27/17 12:55	Solid	ICP 7300	03/29/17	03/30/17 11:44	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		65.0		0.495		0.990	
Utah3318-04-005-01	17-03-2035-41-A	03/27/17 13:06	Solid	ICP 7300	03/29/17	03/30/17 11:45	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		37.7		0.495		0.990	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-01-005-01	17-03-2035-43-A	03/27/17 14:09	Solid	ICP 7300	03/29/17	03/30/17 11:49	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		5.69		0.758		1.01	
Lead		52.9		0.505		1.01	
Utah3304-01-005-02	17-03-2035-44-A	03/27/17 14:09	Solid	ICP 7300	03/29/17	03/30/17 11:50	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		5.67		0.725		0.966	
Lead		48.8		0.483		0.966	
Utah3304-02-005-01	17-03-2035-46-A	03/27/17 14:20	Solid	ICP 7300	03/29/17	03/30/17 11:50	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.1		0.488		0.976	
Utah3304-02-005-02	17-03-2035-47-A	03/27/17 14:20	Solid	ICP 7300	03/29/17	03/30/17 11:51	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.0		0.505		1.01	
Utah3304-03-005-01	17-03-2035-49-A	03/27/17 14:30	Solid	ICP 7300	03/29/17	03/30/17 11:52	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		47.9		0.510		1.02	
Utah3304-03-005-02	17-03-2035-50-A	03/27/17 14:30	Solid	ICP 7300	03/29/17	03/30/17 11:53	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		46.0		0.508		1.02	
Utah3304-04-005-01	17-03-2035-52-A	03/27/17 14:48	Solid	ICP 7300	03/29/17	03/30/17 11:54	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		38.3		0.508		1.02	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-04-005-02	17-03-2035-53-A	03/27/17 14:48	Solid	ICP 7300	03/29/17	03/30/17 11:54	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		37.4		0.521		1.04	
Blai0760-01-005-01	17-03-2035-55-A	03/27/17 15:09	Solid	ICP 7300	03/29/17	03/30/17 11:55	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		6.55		0.739		0.985	
Lead		151		0.493		0.985	
Blai0760-02-005-01	17-03-2035-57-A	03/27/17 15:17	Solid	ICP 7300	03/29/17	03/30/17 11:56	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		76.6		0.508		1.02	
Blai0760-03-005-01	17-03-2035-59-A	03/27/17 15:28	Solid	ICP 7300	03/29/17	03/30/17 12:00	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		91.8		0.476		0.952	
Blai0760-04-005-01	17-03-2035-61-A	03/27/17 15:40	Solid	ICP 7300	03/29/17	03/30/17 12:00	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		111		0.526		1.05	
Method Blank	097-01-002-24543	N/A	Solid	ICP 7300	03/29/17	03/30/17 10:34	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	
Method Blank	097-01-002-24533	N/A	Solid	ICP 7300	03/29/17	03/30/17 10:36	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B  
 Units: mg/L

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032717	17-03-2035-63-A	03/27/17 16:05	Aqueous	ICP 7300	03/30/17	03/30/17 16:46	170330LA5

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

Method Blank	097-01-003-16390	N/A	Aqueous	ICP 7300	03/30/17	03/30/17 16:28	170330LA5
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Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-01</b>	<b>17-03-2035-64-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 12:13</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	320	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	7.1	5.0	2.2	1.00	
4,4'-DDT	8.0	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	94	24-168			
2,4,5,6-Tetrachloro-m-Xylene	63	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-02</b>	<b>17-03-2035-65-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 12:28</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	87	24-168			
2,4,5,6-Tetrachloro-m-Xylene	58	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-03</b>	<b>17-03-2035-66-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 12:43</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	340	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDT	30	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	6.1	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

<b>Composite-03</b>	<b>17-03-2035-66-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 10:48</b>	<b>170331L12</b>
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	42	25	11	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-04</b>	<b>17-03-2035-67-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 12:58</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	85	24-168			
2,4,5,6-Tetrachloro-m-Xylene	63	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-05</b>	<b>17-03-2035-68-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/05/17</b>	<b>04/05/17 13:19</b>	<b>170405L07</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	40	50	26	1.00	J
4,4'-DDD	4.7	5.0	2.4	1.00	J
4,4'-DDE	29	5.0	2.2	1.00	
4,4'-DDT	13	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-05-dup</b>	<b>17-03-2035-69-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/05/17</b>	<b>04/05/17 13:34</b>	<b>170405L07</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	47	50	26	1.00	J
4,4'-DDD	4.4	5.0	2.4	1.00	J
4,4'-DDE	34	5.0	2.2	1.00	
4,4'-DDT	12	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	94	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-06</b>	<b>17-03-2035-70-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 13:43</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	34	50	26	1.00	J
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	6.3	5.0	2.2	1.00	
4,4'-DDT	3.6	5.0	2.2	1.00	J
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	55	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-07</b>	<b>17-03-2035-71-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 13:58</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	66	50	26	1.00	
4,4'-DDD	7.7	5.0	2.4	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

Composite-07	17-03-2035-71-A	03/27/17 00:00	Solid	GC 41	03/31/17	04/05/17 11:18	170331L12
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	97	25	11	5.00	
4,4'-DDT	35	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-08</b>	<b>17-03-2035-72-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 14:13</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	14	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-09</b>	<b>17-03-2035-73-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 14:29</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	390	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	10	5.0	2.2	1.00	
4,4'-DDT	9.9	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-10</b>	<b>17-03-2035-74-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 14:44</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	2.7	5.0	2.2	1.00	J
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	94	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-11</b>	<b>17-03-2035-75-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 14:59</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	200	50	26	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-11</b>	<b>17-03-2035-75-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 11:48</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	89	50	23	10.0	
Dieldrin	270	50	22	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-11</b>	<b>17-03-2035-75-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 12:19</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	920	250	110	50.0	
4,4'-DDT	470	250	110	50.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	107	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-12</b>	<b>17-03-2035-76-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 15:14</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	370	50	26	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	123	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-12</b>	<b>17-03-2035-76-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 12:04</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	61	50	23	10.0	
Dieldrin	340	50	22	10.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-12</b>	<b>17-03-2035-76-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 12:34</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	890	250	110	50.0	
4,4'-DDT	370	250	110	50.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	122	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-13</b>	<b>17-03-2035-77-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 15:29</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	13	5.0	2.3	1.00	
4,4'-DDE	32	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	11	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

Composite-13	17-03-2035-77-A	03/27/17 00:00	Solid	GC 41	03/31/17	04/05/17 11:33	170331L12
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDT	46	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

### Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-14</b>	<b>17-03-2035-78-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 10:18</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	680	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	2.7	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	58	25-145	

Composite-14	17-03-2035-78-A	03/27/17 00:00	Solid	GC 41	03/31/17	04/05/17 12:49	170331L12
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	140	25	11	5.00	
4,4'-DDT	57	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-15</b>	<b>17-03-2035-79-A</b>	<b>03/27/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/05/17 10:33</b>	<b>170331L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	9.4	5.0	2.2	1.00	
4,4'-DDT	4.5	5.0	2.2	1.00	J
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	72	24-168	
2,4,5,6-Tetrachloro-m-Xylene	58	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2648	N/A	Solid	GC 41	03/31/17	04/04/17 10:58	170331L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2650	N/A	Solid	GC 41	04/05/17	04/05/17 13:04	170405L07

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	90	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032717	17-03-2035-63-B	03/27/17 16:05	Aqueous	GC 44	03/29/17	04/03/17 12:59	170329L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.095	0.027	1.00	
Gamma-BHC	ND	0.095	0.029	1.00	
Beta-BHC	ND	0.095	0.029	1.00	
Heptachlor	ND	0.095	0.025	1.00	
Delta-BHC	ND	0.095	0.027	1.00	
Aldrin	ND	0.095	0.025	1.00	
Heptachlor Epoxide	ND	0.095	0.024	1.00	
Endosulfan I	ND	0.095	0.026	1.00	
Dieldrin	ND	0.095	0.027	1.00	
4,4'-DDE	ND	0.095	0.025	1.00	
Endrin	ND	0.095	0.029	1.00	
Endrin Aldehyde	ND	0.095	0.025	1.00	
4,4'-DDD	ND	0.095	0.026	1.00	
Endosulfan II	ND	0.095	0.026	1.00	
4,4'-DDT	ND	0.095	0.025	1.00	
Endosulfan Sulfate	ND	0.095	0.028	1.00	
Methoxychlor	ND	0.095	0.024	1.00	
Chlordane	ND	0.95	0.31	1.00	
Toxaphene	ND	1.9	0.56	1.00	
Endrin Ketone	ND	0.095	0.023	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	56	50-135	
2,4,5,6-Tetrachloro-m-Xylene	84	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-529-947	N/A	Aqueous	GC 44	03/29/17	04/03/17 12:16	170329L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1.00	
Gamma-BHC	ND	0.10	0.030	1.00	
Beta-BHC	ND	0.10	0.030	1.00	
Heptachlor	ND	0.10	0.026	1.00	
Delta-BHC	ND	0.10	0.029	1.00	
Aldrin	ND	0.10	0.027	1.00	
Heptachlor Epoxide	ND	0.10	0.025	1.00	
Endosulfan I	ND	0.10	0.028	1.00	
Dieldrin	ND	0.10	0.029	1.00	
4,4'-DDE	ND	0.10	0.027	1.00	
Endrin	ND	0.10	0.031	1.00	
Endrin Aldehyde	ND	0.10	0.026	1.00	
4,4'-DDD	ND	0.10	0.027	1.00	
Endosulfan II	ND	0.10	0.027	1.00	
4,4'-DDT	ND	0.10	0.027	1.00	
Endosulfan Sulfate	ND	0.10	0.029	1.00	
Methoxychlor	ND	0.10	0.025	1.00	
Chlordane	ND	1.0	0.33	1.00	
Toxaphene	ND	2.0	0.59	1.00	
Endrin Ketone	ND	0.10	0.024	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	50-135	
2,4,5,6-Tetrachloro-m-Xylene	94	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Lind0687-01-005-01	Sample	Solid	ICP 7300	03/29/17	03/30/17 11:22	170329S08
Lind0687-01-005-01	Matrix Spike	Solid	ICP 7300	03/29/17	03/30/17 11:19	170329S08
Lind0687-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	03/29/17	03/30/17 11:20	170329S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.494	25.00	28.97	106	29.60	108	75-125	2	0-20	
Lead	31.57	25.00	55.00	94	54.10	90	75-125	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
<b>Blai0760-04-005-01</b>	<b>Sample</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 12:00</b>	<b>170329S09</b>
<b>Blai0760-04-005-01</b>	<b>Matrix Spike</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 11:21</b>	<b>170329S09</b>
<b>Blai0760-04-005-01</b>	<b>Matrix Spike Duplicate</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 11:21</b>	<b>170329S09</b>

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	7.724	25.00	31.56	95	32.22	98	75-125	2	0-20	
Lead	110.6	25.00	127.4	4X	138.4	4X	75-125	4X	0-20	Q



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2006-1	Sample	Aqueous	ICP 7300	03/30/17	03/30/17 18:12	170330SA5
17-03-2006-1	Matrix Spike	Aqueous	ICP 7300	03/30/17	03/30/17 18:13	170330SA5
17-03-2006-1	Matrix Spike Duplicate	Aqueous	ICP 7300	03/30/17	03/30/17 18:17	170330SA5

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.5000	0.5511	110	0.5392	108	80-140	2	0-11	
Lead	ND	0.5000	0.5263	105	0.5101	102	84-120	3	0-7	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
<b>Composite-02</b>	<b>Sample</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 12:28</b>	<b>170331S12</b>
<b>Composite-02</b>	<b>Matrix Spike</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 11:13</b>	<b>170331S12</b>
<b>Composite-02</b>	<b>Matrix Spike Duplicate</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 11:28</b>	<b>170331S12</b>

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	32.66	131	20.93	84	50-135	44	0-25	4
Alpha-BHC	ND	25.00	28.90	116	19.28	77	50-135	40	0-25	4
Beta-BHC	ND	25.00	46.36	185	27.46	110	50-135	51	0-25	3,4
4,4'-DDD	ND	25.00	34.43	138	28.64	115	50-135	18	0-25	3
4,4'-DDE	ND	25.00	35.10	140	27.30	109	50-135	25	0-25	3
4,4'-DDT	ND	25.00	36.29	145	29.92	120	50-135	19	0-25	3
Delta-BHC	ND	25.00	31.40	126	25.54	102	50-135	21	0-25	
Dieldrin	ND	25.00	36.63	147	26.39	106	50-135	32	0-25	3,4
Endosulfan I	ND	25.00	36.25	145	25.48	102	50-135	35	0-25	3,4
Endosulfan II	ND	25.00	35.58	142	29.35	117	50-135	19	0-25	3
Endosulfan Sulfate	ND	25.00	33.91	136	28.21	113	50-135	18	0-25	3
Endrin	ND	25.00	44.72	179	29.62	118	50-135	41	0-25	3,4
Endrin Aldehyde	ND	25.00	30.46	122	26.37	105	50-135	14	0-25	
Gamma-BHC	ND	25.00	31.98	128	21.46	86	50-135	39	0-25	4
Heptachlor	ND	25.00	35.41	142	21.02	84	50-135	51	0-25	3,4
Heptachlor Epoxide	ND	25.00	20.86	83	24.54	98	50-135	16	0-25	
Methoxychlor	ND	25.00	33.02	132	28.56	114	50-135	14	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0175-1	Sample	Solid	GC 41	04/05/17	04/06/17 16:50	170405S07
17-04-0175-1	Matrix Spike	Solid	GC 41	04/05/17	04/06/17 16:21	170405S07
17-04-0175-1	Matrix Spike Duplicate	Solid	GC 41	04/05/17	04/06/17 16:35	170405S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	21.04	84	21.20	85	50-135	1	0-25	
Alpha-BHC	ND	25.00	20.25	81	20.44	82	50-135	1	0-25	
Beta-BHC	ND	25.00	21.79	87	21.97	88	50-135	1	0-25	
4,4'-DDD	ND	25.00	27.48	110	27.79	111	50-135	1	0-25	
4,4'-DDE	ND	25.00	26.02	104	26.22	105	50-135	1	0-25	
4,4'-DDT	ND	25.00	25.03	100	25.23	101	50-135	1	0-25	
Delta-BHC	ND	25.00	23.33	93	23.42	94	50-135	0	0-25	
Dieldrin	10.74	25.00	34.68	96	34.90	97	50-135	1	0-25	
Endosulfan I	ND	25.00	24.65	99	24.77	99	50-135	0	0-25	
Endosulfan II	ND	25.00	25.48	102	25.92	104	50-135	2	0-25	
Endosulfan Sulfate	ND	25.00	25.31	101	25.82	103	50-135	2	0-25	
Endrin	ND	25.00	26.39	106	26.68	107	50-135	1	0-25	
Endrin Aldehyde	ND	25.00	23.51	94	23.73	95	50-135	1	0-25	
Gamma-BHC	ND	25.00	21.31	85	21.51	86	50-135	1	0-25	
Heptachlor	ND	25.00	21.55	86	21.71	87	50-135	1	0-25	
Heptachlor Epoxide	ND	25.00	27.91	112	27.38	110	50-135	2	0-25	
Methoxychlor	ND	25.00	25.15	101	25.55	102	50-135	2	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24543</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:35</b>	<b>170329L08</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.67	91	80-120	
Lead		25.00	24.76	99	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24533</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:37</b>	<b>170329L09</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.13	89	80-120	
Lead		25.00	24.25	97	80-120	



## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-003-16390</b>	<b>LCS</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>03/30/17</b>	<b>03/30/17 16:29</b>	<b>170330LA5</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		0.5000	0.4517	90	80-120	
Lead		0.5000	0.5186	104	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2648</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>03/31/17</b>	<b>04/04/17 10:43</b>	<b>170331L12</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	20.35	81	50-135	36-149	
Alpha-BHC		25.00	22.62	90	50-135	36-149	
Beta-BHC		25.00	21.68	87	50-135	36-149	
4,4'-DDD		25.00	20.98	84	50-135	36-149	
4,4'-DDE		25.00	20.94	84	50-135	36-149	
4,4'-DDT		25.00	22.44	90	50-135	36-149	
Delta-BHC		25.00	22.62	90	50-135	36-149	
Dieldrin		25.00	22.89	92	50-135	36-149	
Endosulfan I		25.00	24.21	97	50-135	36-149	
Endosulfan II		25.00	23.66	95	50-135	36-149	
Endosulfan Sulfate		25.00	22.23	89	50-135	36-149	
Endrin		25.00	21.30	85	50-135	36-149	
Endrin Aldehyde		25.00	22.56	90	50-135	36-149	
Gamma-BHC		25.00	22.80	91	50-135	36-149	
Heptachlor		25.00	22.65	91	50-135	36-149	
Heptachlor Epoxide		25.00	21.94	88	50-135	36-149	
Methoxychlor		25.00	21.28	85	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass


 Return to Contents

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2650</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/05/17</b>	<b>04/05/17 15:04</b>	<b>170405L07</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	21.72	87	50-135	36-149	
Alpha-BHC		25.00	22.89	92	50-135	36-149	
Beta-BHC		25.00	21.69	87	50-135	36-149	
4,4'-DDD		25.00	22.45	90	50-135	36-149	
4,4'-DDE		25.00	23.26	93	50-135	36-149	
4,4'-DDT		25.00	24.45	98	50-135	36-149	
Delta-BHC		25.00	23.20	93	50-135	36-149	
Dieldrin		25.00	23.66	95	50-135	36-149	
Endosulfan I		25.00	24.11	96	50-135	36-149	
Endosulfan II		25.00	24.50	98	50-135	36-149	
Endosulfan Sulfate		25.00	23.51	94	50-135	36-149	
Endrin		25.00	21.88	88	50-135	36-149	
Endrin Aldehyde		25.00	23.33	93	50-135	36-149	
Gamma-BHC		25.00	23.05	92	50-135	36-149	
Heptachlor		25.00	23.44	94	50-135	36-149	
Heptachlor Epoxide		25.00	22.70	91	50-135	36-149	
Methoxychlor		25.00	23.20	93	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

## Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3510C  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-529-947	LCS	Aqueous	GC 44	03/29/17	04/03/17 12:30	170329L04				
099-12-529-947	LCSD	Aqueous	GC 44	03/29/17	04/03/17 12:45	170329L04				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.5328	107	0.5538	111	50-135	36-149	4	0-25	
Gamma-BHC	0.5000	0.5395	108	0.5621	112	50-135	36-149	4	0-25	
Beta-BHC	0.5000	0.5437	109	0.5365	107	50-135	36-149	1	0-25	
Heptachlor	0.5000	0.5512	110	0.5751	115	50-135	36-149	4	0-25	
Delta-BHC	0.5000	0.5617	112	0.5902	118	50-135	36-149	5	0-25	
Aldrin	0.5000	0.5259	105	0.5485	110	50-135	36-149	4	0-25	
Heptachlor Epoxide	0.5000	0.5240	105	0.5447	109	50-135	36-149	4	0-25	
Endosulfan I	0.5000	0.5579	112	0.5781	116	50-135	36-149	4	0-25	
Dieldrin	0.5000	0.5491	110	0.5710	114	50-135	36-149	4	0-25	
4,4'-DDE	0.5000	0.5538	111	0.5734	115	50-135	36-149	3	0-25	
Endrin	0.5000	0.5749	115	0.5976	120	50-135	36-149	4	0-25	
Endrin Aldehyde	0.5000	0.5317	106	0.5544	111	50-135	36-149	4	0-25	
4,4'-DDD	0.5000	0.5667	113	0.5870	117	50-135	36-149	4	0-25	
Endosulfan II	0.5000	0.5608	112	0.5833	117	50-135	36-149	4	0-25	
4,4'-DDT	0.5000	0.5369	107	0.5598	112	50-135	36-149	4	0-25	
Endosulfan Sulfate	0.5000	0.5332	107	0.5553	111	50-135	36-149	4	0-25	
Methoxychlor	0.5000	0.5112	102	0.5344	107	50-135	36-149	4	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 17-03-2035

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3010A Total	935	ICP 7300	1
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3510C	669	GC 44	1

  
Return to Contents

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.





Revised COC received from  
 Matt Rathel (H&A) on  
 03/30/17 at 11:25am.  
 - Vitendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY: **17-03-2035**  
 DATE: **3/27/17**  
 PAGE: **2** OF **7**

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT:  
 Colleen Canfield

STATE: CA ZIP: 92626  
 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 TEL: 714-371-1802

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

GLOBAL ID:  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

FIELD POINT NAME (For COELT EDF)  
 NO. OF CONT.

LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
9	Ave03472-07-005-01	3/27/17	0951	SO	1
10	Ave03472-02-025-01		0955		
11	Ave03472-03-025-01		1003		
12	Ave03472-03-025-01		1007		
13	Ave03472-04-005-01		1009		
14	Ave03472-04-005-01		1011		
15	Ave03461-01-005-01		1035		
16	Ave03461-01-005-02		1035		
17	Ave03461-01-005-01		1040		
18	Ave03461-02-005-01		1050		

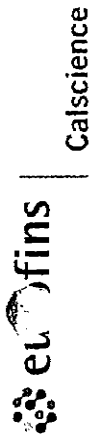
Requested Analyses:  
 Field Filtered  
 Preserved  
 Unpreserved  
 Lead - 6010B (Soil)  
 Arsenic - 6010B (Soil)  
 Organochlorine Pesticides 8081A (Soil)  
 HPL

Received by: (Signature/Affiliation) *Aly Eci*  
 Date: 3/28/17 Time: 1100  
 Received by: (Signature/Affiliation) *P. Nelson*  
 Date: 3/28/17 Time: 1300  
 Received by: (Signature/Affiliation)

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from  
Matt Rathel (H&A) on  
03/30/17 at 11:25am.  
- Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # LAB USE ONLY  
 DATE: 3/27/17  
 PAGE: 3 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 STATE: CA ZIP: 92626  
 TEL: 714-371-1802  
 E-MAIL: coanfield@haleyaldrich.com

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson  
 PROJECT CONTACT: Colleen Canfield

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0

Requested Analyses:  
 Unpreserved Preserved Field Filtered  
 Lead - 6010B (Soil) X X X X X X X X X X  
 Arsenic - 6010B (Soil) X X X X X X X X X X  
 Organochlorine Pesticides 8081A (Soil) H&A X X X X X X X X X X

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
19	AV03461-02-005-02		3/27/17	1050	80	1
20	AV03461-02-025-01			1050		
21	AV03461-03-005-01			1102		
22	AV03461-03-005-02			1102		
23	AV03461-03-025-01			1108		
24	AV03461-04-005-01			1116		
25	AV03461-04-005-02			1116		
26	AV03461-04-025-01			1124		
27	AV03461-04-005-01			1143		
28	AV03461-01-025-01			1152		

Received by: (Signature/Affiliation) *AY ECI* Date: 3/28/17 Time: 1100  
 Relinquished by: (Signature) *AY* Date: 3/28/17 Time: 1300  
 Relinquished by: (Signature) *AY* Date: 3/28/17 Time: 1300

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5484

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92628

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Flush surcharges may apply to any TAT not STANDARD):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

HALEY & ALDRICH CHAIN OF CUSTODY

WO # LAB USE ONLY

DATE: 3/22/17  
PAGE: 5 OF 7

BLANKET SERVICE AGREEMENT NO.:

2015-18-EurofinsCalscience  
Quote: 963193  
SAMPLER(S): (PRINT)

Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-008 2.0

PROJECT CONTACT:

Colleen Canfield

REQUESTED ANALYSES

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X		X			Hold
			X		
			X	X	
			X	X	
			X		
			X		
			X		
			X		
			X		
			X		

Received by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Received by: (Signature/Affiliation)
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Date: 3/28/17	Date: 3/28/17	Date: 3/28/17
Time: 1100	Time: 1300	Time:

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from  
 Matt Raltheil (H&A) on  
 03/30/17 at 11:25am.  
 - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY: **17-03-2035**      DATE: **3/27/17**      OF **7**  
 PAGE: **6**

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-Eurofins Calscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
 Colleen Canfield

LABORATORY CLIENT:  
 Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa      STATE: CA      ZIP: 92626

TEL: 714-371-1802      E-MAIL: ccanfield@haleyaldrich.com

REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		

LOG CODE:

SAME DAY     24 HR     48 HR     72 HR     5 DAYS     STANDARD

Geotracker EDF

H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raltheil of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COBELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
49	Utah3304-03-025-01		3/27/17	1436	SD	1
50	Utah3304-03-025-02			1430		
51	Utah3304-03-025-01			1436		
52	Utah3304-04-025-01			1448		
53	Utah3304-04-025-02			1448		
54	Utah3304-04-025-01			1452		
55	Utah3304-01-025-01			1509		
56	Utah3304-01-025-01			1512		
57	Utah3304-02-025-01			1517		
58	Utah3304-02-025-01			1520		

Received by: (Signature/Affiliation) *AY ECI*      Date: **3/28/17**      Time: **1100**

Received by: (Signature/Affiliation) *ECI*      Date: **3/28/17**      Time: **1300**

Received by: (Signature/Affiliation) *AY*

Reinquired by: (Signature) *AY*

Reinquired by: (Signature) *AY*

Reinquired by: (Signature)

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

17-03-2035

Revised COC received from  
Matt Raithe (H&A) on 03/30/17  
at 11:25am.  
- Virendra (ECI)

Page 1 of 2

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-01 - 64	X	Lind0687-01-005-01 - 1 Lind0687-04-005-01 - 5
Composite-02 - 65	X	Lind0687-01-025-01 - 2 Lind0687-02-025-01 - 3 Lind0687-03-025-01 - 4 Lind0687-04-025-01 - 6
Composite-03 - 66	X	Avoc3472-01-005-01 - 7 Avoc3472-02-005-01 - 9 Avoc3472-03-005-01 - 11 Avoc3472-04-005-01 - 13
Composite-04 - 67	X	Avoc3472-01-025-01 - 8 Avoc3472-02-025-01 - 10 Avoc3472-03-025-01 - 12 Avoc3472-04-025-01 - 14
Composite-05 - 68	X	Avoc3461-01-005-01 - 15 Avoc3461-02-005-01 - 18 Avoc3461-03-005-01 - 21 Avoc3461-04-005-01 - 24
Composite-05-dup - 69	X	Avoc3461-01-005-02 - 16 Avoc3461-02-005-02 - 19 Avoc3461-03-005-02 - 22 Avoc3461-04-005-02 - 25
Composite-06 - 70	X	Avoc3461-01-025-01 - 17 Avoc3461-02-025-01 - 20 Avoc3461-03-025-01 - 23 Avoc3461-04-025-01 - 26
Composite-07 - 71	X	Avoc3408-01-005-01 - 27 Avoc3408-02-005-01 - 29 Avoc3408-03-005-01 - 31 Avoc3408-04-005-01 - 33
Composite-08 - 72	X	Avoc3408-01-025-01 - 28 Avoc3408-02-025-01 - 30 Avoc3408-03-025-01 - 32 Avoc3408-04-025-01 - 34

17-03-2035

Page 2 of 2

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-09 -73	X	Utah3318-01-005-01 -35 Utah3318-02-005-01 -37 Utah3318-03-005-01 -39 Utah3318-04-005-01 -41
Composite-10 -74	X	Utah3318-01-025-01 -36 Utah3318-02-025-01 -38 Utah3318-03-025-01 -40 Utah3318-04-025-01 -42
Composite-11 -75	X	Utah3304-01-005-01 -43 Utah3304-02-005-01 -46 Utah3304-03-005-01 -49 Utah3304-04-005-01 -52
Composite-12 -76	X	Utah3304-01-005-02 -44 Utah3304-02-005-02 -47 Utah3304-03-005-02 -50 Utah3304-04-005-02 -53
Composite-13 -77	X	Utah3304-01-025-01 -45 Utah3304-02-025-01 -48 Utah3304-03-025-01 -51 Utah3304-04-025-01 -54
Composite-14 -78	X	Blai0760-01-005-01 -55 Blai0760-02-005-01 -57 Blai0760-03-005-01 -59 Blai0760-04-005-01 -61
Composite-15 -79	X	Blai0760-01-025-01 -56 Blai0760-02-025-01 -58 Blai0760-03-025-01 -60 Blai0760-04-025-01 -62

Revised COC received from  
Matt Raithel (H&A) on 03/30/17  
at 11:25am.  
- Virendra (ECI)



Calscience

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HALEY & ALDRICH CHAIN OF CUSTODY

WO #7 LAB USE ONLY

17-03-2035

DATE: 3/27/17

PAGE: 1 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any FAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF LOG CODE:  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	Lind0687-01-025-01		3/27/17	0821	SO	1
2	Lind0687-01-025-01			0829		
	<del>Lind0687-01-025-01</del>			0835		
3	Lind0687-02-025-01			0841		
	<del>Lind0687-02-025-01</del>			0850		
4	Lind0687-03-025-01			0856		
5	Lind0687-04-025-01			0903		
6	Lind0687-04-025-01			0907		
7	Aves3472-01-025-01			0920		
8	Aves3472-01-025-01			0927		

REQUESTED ANALYSES						
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *ECB* Date: 3/28/17 Time: 1100  
 Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *ALY* Date: 3/28/17 Time: 1300  
 Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2035

DATE: 3/27/17

PAGE: 2 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.: 2015-18-Eurofins Calscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
9	AVOC3472-02-005-01		3/27/17	0951	SO	1
10	AVOC3472-02-025-01			0955		
11	AVOC3472-03-005-01			1003		
12	AVOC3472-03-025-01			1007		
13	AVOC3472-04-005-01			1009		
14	AVOC3472-04-025-01			1011		
15	AVOC3461-01-005-01			1035		
16	AVOC3461-01-005-02			1035		
17	AVOC3461-01-025-01			1040		
18	AVOC3461-02-005-01			1050		

Requested Analyses:

Sample ID	Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
9	X		X			
10	X			X		
11	X			X		
12	X			X		
13	X			X		
14	X			X		
15	X			X		
16	X			X		
17	X			X		
18	X			X		

Received by: (Signature/Affiliation) *Aly Ece* Date: 3/28/17 Time: 1100  
 Received by: (Signature/Affiliation) *Pr...* Date: 3/28/17 Time: 1300  
 Received by: (Signature/Affiliation) *Aly*





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17  
PAGE: 3 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard (Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
Tanya Nelson

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES											
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)						
19	A1003461-02-005-02		3/27/17	1050	SO	1	X											
20	A1003461-02-025-01			1056							X							
21	A1003461-03-005-01			1102						X								
22	A1003461-03-005-02			1102						X								
23	A1003461-03-025-01			1108						X								
24	A1003461-04-005-01			1116						X								
25	A1003461-04-005-02			1116						X								
26	A1003461-04-025-01			1124						X								
27	A1003408-01-005-01			1143						X								
28	A1003408-01-025-01			1152						X								

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

Relinquished by: (Signature) [Signature] Date: 3/28/17 Time: 1100  
 Relinquished by: (Signature) [Signature] Date: 3/28/17 Time: 1300  
 Relinquished by: (Signature) [Signature] Date: 3/28/17 Time: 1300

Received by: (Signature/Affiliation) [Signature]  
 Received by: (Signature/Affiliation) [Signature]  
 Received by: (Signature/Affiliation) [Signature]



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17

PAGE: 4 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
CITY: Costa Mesa	TEL: 714-371-1802	GLOBAL ID:				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF		LOG CODE:				
<input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):				
Special Instructions:						
Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
29	AVOC3408-02-005-01		3/27/17	1156	SO	1
30	AVOC3408-02-025-01			1204		
31	AVOC3408-03-005-01			1212		
32	AVOC3408-03-025-01			1216		
33	AVOC3408-04-005-01			1220		
34	AVOC3408-04-025-01			1224		
35	UTAH2318-01-005-01			1233		
36	UTAH2318-01-025-01			1238		
37	UTAH2318-02-005-01			1246		
38	UTAH2318-02-025-01			1250		
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			Aly ECI	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			P. Nelson	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			Aly	

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)															
X		X	X			Hold														
			X		X															
			X		X															
			X		X															
			X		X															
			X		X															

Date: 3/28/17	Time: 1100
Date: 3/28/17	Time: 1300
Date:	Time:



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17  
PAGE: 5 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:  
2015-18-Eurofins Calscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
39	Utah3318-03-005-01		3/27/17	1255	1
40	Utah3318-03-025-01			1259	
41	Utah3318-04-005-01			1306	
42	Utah3318-04-025-01			1310	
43	Utah3304-01-005-01			1409	
44	Utah3304-01-005-02			1409	
45	Utah3304-01-025-01			1413	
46	Utah3304-02-005-01			1420	
47	Utah3304-02-005-02			1420	
48	Utah3304-02-005-01			1424	

REQUESTED ANALYSES					
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		Hold
			X		X
			X		X
			X		X
			X		X
			X		X
			X		X
			X		X

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) Aly ECI Date: 3/28/17 Time: 1100

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) [Signature] Date: 3/28/17 Time: 1300

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_





SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: H & A

DATE: 03 / 28 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.8°C (w/ CF): 3.8°C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 678

CUSTODY SEAL:

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 678

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....  Yes  No  N/A

COC document(s) received complete .....  Yes  No  N/A

Sampling date  Sampling time  Matrix  Number of containers

No analysis requested  Not relinquished  No relinquished date  No relinquished time

Sampler's name indicated on COC .....  Yes  No  N/A

Sample container label(s) consistent with COC .....  Yes  No  N/A

Sample container(s) intact and in good condition .....  Yes  No  N/A

Proper containers for analyses requested .....  Yes  No  N/A

Sufficient volume/mass for analyses requested .....  Yes  No  N/A

Samples received within holding time .....  Yes  No  N/A

Aqueous samples for certain analyses received within 15-minute holding time

pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....  Yes  No  N/A

Proper preservation chemical(s) noted on COC and/or sample container .....  Yes  No  N/A

Unpreserved aqueous sample(s) received for certain analyses

Volatile Organics  Total Metals  Dissolved Metals

Container(s) for certain analysis free of headspace .....  Yes  No  N/A

Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500)

Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation .....  Yes  No  N/A

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB

125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AGJ  500AGJ<sub>s</sub>

500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

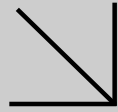
Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053

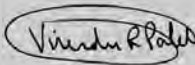
s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 802

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

**WORK ORDER NUMBER: 17-03-2035***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For****Client:** Haley & Aldrich, Inc.**Client Project Name:** UC Riverside North District / 128685-006  
2.0**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453



---

 Approved for release on 04/26/2017 by:  
 Virendra Patel  
 Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-03-2035

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/28/17. They were assigned to Work Order 17-03-2035.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2035
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/28/17 13:00
	Number of Containers: 80

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Lind0687-01-005-01	17-03-2035-1	03/27/17 08:21	1	Solid
Lind0687-04-005-01	17-03-2035-5	03/27/17 09:03	1	Solid
Avoc3472-01-005-01	17-03-2035-7	03/27/17 09:20	1	Solid
Avoc3472-01-025-01	17-03-2035-8	03/27/17 09:27	1	Solid
Avoc3472-02-005-01	17-03-2035-9	03/27/17 09:51	1	Solid
Avoc3472-03-005-01	17-03-2035-11	03/27/17 10:03	1	Solid
Avoc3472-04-005-01	17-03-2035-13	03/27/17 10:09	1	Solid
Avoc3461-01-025-01	17-03-2035-17	03/27/17 10:40	1	Solid
Avoc3408-02-025-01	17-03-2035-30	03/27/17 12:04	1	Solid
Utah3318-01-005-01	17-03-2035-35	03/27/17 12:33	1	Solid
Utah3318-02-005-01	17-03-2035-37	03/27/17 12:46	1	Solid
Utah3318-02-025-01	17-03-2035-38	03/27/17 12:50	1	Solid
Utah3318-03-005-01	17-03-2035-39	03/27/17 12:55	1	Solid
Utah3318-04-005-01	17-03-2035-41	03/27/17 13:06	1	Solid
Utah3304-01-005-01	17-03-2035-43	03/27/17 14:09	1	Solid
Utah3304-01-025-01	17-03-2035-45	03/27/17 14:13	1	Solid
Utah3304-02-005-01	17-03-2035-46	03/27/17 14:20	1	Solid
Utah3304-02-025-01	17-03-2035-48	03/27/17 14:24	1	Solid
Utah3304-03-005-01	17-03-2035-49	03/27/17 14:30	1	Solid
Utah3304-03-025-01	17-03-2035-51	03/27/17 14:36	1	Solid
Utah3304-04-005-01	17-03-2035-52	03/27/17 14:48	1	Solid
Utah3304-04-025-01	17-03-2035-54	03/27/17 14:52	1	Solid
Blai0760-01-005-01	17-03-2035-55	03/27/17 15:09	1	Solid
Blai0760-01-025-01	17-03-2035-56	03/27/17 15:12	1	Solid
Blai0760-02-005-01	17-03-2035-57	03/27/17 15:17	1	Solid
Blai0760-03-005-01	17-03-2035-59	03/27/17 15:28	1	Solid
Blai0760-03-025-01	17-03-2035-60	03/27/17 15:34	1	Solid
Blai0760-04-005-01	17-03-2035-61	03/27/17 15:40	1	Solid
Blai0760-04-025-01	17-03-2035-62	03/27/17 15:44	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/28/17

Attn: Colleen Canfield

Page 1 of 5

### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Lind0687-01-005-01 (17-03-2035-1)						
Arsenic	2.49		0.773	mg/kg	EPA 6010B	EPA 3050B
Lead	31.6		0.515	mg/kg	EPA 6010B	EPA 3050B
Chlordane	190	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.8	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.6	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Lind0687-04-005-01 (17-03-2035-5)						
Lead	54.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Chlordane	600	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	18	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.1	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Avoc3472-01-005-01 (17-03-2035-7)						
Lead	119		0.498	mg/kg	EPA 6010B	EPA 3050B
Chlordane	410	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	2.8	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	34	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	61	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.2	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Avoc3472-01-025-01 (17-03-2035-8)						
Lead	5.51		0.513	mg/kg	EPA 6010B	EPA 3050B
Avoc3472-02-005-01 (17-03-2035-9)						
Lead	63.7		0.508	mg/kg	EPA 6010B	EPA 3050B
Chlordane	470	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.3	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	40	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.7	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Avoc3472-03-005-01 (17-03-2035-11)						
Lead	35.8		0.521	mg/kg	EPA 6010B	EPA 3050B
Chlordane	340	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	39	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.6	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	13	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.7	J,ET	3.6*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2035	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/28/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Avoc3472-04-005-01 (17-03-2035-13)						
Lead	10.3		0.498	mg/kg	EPA 6010B	EPA 3050B
Chlordane	400	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	85	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	19	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Avoc3461-01-025-01 (17-03-2035-17)						
Lead	3.50		0.510	mg/kg	EPA 6010B	EPA 3050B
Avoc3408-02-025-01 (17-03-2035-30)						
Lead	8.05		0.493	mg/kg	EPA 6010B	EPA 3050B
Utah3318-01-005-01 (17-03-2035-35)						
Lead	61.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	150	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	28	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	9.7	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3318-02-005-01 (17-03-2035-37)						
Lead	144		0.513	mg/kg	EPA 6010B	EPA 3050B
Chlordane	390	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	6.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	17	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.4	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3318-02-025-01 (17-03-2035-38)						
Lead	14.5		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3318-03-005-01 (17-03-2035-39)						
Lead	65.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	44	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.4	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	13	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Utah3318-04-005-01 (17-03-2035-41)						
Lead	37.7		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	43	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	10	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	20	ET	10	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/28/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Utah3304-01-005-01 (17-03-2035-43)						
Arsenic	5.69		0.758	mg/kg	EPA 6010B	EPA 3050B
Lead	52.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	490	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	320	ET	100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	130	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	240	ET	100	ug/kg	EPA 8081A	EPA 3545
Utah3304-02-005-01 (17-03-2035-46)						
Lead	31.1		0.488	mg/kg	EPA 6010B	EPA 3050B
Chlordane	300	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	1400	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	1200	ET	250	ug/kg	EPA 8081A	EPA 3545
Dieldrin	500	ET	100	ug/kg	EPA 8081A	EPA 3545
Utah3304-02-025-01 (17-03-2035-48)						
4,4'-DDE	130	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	270	ET	250	ug/kg	EPA 8081A	EPA 3545
Dieldrin	56	ET	25	ug/kg	EPA 8081A	EPA 3545
Utah3304-03-005-01 (17-03-2035-49)						
Lead	47.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	130	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	230	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	74	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	52	ET	25	ug/kg	EPA 8081A	EPA 3545
Utah3304-03-025-01 (17-03-2035-51)						
4,4'-DDE	2.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Utah3304-04-005-01 (17-03-2035-52)						
Lead	38.3		0.508	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	730	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	130	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	32	ET	25	ug/kg	EPA 8081A	EPA 3545
Utah3304-04-025-01 (17-03-2035-54)						
Chlordane	110	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.7	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	90	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	67	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.5	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2035  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/28/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Blai0760-01-005-01 (17-03-2035-55)						
Arsenic	6.55		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	151		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	230	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	6.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	66	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	7.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Blai0760-01-025-01 (17-03-2035-56)						
Lead	6.87		0.510	mg/kg	EPA 6010B	EPA 3050B
Blai0760-02-005-01 (17-03-2035-57)						
Lead	76.6		0.508	mg/kg	EPA 6010B	EPA 3050B
Chlordane	520	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	13	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	63	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.0	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.1	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Blai0760-03-005-01 (17-03-2035-59)						
Lead	91.8		0.476	mg/kg	EPA 6010B	EPA 3050B
Chlordane	360	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	24	J,ET	12*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	170	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	10	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Blai0760-03-025-01 (17-03-2035-60)						
Lead	19.0		0.515	mg/kg	EPA 6010B	EPA 3050B
Blai0760-04-005-01 (17-03-2035-61)						
Lead	111		0.526	mg/kg	EPA 6010B	EPA 3050B
Chlordane	890	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	56	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	680	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	160	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.3	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Blai0760-04-025-01 (17-03-2035-62)						
Lead	7.59		0.515	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

### Detections Summary

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Client: Haley & Aldrich, Inc.	Work Order: 17-03-2035
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	Received: 03/28/17

Attn: Colleen Canfield

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Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
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Subcontracted analyses, if any, are not included in this summary.

  
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\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-01-005-01	17-03-2035-1-A	03/27/17 08:21	Solid	ICP 7300	03/29/17	03/30/17 11:22	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.49		0.773		1.03	
Lead		31.6		0.515		1.03	
Lind0687-04-005-01	17-03-2035-5-A	03/27/17 09:03	Solid	ICP 7300	03/29/17	03/30/17 11:23	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		54.2		0.503		1.01	
Avoc3472-01-005-01	17-03-2035-7-A	03/27/17 09:20	Solid	ICP 7300	03/29/17	03/30/17 11:26	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		119		0.498		0.995	
Avoc3472-01-025-01	17-03-2035-8-A	03/27/17 09:27	Solid	ICP 7300	04/21/17	04/21/17 17:24	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.51		0.513		1.03	
Avoc3472-02-005-01	17-03-2035-9-A	03/27/17 09:51	Solid	ICP 7300	03/29/17	03/30/17 11:27	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		63.7		0.508		1.02	
Avoc3472-03-005-01	17-03-2035-11-A	03/27/17 10:03	Solid	ICP 7300	03/29/17	03/30/17 11:28	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		35.8		0.521		1.04	
Avoc3472-04-005-01	17-03-2035-13-A	03/27/17 10:09	Solid	ICP 7300	03/29/17	03/30/17 11:29	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		10.3		0.498		0.995	
Avoc3461-01-025-01	17-03-2035-17-A	03/27/17 10:40	Solid	ICP 7300	04/21/17	04/21/17 17:26	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		3.50		0.510		1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3408-02-025-01	17-03-2035-30-A	03/27/17 12:04	Solid	ICP 7300	04/21/17	04/21/17 17:27	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		8.05		0.493		0.985	
Utah3318-01-005-01	17-03-2035-35-A	03/27/17 12:33	Solid	ICP 7300	03/29/17	03/30/17 11:43	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		61.8		0.505		1.01	
Utah3318-02-005-01	17-03-2035-37-A	03/27/17 12:46	Solid	ICP 7300	03/29/17	03/30/17 11:43	170329L08
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		144		0.513		1.03	
Utah3318-02-025-01	17-03-2035-38-A	03/27/17 12:50	Solid	ICP 7300	04/21/17	04/21/17 17:28	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		14.5		0.510		1.02	
Utah3318-03-005-01	17-03-2035-39-A	03/27/17 12:55	Solid	ICP 7300	03/29/17	03/30/17 11:44	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		65.0		0.495		0.990	
Utah3318-04-005-01	17-03-2035-41-A	03/27/17 13:06	Solid	ICP 7300	03/29/17	03/30/17 11:45	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		37.7		0.495		0.990	
Utah3304-01-005-01	17-03-2035-43-A	03/27/17 14:09	Solid	ICP 7300	03/29/17	03/30/17 11:49	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		5.69		0.758		1.01	
Lead		52.9		0.505		1.01	
Utah3304-02-005-01	17-03-2035-46-A	03/27/17 14:20	Solid	ICP 7300	03/29/17	03/30/17 11:50	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.1		0.488		0.976	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-03-005-01	17-03-2035-49-A	03/27/17 14:30	Solid	ICP 7300	03/29/17	03/30/17 11:52	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		47.9		0.510		1.02	
Utah3304-04-005-01	17-03-2035-52-A	03/27/17 14:48	Solid	ICP 7300	03/29/17	03/30/17 11:54	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		38.3		0.508		1.02	
Blai0760-01-005-01	17-03-2035-55-A	03/27/17 15:09	Solid	ICP 7300	03/29/17	03/30/17 11:55	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		6.55		0.739		0.985	
Lead		151		0.493		0.985	
Blai0760-01-025-01	17-03-2035-56-A	03/27/17 15:12	Solid	ICP 7300	04/21/17	04/21/17 17:29	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.87		0.510		1.02	
Blai0760-02-005-01	17-03-2035-57-A	03/27/17 15:17	Solid	ICP 7300	03/29/17	03/30/17 11:56	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		76.6		0.508		1.02	
Blai0760-03-005-01	17-03-2035-59-A	03/27/17 15:28	Solid	ICP 7300	03/29/17	03/30/17 12:00	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		91.8		0.476		0.952	
Blai0760-03-025-01	17-03-2035-60-A	03/27/17 15:34	Solid	ICP 7300	04/21/17	04/21/17 17:32	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		19.0		0.515		1.03	
Blai0760-04-005-01	17-03-2035-61-A	03/27/17 15:40	Solid	ICP 7300	03/29/17	03/30/17 12:00	170329L09
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		111		0.526		1.05	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0760-04-025-01</b>	<b>17-03-2035-62-A</b>	<b>03/27/17 15:44</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:33</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		7.59		0.515		1.03	
<b>Method Blank</b>	<b>097-01-002-24543</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:34</b>	<b>170329L08</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	
<b>Method Blank</b>	<b>097-01-002-24533</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:36</b>	<b>170329L09</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	
<b>Method Blank</b>	<b>097-01-002-24705</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:22</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.485		0.971	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-01-005-01	17-03-2035-1-A	03/27/17 08:21	Solid	GC 41	04/19/17	04/22/17 06:17	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	190	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	5.8	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	2.6	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	24-168	
2,4,5,6-Tetrachloro-m-Xylene	95	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-04-005-01	17-03-2035-5-A	03/27/17 09:03	Solid	GC 41	04/19/17	04/22/17 06:32	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	600	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	18	5.0	2.2	1.00	ET
4,4'-DDT	16	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	5.1	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-01-005-01	17-03-2035-7-A	03/27/17 09:20	Solid	GC 41	04/19/17	04/22/17 06:47	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	410	50	26	1.00	ET
4,4'-DDD	2.8	5.0	2.3	1.00	J,ET
4,4'-DDE	34	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	5.2	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	136	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-01-005-01	17-03-2035-7-A	03/27/17 09:20	Solid	GC 41	04/19/17	04/22/17 13:18	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	61	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	124	24-168	
2,4,5,6-Tetrachloro-m-Xylene	95	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-02-005-01	17-03-2035-9-A	03/27/17 09:51	Solid	GC 41	04/19/17	04/22/17 07:02	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	470	50	26	1.00	ET
4,4'-DDD	3.3	5.0	2.4	1.00	J,ET
4,4'-DDE	20	5.0	2.2	1.00	ET
4,4'-DDT	40	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	9.1	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	4.7	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	138	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-03-005-01	17-03-2035-11-A	03/27/17 10:03	Solid	GC 41	04/19/17	04/22/17 07:17	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	340	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDE	39	4.9	2.2	1.00	ET
4,4'-DDT	5.6	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	13	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	7.7	9.9	3.6	1.00	J,ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	34	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-04-005-01	17-03-2035-13-A	03/27/17 10:09	Solid	GC 41	04/19/17	04/22/17 07:32	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	400	50	26	1.00	ET
4,4'-DDD	14	5.0	2.4	1.00	ET
4,4'-DDT	19	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	58	24-168	
2,4,5,6-Tetrachloro-m-Xylene	32	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3472-04-005-01	17-03-2035-13-A	03/27/17 10:09	Solid	GC 41	04/19/17	04/25/17 14:14	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	85	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	49	24-168	
2,4,5,6-Tetrachloro-m-Xylene	35	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3318-01-005-01	17-03-2035-35-A	03/27/17 12:33	Solid	GC 41	04/19/17	04/22/17 07:47	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	150	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	28	5.0	2.2	1.00	ET
4,4'-DDT	8.9	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	9.7	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	155	24-168	
2,4,5,6-Tetrachloro-m-Xylene	92	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3318-02-005-01	17-03-2035-37-A	03/27/17 12:46	Solid	GC 41	04/19/17	04/22/17 08:02	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	390	50	26	1.00	ET
4,4'-DDD	6.6	5.0	2.4	1.00	ET
4,4'-DDE	17	5.0	2.2	1.00	ET
4,4'-DDT	14	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	5.3	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	7.4	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	160	24-168	
2,4,5,6-Tetrachloro-m-Xylene	84	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3318-03-005-01	17-03-2035-39-A	03/27/17 12:55	Solid	GC 41	04/19/17	04/22/17 08:17	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	44	50	26	1.00	J,ET
4,4'-DDD	4.4	5.0	2.4	1.00	J,ET
4,4'-DDE	13	5.0	2.2	1.00	ET
4,4'-DDT	6.6	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	162	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3318-04-005-01	17-03-2035-41-A	03/27/17 13:06	Solid	GC 41	04/19/17	04/22/17 08:32	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	43	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	10	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	2.8	5.0	2.2	1.00	J,ET
Heptachlor Epoxide	20	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	24-168	
2,4,5,6-Tetrachloro-m-Xylene	35	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-01-005-01	17-03-2035-43-A	03/27/17 14:09	Solid	GC 41	04/19/17	04/22/17 13:33	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	19	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	490	250	130	5.00	ET
4,4'-DDD	ND	25	12	5.00	ET
4,4'-DDT	130	25	11	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Endosulfan I	ND	25	9.9	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	13	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	14	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	131	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-01-005-01	17-03-2035-43-A	03/27/17 14:09	Solid	GC 41	04/19/17	04/25/17 14:29	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	320	100	44	20.0	ET
Dieldrin	240	100	44	20.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	80	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-01-025-01	17-03-2035-45-A	03/27/17 14:13	Solid	GC 41	04/19/17	04/22/17 09:02	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	24-168	
2,4,5,6-Tetrachloro-m-Xylene	36	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-02-005-01	17-03-2035-46-A	03/27/17 14:20	Solid	GC 41	04/19/17	04/22/17 13:48	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	100	44	20.0	ET
Alpha-BHC	ND	200	74	20.0	ET
Beta-BHC	ND	100	49	20.0	ET
Chlordane	300	50	26	1.00	ET
4,4'-DDD	ND	100	47	20.0	ET
Delta-BHC	ND	200	87	20.0	ET
Dieldrin	500	100	44	20.0	ET
Endosulfan I	ND	100	39	20.0	ET
Endosulfan II	ND	100	47	20.0	ET
Endosulfan Sulfate	ND	100	52	20.0	ET
Endrin	ND	100	47	20.0	ET
Endrin Aldehyde	ND	100	60	20.0	ET
Endrin Ketone	ND	100	50	20.0	ET
Gamma-BHC	ND	100	44	20.0	ET
Heptachlor	ND	100	43	20.0	ET
Heptachlor Epoxide	ND	200	74	20.0	ET
Methoxychlor	ND	100	54	20.0	ET
Toxaphene	ND	2000	890	20.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	128	24-168	
2,4,5,6-Tetrachloro-m-Xylene	54	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 17 of 35

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-02-005-01	17-03-2035-46-A	03/27/17 14:20	Solid	GC 41	04/19/17	04/24/17 13:46	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	1400	250	110	50.0	ET
4,4'-DDT	1200	250	110	50.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-02-025-01	17-03-2035-48-A	03/27/17 14:24	Solid	GC 41	04/19/17	04/22/17 14:04	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	19	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	ND	250	130	5.00	ET
4,4'-DDD	ND	25	12	5.00	ET
4,4'-DDE	130	25	11	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	56	25	11	5.00	ET
Endosulfan I	ND	25	9.9	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	13	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	14	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	133	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-02-025-01	17-03-2035-48-A	03/27/17 14:24	Solid	GC 41	04/19/17	04/24/17 14:01	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	270	250	110	50.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	135	24-168	
2,4,5,6-Tetrachloro-m-Xylene	100	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-03-005-01	17-03-2035-49-A	03/27/17 14:30	Solid	GC 41	04/19/17	04/22/17 14:19	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	18	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	130	50	26	1.00	ET
4,4'-DDD	ND	25	12	5.00	ET
4,4'-DDT	74	25	11	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	52	25	11	5.00	ET
Endosulfan I	ND	25	9.8	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	12	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	13	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

### Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-03-005-01	17-03-2035-49-A	03/27/17 14:30	Solid	GC 41	04/19/17	04/22/17 14:34	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	230	50	22	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	238	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-03-025-01	17-03-2035-51-A	03/27/17 14:36	Solid	GC 41	04/19/17	04/22/17 10:02	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	2.3	5.0	2.2	1.00	J,ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	148	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-04-005-01	17-03-2035-52-A	03/27/17 14:48	Solid	GC 41	04/19/17	04/22/17 14:49	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	18	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	ND	250	130	5.00	ET
4,4'-DDD	ND	25	12	5.00	ET
4,4'-DDT	130	25	11	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	32	25	11	5.00	ET
Endosulfan I	ND	25	9.9	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	13	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	14	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-04-005-01	17-03-2035-52-A	03/27/17 14:48	Solid	GC 41	04/19/17	04/24/17 14:16	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	730	250	110	50.0	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	99	24-168			
2,4,5,6-Tetrachloro-m-Xylene	70	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-04-025-01	17-03-2035-54-A	03/27/17 14:52	Solid	GC 41	04/19/17	04/22/17 10:32	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	110	50	26	1.00	ET
4,4'-DDD	4.7	5.0	2.3	1.00	J,ET
4,4'-DDT	3.4	5.0	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	8.5	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	171	24-168	2,7
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

### Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3304-04-025-01	17-03-2035-54-A	03/27/17 14:52	Solid	GC 41	04/19/17	04/22/17 15:19	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	90	25	11	5.00	ET
Dieldrin	67	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	147	24-168	
2,4,5,6-Tetrachloro-m-Xylene	92	25-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-01-005-01	17-03-2035-55-A	03/27/17 15:09	Solid	GC 41	04/19/17	04/22/17 10:47	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	230	50	26	1.00	ET
4,4'-DDD	6.6	5.0	2.4	1.00	ET
4,4'-DDT	2.2	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	7.1	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	42	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-01-005-01	17-03-2035-55-A	03/27/17 15:09	Solid	GC 41	04/19/17	04/22/17 15:34	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	66	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	77	24-168	
2,4,5,6-Tetrachloro-m-Xylene	48	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/28/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2035
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-02-005-01	17-03-2035-57-A	03/27/17 15:17	Solid	GC 41	04/19/17	04/22/17 11:03	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	520	50	26	1.00	ET
4,4'-DDD	13	5.0	2.3	1.00	ET
4,4'-DDT	4.0	5.0	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	4.1	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	165	24-168	
2,4,5,6-Tetrachloro-m-Xylene	82	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-02-005-01	17-03-2035-57-A	03/27/17 15:17	Solid	GC 41	04/19/17	04/22/17 15:49	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	63	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	146	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-03-005-01	17-03-2035-59-A	03/27/17 15:28	Solid	GC 41	04/19/17	04/21/17 08:32	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	360	50	26	1.00	ET
4,4'-DDT	20	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	10	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	156	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-03-005-01	17-03-2035-59-A	03/27/17 15:28	Solid	GC 41	04/19/17	04/21/17 14:34	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	24	25	12	5.00	J,ET
4,4'-DDE	170	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	157	24-168	
2,4,5,6-Tetrachloro-m-Xylene	97	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-04-005-01	17-03-2035-61-A	03/27/17 15:40	Solid	GC 41	04/19/17	04/21/17 08:47	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	9.2	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	6.3	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	142	24-168	
2,4,5,6-Tetrachloro-m-Xylene	89	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-04-005-01	17-03-2035-61-A	03/27/17 15:40	Solid	GC 41	04/19/17	04/21/17 14:49	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	890	250	130	5.00	ET
4,4'-DDD	56	25	12	5.00	ET
4,4'-DDT	160	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	61	24-168	
2,4,5,6-Tetrachloro-m-Xylene	49	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0760-04-005-01	17-03-2035-61-A	03/27/17 15:40	Solid	GC 41	04/19/17	04/21/17 15:04	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	680	250	110	50.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	154	24-168	
2,4,5,6-Tetrachloro-m-Xylene	110	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2670	N/A	Solid	GC 41	04/19/17	04/20/17 15:04	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	102	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2672	N/A	Solid	GC 41	04/19/17	04/21/17 15:19	170419L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

**Quality Control - Spike/Spike Duplicate**

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Lind0687-01-005-01	Sample	Solid	ICP 7300	03/29/17	03/30/17 11:22	170329S08
Lind0687-01-005-01	Matrix Spike	Solid	ICP 7300	03/29/17	03/30/17 11:19	170329S08
Lind0687-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	03/29/17	03/30/17 11:20	170329S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.494	25.00	28.97	106	29.60	108	75-125	2	0-20	
Lead	31.57	25.00	55.00	94	54.10	90	75-125	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
<b>Blai0760-04-005-01</b>	<b>Sample</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 12:00</b>	<b>170329S09</b>
<b>Blai0760-04-005-01</b>	<b>Matrix Spike</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 11:21</b>	<b>170329S09</b>
<b>Blai0760-04-005-01</b>	<b>Matrix Spike Duplicate</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 11:21</b>	<b>170329S09</b>

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	7.724	25.00	31.56	95	32.22	98	75-125	2	0-20	
Lead	110.6	25.00	127.4	4X	138.4	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits





Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Avoc3472-01-025-01	Sample	Solid	ICP 7300	04/21/17	04/21/17 17:24	170421S05
Avoc3472-01-025-01	Matrix Spike	Solid	ICP 7300	04/21/17	04/21/17 17:25	170421S05
Avoc3472-01-025-01	Matrix Spike Duplicate	Solid	ICP 7300	04/21/17	04/21/17 17:25	170421S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	5.507	25.00	36.72	125	33.62	112	75-125	9	0-20	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2252-71	Sample	Solid	GC 41	04/19/17	04/21/17 06:47	170419S03
17-03-2252-71	Matrix Spike	Solid	GC 41	04/19/17	04/21/17 09:02	170419S03
17-03-2252-71	Matrix Spike Duplicate	Solid	GC 41	04/19/17	04/21/17 09:17	170419S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.96	80	20.58	82	50-135	3	0-25	
Alpha-BHC	ND	25.00	18.67	75	19.19	77	50-135	3	0-25	
Beta-BHC	ND	25.00	20.40	82	21.38	86	50-135	5	0-25	
4,4'-DDD	19.85	25.00	62.23	170	65.29	182	50-135	5	0-25	3
4,4'-DDE	94.52	25.00	123.6	116	129.6	140	50-135	5	0-25	3
4,4'-DDT	38.49	25.00	38.34	0	41.61	13	50-135	8	0-25	3
Delta-BHC	ND	25.00	21.89	88	22.90	92	50-135	4	0-25	
Dieldrin	7.141	25.00	39.53	130	41.88	139	50-135	6	0-25	3
Endosulfan I	ND	25.00	32.74	131	35.96	144	50-135	9	0-25	3
Endosulfan II	ND	25.00	28.43	114	30.05	120	50-135	6	0-25	
Endosulfan Sulfate	ND	25.00	26.95	108	28.71	115	50-135	6	0-25	
Endrin	ND	25.00	30.80	123	32.42	130	50-135	5	0-25	
Endrin Aldehyde	ND	25.00	23.53	94	24.06	96	50-135	2	0-25	
Gamma-BHC	ND	25.00	19.35	77	19.88	80	50-135	3	0-25	
Heptachlor	ND	25.00	18.29	73	18.89	76	50-135	3	0-25	
Heptachlor Epoxide	ND	25.00	82.60	330	92.90	372	50-135	12	0-25	3
Methoxychlor	ND	25.00	14.59	58	15.87	63	50-135	8	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Lind0687-01-005-01	Sample	Solid	GC 41	04/19/17	04/22/17 06:17	170419S14
Lind0687-01-005-01	Matrix Spike	Solid	GC 41	04/19/17	04/22/17 12:03	170419S14
Lind0687-01-005-01	Matrix Spike Duplicate	Solid	GC 41	04/19/17	04/22/17 12:18	170419S14

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	23.81	95	23.70	95	50-135	0	0-25	
Alpha-BHC	ND	25.00	21.70	87	21.58	86	50-135	1	0-25	
Beta-BHC	ND	25.00	22.85	91	22.64	91	50-135	1	0-25	
4,4'-DDD	ND	25.00	48.11	192	47.61	190	50-135	1	0-25	3
4,4'-DDE	ND	25.00	28.74	115	28.22	113	50-135	2	0-25	
4,4'-DDT	5.828	25.00	34.28	114	33.91	112	50-135	1	0-25	
Delta-BHC	ND	25.00	25.39	102	25.23	101	50-135	1	0-25	
Dieldrin	ND	25.00	29.45	118	28.90	116	50-135	2	0-25	
Endosulfan I	ND	25.00	25.10	100	24.48	98	50-135	2	0-25	
Endosulfan II	ND	25.00	26.86	107	26.51	106	50-135	1	0-25	
Endosulfan Sulfate	ND	25.00	27.16	109	27.14	109	50-135	0	0-25	
Endrin	ND	25.00	30.16	121	29.70	119	50-135	2	0-25	
Endrin Aldehyde	ND	25.00	24.62	98	24.37	97	50-135	1	0-25	
Gamma-BHC	ND	25.00	22.81	91	22.66	91	50-135	1	0-25	
Heptachlor	ND	25.00	23.43	94	23.30	93	50-135	1	0-25	
Heptachlor Epoxide	ND	25.00	28.50	114	28.66	115	50-135	1	0-25	
Methoxychlor	ND	25.00	31.79	127	31.55	126	50-135	1	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24543</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:35</b>	<b>170329L08</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.67	91	80-120	
Lead		25.00	24.76	99	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24533</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>03/29/17</b>	<b>03/30/17 10:37</b>	<b>170329L09</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.13	89	80-120	
Lead		25.00	24.25	97	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
Work Order: 17-03-2035  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24705</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:23</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	26.25	105	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2670</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 11:03</b>	<b>170419L03</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.33	89	50-135	36-149	
Alpha-BHC		25.00	21.85	87	50-135	36-149	
Beta-BHC		25.00	22.88	92	50-135	36-149	
4,4'-DDD		25.00	29.06	116	50-135	36-149	
4,4'-DDE		25.00	26.98	108	50-135	36-149	
4,4'-DDT		25.00	29.21	117	50-135	36-149	
Delta-BHC		25.00	25.42	102	50-135	36-149	
Dieldrin		25.00	25.31	101	50-135	36-149	
Endosulfan I		25.00	24.46	98	50-135	36-149	
Endosulfan II		25.00	28.00	112	50-135	36-149	
Endosulfan Sulfate		25.00	28.22	113	50-135	36-149	
Endrin		25.00	26.98	108	50-135	36-149	
Endrin Aldehyde		25.00	26.97	108	50-135	36-149	
Gamma-BHC		25.00	22.55	90	50-135	36-149	
Heptachlor		25.00	22.75	91	50-135	36-149	
Heptachlor Epoxide		25.00	23.23	93	50-135	36-149	
Methoxychlor		25.00	28.89	116	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/28/17  
 Work Order: 17-03-2035  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2672</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 15:34</b>	<b>170419L14</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	20.69	83	50-135	36-149	
Alpha-BHC		25.00	20.65	83	50-135	36-149	
Beta-BHC		25.00	20.57	82	50-135	36-149	
4,4'-DDD		25.00	23.04	92	50-135	36-149	
4,4'-DDE		25.00	22.82	91	50-135	36-149	
4,4'-DDT		25.00	23.99	96	50-135	36-149	
Delta-BHC		25.00	21.91	88	50-135	36-149	
Dieldrin		25.00	21.76	87	50-135	36-149	
Endosulfan I		25.00	21.22	85	50-135	36-149	
Endosulfan II		25.00	23.05	92	50-135	36-149	
Endosulfan Sulfate		25.00	22.80	91	50-135	36-149	
Endrin		25.00	23.06	92	50-135	36-149	
Endrin Aldehyde		25.00	18.90	76	50-135	36-149	
Gamma-BHC		25.00	21.04	84	50-135	36-149	
Heptachlor		25.00	21.64	87	50-135	36-149	
Heptachlor Epoxide		25.00	20.30	81	50-135	36-149	
Methoxychlor		25.00	23.50	94	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Sample Analysis Summary Report

Work Order: 17-03-2035

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3545	944	GC 41	1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

Revised COC received from Matt Raithel (H&A) on 04/17/2017 at 13:10pm. - Virendra (ECI)

HALEY & ALDRICH CHAIN OF CUSTODY RECORD

17-03-2035

DATE: 3/27/17

PAGE: 1 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 STATE: CA  
 ZIP: 92626  
 TEL: 714-371-1802  
 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions: **See Attached table for Compositing instructions for 8061**

Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES									
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)				
1	Lind0687-01-005-01		3/23/17	0821	80	1	X									
2	Lind0687-01-025-01			0829							X					
3	Lind0687-02-005-01			0835							X					
4	Lind0687-03-025-01			0841							X					
5	Lind0687-04-005-01			0856							X					
6	Lind0687-04-025-01			0903							X					
7	Avoc3472-01-005-01			0907							X					
8	Avoc3472-01-025-01			0927							X					

Received by: (Signature/Affiliation) *[Signature]* **ECB**  
 Date: 3/28/17 Time: 1000

Received by: (Signature/Affiliation) *[Signature]*  
 Date: 3/28/17 Time: 1300

Received by: (Signature/Affiliation) *[Signature]*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

Revised COC received from Matt Raithel (H&A) on 04/17/2017 at 13:10pm. - Virendra (ECI)



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

**HALEY & ALDRICH CHAIN OF CUSTODY**  
 DATE: 3/27/17  
 PAGE: 2 OF 7

WO # / LAB USE ONLY  
 17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

Requested Archiving requirements (if required to be held greater than 30 days):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
9	AVOC3472-02-005-01		3/27/17	0955	SO	1
10	AVOC3472-02-025-01			0955		
11	AVOC3472-03-025-01			1003		
12	AVOC3472-03-025-01			1007		
13	AVOC3472-04-005-01			1009		
14	AVOC3472-04-025-01			1011		
15	AVOC3461-01-005-01			1035		
16	AVOC3461-01-005-02			1035		
17	AVOC3461-01-025-01			1040		
18	AVOC3461-02-005-01			1050		

REQUESTED ANALYSES		Date:	Time:
Unpreserved	Field Filled	3/28/17	1100
Preserved	Field Filled	3/28/17	1300
Lead - 6010B (Soil)	Field Filled	3/28/17	1300
Arsenic - 6010B (Soil)	Field Filled	3/28/17	1300
Organochlorine Pesticides 8081A (Soil)	Field Filled	3/28/17	1300

Received by: (Signature/Affiliation) Aly ECI  
 Received by: (Signature/Affiliation) Preeti  
 Received by: (Signature/Affiliation) Aly

Revised COC received from Matt Raithe (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

DATE: 3/27/17  
PAGE: 4 OF 7

WO # / LAB USE ONLY  
17-03-2035

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
Quote: 963193  
SAMPLER(S): (PRINT)  
Tanya Nelson

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

Special Instructions:  
Pricing provided on Eurofins Quote 963193  
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
29	AVOC3408-02-005-01		3/27/17	1156	SO	1
30	AVOC3408-02-025-01			1204		
31	AVOC3408-03-005-01			1212		
32	AVOC3408-03-025-01			1216		
33	AVOC3408-04-005-01			1220		
34	AVOC3408-04-025-01			1224		
35	UTAH2318-01-005-01			1233		
36	UTAH2318-01-025-01			1238		
37	UTAH2318-02-005-01			1246		
38	UTAH2318-02-025-01			1250		

Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Date	Time
	X			X			3/28/17	1100
	X			X			3/28/17	1300
	X			X				
	X			X				
	X			X				
	X			X				
	X			X				
	X			X				
	X			X				
	X			X				
	X			X				

Received by: (Signature/Affiliation) AY ECI  
 Received by: (Signature/Affiliation) AY ECI  
 Received by: (Signature/Affiliation) AY ECI

Relinquished by: (Signature) AY  
 Relinquished by: (Signature) AY  
 Relinquished by: (Signature) AY

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.











## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.

Revised COC received from Matt Raithehl (H&A) on 03/30/17 at 11:25am. - Virendra (ECI)

**eurofins** | Calscience

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LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (rush surcharges may apply to any FAT not STANDARD):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions: *See Attached table for Pricing provided on Eurofins Quote 963193 Compositing in instructions for 8051*  
 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110

**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY

**17-03-2035**

DATE: 3/27/17

PAGE: 1 OF 7

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193													
PROJECT CONTACT: Colleen Cantfield		SAMPLER(S): (PRINT) Tanya Nelson													
<b>REQUESTED ANALYSES</b>															
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Matrix	DATE	TIME	Preserved	Unpreserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
			DATE	TIME											
1	Lind0687-01-005-01		3/27/17	0821	1	SO			X			X			
2	Lind0687-01-045-01			0829					X			X			
3	Lind0687-01-015-01			0835					X			X			
4	Lind0687-01-025-01			0841					X			X			
5	Lind0687-01-005-01			0850					X			X			
6	Lind0687-04-025-01			0903					X			X			
7	Lind0687-04-075-01			0907					X			X			
8	Avoc3472-01-025-01			0920					X			X			
8	Avoc3477-01-025-01			0927					X			X			
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature/Affiliation) <i>ECI</i>		Date: <u>3/28/17</u> Time: <u>1000</u>			
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature/Affiliation) <i>ECI</i>		Date: <u>3/28/17</u> Time: <u>1300</u>			
Relinquished by: (Signature)										Received by: (Signature/Affiliation)		Date:			

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from  
 Matt Rathel (H&A) on  
 03/30/17 at 11:25am.  
 - Vitendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY: **17-03-2035**  
 DATE: **3/27/17**  
 PAGE: **2** OF **7**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 STATE: CA  
 ZIP: 92626  
 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
9	Ave03472-07-005-01		3/27/17	0955	SO	1
10	Ave03472-02-025-01			1003		
11	Ave03472-03-025-01			1007		
12	Ave03472-03-025-01			1009		
13	Ave03472-04-005-01			1011		
14	Ave03472-04-025-01			1035		
15	Ave03461-01-005-01			1035		
16	Ave03461-01-005-02			1040		
17	Ave03461-01-025-01			1050		
18	Ave03461-02-005-01					

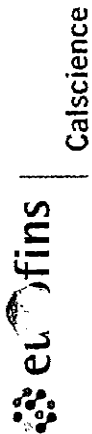
Requested Analytes	Field Filtered	Preserved	Unpreserved	Date	Time
Organochlorine Pesticides 8081A (Soil)					
Arsenic - 6010B (Soil)	X				
Lead - 6010B (Soil)	X				
Field Filtered	X				
Preserved		X			
Unpreserved			X		
				3/28/17	1100
				3/28/17	1300

Received by: (Signature/Affiliation) *Aly Eci*  
 Received by: (Signature/Affiliation) *P. Nelson*  
 Received by: (Signature/Affiliation)

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from  
 Matt Rathel (H&A) on  
 03/30/17 at 11:25am.  
 - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

DATE: 3/27/17 OF 7  
 PAGE: 3

WO # / LAB USE ONLY

17-03-2035

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT:  
 Colleen Canfield

STATE: CA ZIP: 92626  
 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa

TURNAROUND TIME (rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME									
19	AV03461-02-005-02		3/27/17	1050	80	1	X						
20	AV03461-02-025-01			1050									
21	AV03461-03-005-01			1102									
22	AV03461-03-005-02			1102									
23	AV03461-03-025-01			1108									
24	AV03461-04-005-01			1116									
25	AV03461-04-005-02			1116									
26	AV03461-04-025-01			1124									
27	AV03461-04-005-01			1143									
28	AV03461-01-025-01			1152									

Requested Analyses

Received by: (Signature/Affiliation) AY ECI Date: 3/28/17 Time: 1100  
 Relinquished by: (Signature) [Signature]  
 Received by: (Signature/Affiliation) AY ECI Date: 3/28/17 Time: 1300  
 Relinquished by: (Signature) [Signature]  
 Received by: (Signature/Affiliation) [Signature] Date: 3/28/17 Time: 1300

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

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LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92628

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Flush surcharges may apply to any TAT not STANDARD):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):

**Special Instructions:**

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

WOT/LAB USE ONLY

17-03-2035

DATE: 2/22/17 PAGE: 5 OF 7

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-008 2.0

PROJECT CONTACT:

Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:

2015-18-EurofinsCalscience  
Quote: 963193  
SAMPLER(S): (PRINT)

Tanya Nelson

**REQUESTED ANALYSES**

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X		X			Hold
			X		
			X	X	
			X	X	
			X		
			X		
			X		
			X		
			X		
			X		

Received by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Received by: (Signature/Affiliation)
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Date: 2/28/17	Date: 3/28/17	Date:
Time: 1100	Time: 1300	Time:

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



17-03-2035

Revised COC received from  
Matt Raithe (H&A) on 03/30/17  
at 11:25am.  
- Virendra (ECI)

Page 1 of 2

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-01 - 64	X	Lind0687-01-005-01 - 1 Lind0687-04-005-01 - 5
Composite-02 - 65	X	Lind0687-01-025-01 - 2 Lind0687-02-025-01 - 3 Lind0687-03-025-01 - 4 Lind0687-04-025-01 - 6
Composite-03 - 66	X	Avoc3472-01-005-01 - 7 Avoc3472-02-005-01 - 9 Avoc3472-03-005-01 - 11 Avoc3472-04-005-01 - 13
Composite-04 - 67	X	Avoc3472-01-025-01 - 8 Avoc3472-02-025-01 - 10 Avoc3472-03-025-01 - 12 Avoc3472-04-025-01 - 14
Composite-05 - 68	X	Avoc3461-01-005-01 - 15 Avoc3461-02-005-01 - 18 Avoc3461-03-005-01 - 21 Avoc3461-04-005-01 - 24
Composite-05-dup - 69	X	Avoc3461-01-005-02 - 16 Avoc3461-02-005-02 - 19 Avoc3461-03-005-02 - 22 Avoc3461-04-005-02 - 25
Composite-06 - 70	X	Avoc3461-01-025-01 - 17 Avoc3461-02-025-01 - 20 Avoc3461-03-025-01 - 23 Avoc3461-04-025-01 - 26
Composite-07 - 71	X	Avoc3408-01-005-01 - 27 Avoc3408-02-005-01 - 29 Avoc3408-03-005-01 - 31 Avoc3408-04-005-01 - 33
Composite-08 - 72	X	Avoc3408-01-025-01 - 28 Avoc3408-02-025-01 - 30 Avoc3408-03-025-01 - 32 Avoc3408-04-025-01 - 34

17-03-2035

Page 2 of 2

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-09 -73	X	Utah3318-01-005-01 -35 Utah3318-02-005-01 -37 Utah3318-03-005-01 -39 Utah3318-04-005-01 -41
Composite-10 -74	X	Utah3318-01-025-01 -36 Utah3318-02-025-01 -38 Utah3318-03-025-01 -40 Utah3318-04-025-01 -42
Composite-11 -75	X	Utah3304-01-005-01 -43 Utah3304-02-005-01 -46 Utah3304-03-005-01 -49 Utah3304-04-005-01 -52
Composite-12 -76	X	Utah3304-01-005-02 -44 Utah3304-02-005-02 -47 Utah3304-03-005-02 -50 Utah3304-04-005-02 -53
Composite-13 -77	X	Utah3304-01-025-01 -45 Utah3304-02-025-01 -48 Utah3304-03-025-01 -51 Utah3304-04-025-01 -54
Composite-14 -78	X	Blai0760-01-005-01 -55 Blai0760-02-005-01 -57 Blai0760-03-005-01 -59 Blai0760-04-005-01 -61
Composite-15 -79	X	Blai0760-01-025-01 -56 Blai0760-02-025-01 -58 Blai0760-03-025-01 -60 Blai0760-04-025-01 -62

Revised COC received from  
Matt Raithel (H&A) on 03/30/17  
at 11:25am.  
- Virendra (ECI)





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY

WO #7 LAB USE ONLY

## 17-03-2035

DATE: 3/27/17

PAGE: 1 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
Quote: 963193  
SAMPLER(S): (PRINT)  
Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any FAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
EDD

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	Lind0687-01-025-01		3/27/17	0821	SO	1
2	Lind0687-01-025-01			0829		
	<del>Lind0687-01-025-01</del>			0835		
3	Lind0687-02-025-01			0841		
	<del>Lind0687-02-025-01</del>			0850		
4	Lind0687-03-025-01			0856		
5	Lind0687-04-025-01			0903		
6	Lind0687-04-025-01			0907		
7	Avoc3472-01-025-01			0920		
8	Avoc3472-01-025-01			0927		

REQUESTED ANALYSES						
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	
X		X	X	X	X	Hold
		X	X	X	X	
		X	X	X	X	
		X	X	X	X	
		X	X	X	X	
		X	X	X	X	

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) ECB Date: 3/28/17 Time: 1100

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) ECB Date: 3/28/17 Time: 1300

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2035

DATE: 3/27/17

PAGE: 2 OF 7

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
9	AVOC3472-02-005-01		3/27/17	0951	SO	1
10	AVOC3472-02-025-01			0955		
11	AVOC3472-03-005-01			1003		
12	AVOC3472-03-025-01			1007		
13	AVOC3472-04-005-01			1009		
14	AVOC3472-04-025-01			1011		
15	AVOC3461-01-005-01			1035		
16	AVOC3461-01-005-02			1035		
17	AVOC3461-01-025-01			1040		
18	AVOC3461-02-005-01			1050		

Requested	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		

REQUESTED ANALYSES

Received by: (Signature/Affiliation) *Aly Ece* Date: 3/28/17 Time: 1100  
 Received by: (Signature/Affiliation) *Prakash* Date: 3/28/17 Time: 1300  
 Received by: (Signature/Affiliation) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) *Tanya Nelson*  
 Relinquished by: (Signature) \_\_\_\_\_  
 Relinquished by: (Signature) \_\_\_\_\_



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17  
PAGE: 3 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD (Sample Archiving requirements (if required to be held greater than 30 days):  
 Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT:  
Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
Tanya Nelson

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES										
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)					
19	A1003461-02-005-02		3/27/17	1050	SO	1	X										
20	A1003461-02-025-01			1056						X							
21	A1003461-03-005-01			1102					X								
22	A1003461-03-005-02			1102					X								
23	A1003461-03-025-01			1108					X								
24	A1003461-04-005-01			1116					X								
25	A1003461-04-005-02			1116					X								
26	A1003461-04-025-01			1124					X								
27	A1003408-01-005-01			1143					X								
28	A1003408-01-025-01			1152					X								

Received by: (Signature/Affiliation) AMY ECF Date: 3/28/17 Time: 1100  
 Received by: (Signature/Affiliation) [Signature] Date: 3/28/17 Time: 1300  
 Received by: (Signature/Affiliation) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17

PAGE: 4 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
CITY: Costa Mesa		GLOBAL ID:				
TEL: 714-371-1802	TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		LOG CODE:				
<input type="checkbox"/> Geotracker EDF		<input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):				
Special Instructions: Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
29	AVOC3408-02-005-01		3/27/17	1156	SO	1
30	AVOC3408-02-025-01			1204		
31	AVOC3408-03-005-01			1212		
32	AVOC3408-03-025-01			1216		
33	AVOC3408-04-005-01			1220		
34	AVOC3408-04-025-01			1224		
35	UTAH2318-01-005-01			1233		
36	UTAH2318-01-025-01			1238		
37	UTAH2318-02-005-01			1246		
38	UTAH2318-02-025-01			1250		

UNPRESERVED	PRESERVED	FIELD FILTERED	LEAD - 6010B (SOIL)	ARSENIC - 6010B (SOIL)	ORGANOCHLORINE PESTICIDES 8081A (SOIL)	OTHER	DATE	TIME
X		X	X		Hold		3/28/17	1100
		X	X				3/28/17	1300
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *Aly ECI*

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]*

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]*



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/27/17  
PAGE: 5 OF 7

17-03-2035

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-Eurofins Calscience				
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: <b>963193</b>				
CITY: Costa Mesa	STATE: CA	ZIP: 92626	SAMPLER(S): (PRINT) Tanya Nelson			
TEL: 714-371-1802	E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>					
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):						
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
GLOBAL ID:		LOG CODE:				
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
39	Utah3318-03-005-01		3/27/17	1255	Soil	1
40	Utah3318-03-025-01			1259		
41	Utah3318-04-005-01			1306		
42	Utah3318-04-025-01			1310		
43	Utah3304-01-005-01			1409		
44	Utah3304-01-005-02			1409		
45	Utah3304-01-025-01			1413		
46	Utah3304-02-005-01			1420		
47	Utah3304-02-005-02			1420		
48	Utah3304-02-005-01			1424		
Relinquished by: (Signature) <i>[Signature]</i>						
Relinquished by: (Signature) <i>[Signature]</i>						
Relinquished by: (Signature) <i>[Signature]</i>						

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)															
X		X	X	X	X															

Date: 3/28/17 Time: 1100

Date: 3/28/17 Time: 1300

Date: \_\_\_\_\_ Time: \_\_\_\_\_





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2035

DATE: 3/27/17

PAGE: 7 OF 7

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:

2015-18-Eurofins Calscience  
Quote: 963193

PROJECT CONTACT:

Colleen Canfield

SAMPLER(S): (PRINT)  
Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155  
CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
59	80a10760-03-005-01		3/27/17	1528	SO	1
60	80a10760-03-025-01			1534		1
61	80a10760-04-005-01			1540		1
62	80a10760-04-025-01			1544		1
63	EB-032717		3/27/17	1605	H <sub>2</sub> O	2

### REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Head
X			X			
			X			
			X			
			X			

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *Aly ECI* Date: 3/28/17 Time: 1100

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: 3/28/17 Time: 1300

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:



Return to Contents

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: H & A

DATE: 03 / 28 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.8°C (w/ CF): 3.8°C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 678

CUSTODY SEAL:

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 678

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....  Yes  No  N/A

COC document(s) received complete .....  Yes  No  N/A

Sampling date  Sampling time  Matrix  Number of containers

No analysis requested  Not relinquished  No relinquished date  No relinquished time

Sampler's name indicated on COC .....  Yes  No  N/A

Sample container label(s) consistent with COC .....  Yes  No  N/A

Sample container(s) intact and in good condition .....  Yes  No  N/A

Proper containers for analyses requested .....  Yes  No  N/A

Sufficient volume/mass for analyses requested .....  Yes  No  N/A

Samples received within holding time .....  Yes  No  N/A

Aqueous samples for certain analyses received within 15-minute holding time

pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....  Yes  No  N/A

Proper preservation chemical(s) noted on COC and/or sample container .....  Yes  No  N/A

Unpreserved aqueous sample(s) received for certain analyses

Volatile Organics  Total Metals  Dissolved Metals

Container(s) for certain analysis free of headspace .....  Yes  No  N/A

Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500)

Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation .....  Yes  No  N/A

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB

125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AGJ  500AGJ<sub>s</sub>

500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

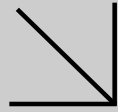
Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 802





**WORK ORDER NUMBER: 17-03-2146**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Haley & Aldrich, Inc.

**Client Project Name:** UC Riverside North District / 128685-006  
2.0

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453

Approved for release on 04/11/2017 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-03-2146

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/29/17. They were assigned to Work Order 17-03-2146.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
EB-032817	17-03-2146-1	03/28/17 16:20	2	Aqueous
Kent3433-01-005-01	17-03-2146-2	03/28/17 08:01	1	Solid
Kent3433-01-025-01	17-03-2146-3	03/28/17 08:05	1	Solid
Kent3433-02-005-01	17-03-2146-4	03/28/17 08:12	1	Solid
Kent3433-02-025-01	17-03-2146-5	03/28/17 08:16	1	Solid
Kent3433-03-005-01	17-03-2146-6	03/28/17 08:20	1	Solid
Kent3433-03-025-01	17-03-2146-7	03/28/17 08:23	1	Solid
Kent3433-04-005-01	17-03-2146-8	03/28/17 08:31	1	Solid
Kent3433-04-025-01	17-03-2146-9	03/28/17 08:37	1	Solid
Cher0871-01-005-01	17-03-2146-10	03/28/17 08:54	1	Solid
Cher0871-01-005-02	17-03-2146-11	03/28/17 08:54	1	Solid
Cher0871-01-025-01	17-03-2146-12	03/28/17 08:59	1	Solid
Cher0871-02-005-01	17-03-2146-13	03/28/17 09:07	1	Solid
Cher0871-02-005-02	17-03-2146-14	03/28/17 09:07	1	Solid
Cher0871-02-025-01	17-03-2146-15	03/28/17 09:13	1	Solid
Cher0871-03-005-01	17-03-2146-16	03/28/17 09:19	1	Solid
Cher0871-03-005-02	17-03-2146-17	03/28/17 09:19	1	Solid
Cher0871-03-025-01	17-03-2146-18	03/28/17 09:24	1	Solid
Cher0871-04-005-01	17-03-2146-19	03/28/17 09:38	1	Solid
Cher0871-04-005-02	17-03-2146-20	03/28/17 09:38	1	Solid
Cher0871-04-025-01	17-03-2146-21	03/28/17 09:42	1	Solid
Cher0803-01-005-01	17-03-2146-22	03/28/17 10:12	1	Solid
Cher0803-01-025-01	17-03-2146-23	03/28/17 10:16	1	Solid
Cher0803-02-005-01	17-03-2146-24	03/28/17 10:25	1	Solid
Cher0803-02-025-01	17-03-2146-25	03/28/17 10:30	1	Solid
Cher0803-03-005-01	17-03-2146-26	03/28/17 10:37	1	Solid
Cher0803-03-025-01	17-03-2146-27	03/28/17 10:41	1	Solid
Cher0803-04-005-01	17-03-2146-28	03/28/17 10:50	1	Solid
Cher0803-04-025-01	17-03-2146-29	03/28/17 10:54	1	Solid
Flor3415-01-005-01	17-03-2146-30	03/28/17 11:14	1	Solid
Flor3415-01-025-01	17-03-2146-31	03/28/17 11:19	1	Solid
Flor3415-02-005-01	17-03-2146-32	03/28/17 11:22	1	Solid
Flor3415-02-025-01	17-03-2146-33	03/28/17 11:26	1	Solid
Flor3415-03-005-01	17-03-2146-34	03/28/17 11:30	1	Solid
Flor3415-03-025-01	17-03-2146-35	03/28/17 11:34	1	Solid
Flor3415-04-005-01	17-03-2146-36	03/28/17 11:40	1	Solid
Flor3415-04-025-01	17-03-2146-37	03/28/17 11:46	1	Solid
Flor3475-01-005-01	17-03-2146-38	03/28/17 11:56	1	Solid
Flor3475-01-025-01	17-03-2146-39	03/28/17 12:04	1	Solid
Flor3475-02-005-01	17-03-2146-40	03/28/17 12:10	1	Solid
Flor3475-02-025-01	17-03-2146-41	03/28/17 12:14	1	Solid
Flor3475-03-005-01	17-03-2146-42	03/28/17 12:22	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Flor3475-03-025-01	17-03-2146-43	03/28/17 12:26	1	Solid
Flor3475-04-005-01	17-03-2146-44	03/28/17 12:32	1	Solid
Flor3475-04-025-01	17-03-2146-45	03/28/17 12:36	1	Solid
Peac3397-01-005-01	17-03-2146-46	03/28/17 13:41	1	Solid
Peac3397-01-025-01	17-03-2146-47	03/28/17 13:46	1	Solid
Peac3397-02-005-01	17-03-2146-48	03/28/17 13:54	1	Solid
Peac3397-02-025-01	17-03-2146-49	03/28/17 13:59	1	Solid
Peac3397-03-005-01	17-03-2146-50	03/28/17 14:04	1	Solid
Peac3397-03-025-01	17-03-2146-51	03/28/17 14:07	1	Solid
Peac3397-04-005-01	17-03-2146-52	03/28/17 14:10	1	Solid
Peac3397-04-025-01	17-03-2146-53	03/28/17 14:13	1	Solid
Peac3392-01-005-01	17-03-2146-54	03/28/17 14:25	1	Solid
Peac3392-01-025-01	17-03-2146-55	03/28/17 14:28	1	Solid
Peac3392-02-005-01	17-03-2146-56	03/28/17 14:34	1	Solid
Peac3392-02-025-01	17-03-2146-57	03/28/17 14:36	1	Solid
Peac3392-03-005-01	17-03-2146-58	03/28/17 14:40	1	Solid
Peac3392-03-025-01	17-03-2146-59	03/28/17 14:43	1	Solid
Peac3392-04-005-01	17-03-2146-60	03/28/17 14:47	1	Solid
Peac3392-04-025-01	17-03-2146-61	03/28/17 14:51	1	Solid
Peac3371-01-005-01	17-03-2146-62	03/28/17 15:07	1	Solid
Peac3371-01-025-01	17-03-2146-63	03/28/17 15:11	1	Solid
Peac3371-02-005-01	17-03-2146-64	03/28/17 15:16	1	Solid
Peac3371-02-025-01	17-03-2146-65	03/28/17 15:20	1	Solid
Peac3371-03-005-01	17-03-2146-66	03/28/17 15:24	1	Solid
Peac3371-03-025-01	17-03-2146-67	03/28/17 15:27	1	Solid
Peac3371-04-005-01	17-03-2146-68	03/28/17 15:33	1	Solid
Peac3371-04-025-01	17-03-2146-69	03/28/17 15:36	1	Solid
Lind0687-02-005-01	17-03-2146-70	03/28/17 16:06	1	Solid
Lind0687-03-005-01	17-03-2146-71	03/28/17 16:15	1	Solid
Avoc3436-01-005-01	17-03-2146-72	03/29/17 08:00	1	Solid
Avoc3436-01-005-02	17-03-2146-73	03/29/17 08:00	1	Solid
Avoc3436-01-025-01	17-03-2146-74	03/29/17 08:07	1	Solid
Avoc3436-02-005-01	17-03-2146-75	03/29/17 08:13	1	Solid
Avoc3436-02-005-02	17-03-2146-76	03/29/17 08:13	1	Solid
Avoc3436-02-025-01	17-03-2146-77	03/29/17 08:17	1	Solid
Avoc3436-03-005-01	17-03-2146-78	03/29/17 08:21	1	Solid
Avoc3436-03-005-02	17-03-2146-79	03/29/17 08:21	1	Solid
Avoc3436-03-025-01	17-03-2146-80	03/29/17 08:26	1	Solid
Avoc3436-04-005-01	17-03-2146-81	03/29/17 08:31	1	Solid
Avoc3436-04-005-02	17-03-2146-82	03/29/17 08:31	1	Solid
Avoc3436-04-025-01	17-03-2146-83	03/29/17 08:36	1	Solid
Utah3323-01-005-01	17-03-2146-84	03/29/17 08:50	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order:	17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name:	UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:	
	Date/Time Received:	03/29/17 12:20
	Number of Containers:	135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Utah3323-01-025-01	17-03-2146-85	03/29/17 08:56	1	Solid
Utah3323-02-005-01	17-03-2146-86	03/29/17 09:02	1	Solid
Utah3323-02-025-01	17-03-2146-87	03/29/17 09:06	1	Solid
Utah3323-03-005-01	17-03-2146-88	03/29/17 09:11	1	Solid
Utah3323-03-025-01	17-03-2146-89	03/29/17 09:14	1	Solid
Utah3323-04-005-01	17-03-2146-90	03/29/17 09:22	1	Solid
Utah3323-04-025-01	17-03-2146-91	03/29/17 09:27	1	Solid
Utah3315-01-005-01	17-03-2146-92	03/29/17 09:40	1	Solid
Utah3315-01-025-01	17-03-2146-93	03/29/17 09:43	1	Solid
Utah3315-02-005-01	17-03-2146-94	03/29/17 09:50	1	Solid
Utah3315-02-025-01	17-03-2146-95	03/29/17 09:54	1	Solid
Utah3315-03-005-01	17-03-2146-96	03/29/17 10:02	1	Solid
Utah3315-03-025-01	17-03-2146-97	03/29/17 10:06	1	Solid
Utah3315-04-005-01	17-03-2146-98	03/29/17 10:11	1	Solid
Utah3315-04-025-01	17-03-2146-99	03/29/17 10:15	1	Solid
Utah3348-01-005-01	17-03-2146-100	03/29/17 10:35	1	Solid
Utah3348-01-025-01	17-03-2146-101	03/29/17 10:38	1	Solid
Utah3348-02-005-01	17-03-2146-102	03/29/17 10:43	1	Solid
Utah3348-02-025-01	17-03-2146-103	03/29/17 10:47	1	Solid
Utah3348-03-005-01	17-03-2146-104	03/29/17 10:51	1	Solid
Utah3348-03-025-01	17-03-2146-105	03/29/17 10:55	1	Solid
Utah3348-04-005-01	17-03-2146-106	03/29/17 11:02	1	Solid
Utah3348-04-025-01	17-03-2146-107	03/29/17 11:06	1	Solid
Composite-16	17-03-2146-108	03/28/17 00:00	1	Solid
Composite-17	17-03-2146-109	03/28/17 00:00	1	Solid
Composite-18	17-03-2146-110	03/28/17 00:00	1	Solid
Composite-18-Dup	17-03-2146-111	03/28/17 00:00	1	Solid
Composite-19	17-03-2146-112	03/28/17 00:00	1	Solid
Composite-20	17-03-2146-113	03/28/17 00:00	1	Solid
Composite-21	17-03-2146-114	03/28/17 00:00	1	Solid
Composite-22	17-03-2146-115	03/28/17 00:00	1	Solid
Composite-23	17-03-2146-116	03/28/17 00:00	1	Solid
Composite-24	17-03-2146-117	03/28/17 00:00	1	Solid
Composite-25	17-03-2146-118	03/28/17 00:00	1	Solid
Composite-26	17-03-2146-119	03/28/17 00:00	1	Solid
Composite-27	17-03-2146-120	03/28/17 00:00	1	Solid
Composite-28	17-03-2146-121	03/28/17 00:00	1	Solid
Composite-29	17-03-2146-122	03/28/17 00:00	1	Solid
Composite-30	17-03-2146-123	03/28/17 00:00	1	Solid
Composite-31	17-03-2146-124	03/28/17 00:00	1	Solid
Composite-32	17-03-2146-125	03/28/17 00:00	1	Solid
Composite-33	17-03-2146-126	03/29/17 00:00	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Composite-33-Dup	17-03-2146-127	03/29/17 00:00	1	Solid
Composite-34	17-03-2146-128	03/29/17 00:00	1	Solid
Composite-35	17-03-2146-129	03/29/17 00:00	1	Solid
Composite-36	17-03-2146-130	03/29/17 00:00	1	Solid
Composite-37	17-03-2146-131	03/29/17 00:00	1	Solid
Composite-38	17-03-2146-132	03/29/17 00:00	1	Solid
Composite-39	17-03-2146-133	03/29/17 00:00	1	Solid
Composite-40	17-03-2146-134	03/29/17 00:00	1	Solid

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Kent3433-01-005-01 (17-03-2146-2)						
Arsenic	2.91		0.718	mg/kg	EPA 6010B	EPA 3050B
Lead	43.5		0.478	mg/kg	EPA 6010B	EPA 3050B
Kent3433-02-005-01 (17-03-2146-4)						
Lead	40.3		0.488	mg/kg	EPA 6010B	EPA 3050B
Kent3433-03-005-01 (17-03-2146-6)						
Lead	295		0.513	mg/kg	EPA 6010B	EPA 3050B
Kent3433-04-005-01 (17-03-2146-8)						
Lead	121		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0871-01-005-01 (17-03-2146-10)						
Arsenic	2.99		0.721	mg/kg	EPA 6010B	EPA 3050B
Lead	83.5		0.481	mg/kg	EPA 6010B	EPA 3050B
Cher0871-01-005-02 (17-03-2146-11)						
Lead	73.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0871-02-005-01 (17-03-2146-13)						
Lead	46.1		0.478	mg/kg	EPA 6010B	EPA 3050B
Cher0871-02-005-02 (17-03-2146-14)						
Lead	45.0		0.508	mg/kg	EPA 6010B	EPA 3050B
Cher0871-03-005-01 (17-03-2146-16)						
Lead	177		0.493	mg/kg	EPA 6010B	EPA 3050B
Cher0871-03-005-02 (17-03-2146-17)						
Lead	51.8		0.510	mg/kg	EPA 6010B	EPA 3050B
Cher0871-04-005-01 (17-03-2146-19)						
Lead	90.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0871-04-005-02 (17-03-2146-20)						
Lead	106		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0803-01-005-01 (17-03-2146-22)						
Arsenic	6.19		0.750	mg/kg	EPA 6010B	EPA 3050B
Lead	218		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0803-02-005-01 (17-03-2146-24)						
Lead	163		0.493	mg/kg	EPA 6010B	EPA 3050B
Cher0803-03-005-01 (17-03-2146-26)						
Lead	80.5		0.500	mg/kg	EPA 6010B	EPA 3050B
Cher0803-04-005-01 (17-03-2146-28)						
Lead	84.0		0.483	mg/kg	EPA 6010B	EPA 3050B
Flor3415-01-005-01 (17-03-2146-30)						
Lead	53.9		0.478	mg/kg	EPA 6010B	EPA 3050B
Flor3415-02-005-01 (17-03-2146-32)						
Lead	58.5		0.515	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown



## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Flor3415-03-005-01 (17-03-2146-34) Lead	90.7		0.488	mg/kg	EPA 6010B	EPA 3050B
Flor3415-04-005-01 (17-03-2146-36) Lead	63.4		0.508	mg/kg	EPA 6010B	EPA 3050B
Flor3475-01-005-01 (17-03-2146-38) Arsenic	4.75		0.739	mg/kg	EPA 6010B	EPA 3050B
Flor3475-01-005-01 (17-03-2146-38) Lead	109		0.493	mg/kg	EPA 6010B	EPA 3050B
Flor3475-02-005-01 (17-03-2146-40) Lead	88.5		0.521	mg/kg	EPA 6010B	EPA 3050B
Flor3475-03-005-01 (17-03-2146-42) Lead	69.1		0.483	mg/kg	EPA 6010B	EPA 3050B
Flor3475-04-005-01 (17-03-2146-44) Lead	89.0		0.488	mg/kg	EPA 6010B	EPA 3050B
Peac3397-01-005-01 (17-03-2146-46) Lead	136		0.495	mg/kg	EPA 6010B	EPA 3050B
Peac3397-02-005-01 (17-03-2146-48) Lead	169		0.505	mg/kg	EPA 6010B	EPA 3050B
Peac3397-03-005-01 (17-03-2146-50) Lead	194		0.505	mg/kg	EPA 6010B	EPA 3050B
Peac3397-04-005-01 (17-03-2146-52) Lead	302		0.500	mg/kg	EPA 6010B	EPA 3050B
Peac3392-01-005-01 (17-03-2146-54) Arsenic	2.77		0.758	mg/kg	EPA 6010B	EPA 3050B
Peac3392-01-005-01 (17-03-2146-54) Lead	56.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Peac3392-02-005-01 (17-03-2146-56) Lead	73.7		0.485	mg/kg	EPA 6010B	EPA 3050B
Peac3392-03-005-01 (17-03-2146-58) Lead	89.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Peac3392-04-005-01 (17-03-2146-60) Lead	137		0.485	mg/kg	EPA 6010B	EPA 3050B
Peac3371-01-005-01 (17-03-2146-62) Arsenic	7.65		0.750	mg/kg	EPA 6010B	EPA 3050B
Peac3371-01-005-01 (17-03-2146-62) Lead	141		0.500	mg/kg	EPA 6010B	EPA 3050B
Peac3371-02-005-01 (17-03-2146-64) Lead	70.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Peac3371-03-005-01 (17-03-2146-66) Lead	72.6		0.521	mg/kg	EPA 6010B	EPA 3050B
Peac3371-04-005-01 (17-03-2146-68) Lead	48.9		0.505	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown



## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
Project Name: UC Riverside North District / 128685-006 2.0  
Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Lind0687-02-005-01 (17-03-2146-70)						
Lead	28.6		0.485	mg/kg	EPA 6010B	EPA 3050B
Lind0687-03-005-01 (17-03-2146-71)						
Lead	45.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Avoc3436-01-005-01 (17-03-2146-72)						
Arsenic	7.44		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	95.0		0.493	mg/kg	EPA 6010B	EPA 3050B
Avoc3436-02-005-01 (17-03-2146-75)						
Lead	68.1		0.490	mg/kg	EPA 6010B	EPA 3050B
Avoc3436-03-005-01 (17-03-2146-78)						
Lead	36.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Avoc3436-04-005-01 (17-03-2146-81)						
Lead	31.9		0.508	mg/kg	EPA 6010B	EPA 3050B
Utah3323-01-005-01 (17-03-2146-84)						
Arsenic	4.08		0.777	mg/kg	EPA 6010B	EPA 3050B
Lead	169		0.518	mg/kg	EPA 6010B	EPA 3050B
Utah3323-02-005-01 (17-03-2146-86)						
Lead	240		0.503	mg/kg	EPA 6010B	EPA 3050B
Utah3323-03-005-01 (17-03-2146-88)						
Lead	31.4		0.481	mg/kg	EPA 6010B	EPA 3050B
Utah3323-04-005-01 (17-03-2146-90)						
Lead	54.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3315-01-005-01 (17-03-2146-92)						
Lead	124		0.500	mg/kg	EPA 6010B	EPA 3050B
Utah3315-02-005-01 (17-03-2146-94)						
Lead	40.4		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3315-03-005-01 (17-03-2146-96)						
Lead	27.6		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3315-04-005-01 (17-03-2146-98)						
Lead	103		0.508	mg/kg	EPA 6010B	EPA 3050B
Utah3348-01-005-01 (17-03-2146-100)						
Arsenic	2.20		0.758	mg/kg	EPA 6010B	EPA 3050B
Lead	37.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Utah3348-02-005-01 (17-03-2146-102)						
Lead	95.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Utah3348-03-005-01 (17-03-2146-104)						
Lead	25.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Utah3348-04-005-01 (17-03-2146-106)						
Lead	143		0.495	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Composite-16 (17-03-2146-108)						
Chlordane	440		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	45		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	25		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	22		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.7	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-17 (17-03-2146-109)						
Chlordane	34	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	3.0	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-18 (17-03-2146-110)						
Chlordane	55		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	55		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	34		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.9	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-18-Dup (17-03-2146-111)						
Chlordane	63		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.5	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	55		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	45		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	24		10	ug/kg	EPA 8081A	EPA 3545
Composite-20 (17-03-2146-113)						
Chlordane	780		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	37		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	13		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.8	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	11		10	ug/kg	EPA 8081A	EPA 3545
Composite-21 (17-03-2146-114)						
Chlordane	64		50	ug/kg	EPA 8081A	EPA 3545
Composite-22 (17-03-2146-115)						
Chlordane	99		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	2.6	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.0		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	18		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	27		10	ug/kg	EPA 8081A	EPA 3545
Composite-23 (17-03-2146-116)						
4,4'-DDE	4.6	J	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.5		5.0	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/29/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-24 (17-03-2146-117)						
Chlordane	360		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	180		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	140		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	11	J	11*	ug/kg	EPA 8081A	EPA 3545
Composite-25 (17-03-2146-118)						
4,4'-DDE	4.3	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-26 (17-03-2146-119)						
Chlordane	730		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	28		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	57		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	71		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	33		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.1	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-27 (17-03-2146-120)						
Chlordane	64		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.6	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	4.7	J	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.3	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-28 (17-03-2146-121)						
Chlordane	850		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	7.3		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.0	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	14		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.0	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-29 (17-03-2146-122)						
Chlordane	210		50	ug/kg	EPA 8081A	EPA 3545
Composite-30 (17-03-2146-123)						
Chlordane	430		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	8.7		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	33		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.3	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.6	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-31 (17-03-2146-124)						
Chlordane	57		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.6	J	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.6	J	2.2*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/29/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-32 (17-03-2146-125)						
Chlordane	1300		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	16		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	33		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	13		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	10		10	ug/kg	EPA 8081A	EPA 3545
Composite-33 (17-03-2146-126)						
Chlordane	330		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	3.1	J	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	20		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	31		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.7	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-33-Dup (17-03-2146-127)						
Chlordane	580		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	9.2		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	37		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	29		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	44		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.5	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-34 (17-03-2146-128)						
Chlordane	58		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.4	J	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.2		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.2		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-35 (17-03-2146-129)						
Chlordane	910		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	74		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	380		100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	250		100	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.3	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	21		10	ug/kg	EPA 8081A	EPA 3545
Composite-36 (17-03-2146-130)						
Chlordane	100		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	10		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	34		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	11		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.0	J	3.7*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

<b>Client:</b> Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	<b>Work Order:</b> 17-03-2146 <b>Project Name:</b> UC Riverside North District / 128685-006 2.0 <b>Received:</b> 03/29/17
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Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-37 (17-03-2146-131)						
Chlordane	6700		1000	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	420		100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	190		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	65		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	26		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	120		50	ug/kg	EPA 8081A	EPA 3545
Composite-38 (17-03-2146-132)						
Chlordane	470		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	30		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.1		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.5	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-39 (17-03-2146-133)						
Chlordane	7700		1000	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	320		100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	7.6		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	83		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	93		50	ug/kg	EPA 8081A	EPA 3545
Composite-40 (17-03-2146-134)						
Chlordane	15000		1000	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	410		100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	21		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	12		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	11		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	64		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	44	J	18*	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-01-005-01	17-03-2146-2-A	03/28/17 08:01	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.91		0.718		0.957	
Lead		43.5		0.478		0.957	
Kent3433-02-005-01	17-03-2146-4-A	03/28/17 08:12	Solid	ICP 7300	04/01/17	04/03/17 10:58	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		40.3		0.488		0.976	
Kent3433-03-005-01	17-03-2146-6-A	03/28/17 08:20	Solid	ICP 7300	04/01/17	04/03/17 11:01	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		295		0.513		1.03	
Kent3433-04-005-01	17-03-2146-8-A	03/28/17 08:31	Solid	ICP 7300	04/01/17	04/03/17 11:02	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		121		0.500		1.00	
Cher0871-01-005-01	17-03-2146-10-A	03/28/17 08:54	Solid	ICP 7300	04/01/17	04/03/17 11:03	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.99		0.721		0.962	
Lead		83.5		0.481		0.962	
Cher0871-01-005-02	17-03-2146-11-A	03/28/17 08:54	Solid	ICP 7300	04/01/17	04/03/17 11:04	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		73.7		0.500		1.00	
Cher0871-02-005-01	17-03-2146-13-A	03/28/17 09:07	Solid	ICP 7300	04/01/17	04/03/17 11:04	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		46.1		0.478		0.957	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-02-005-02</b>	<b>17-03-2146-14-A</b>	<b>03/28/17 09:07</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:05</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.0		0.508		1.02	
<b>Cher0871-03-005-01</b>	<b>17-03-2146-16-A</b>	<b>03/28/17 09:19</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:06</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		177		0.493		0.985	
<b>Cher0871-03-005-02</b>	<b>17-03-2146-17-A</b>	<b>03/28/17 09:19</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:07</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		51.8		0.510		1.02	
<b>Cher0871-04-005-01</b>	<b>17-03-2146-19-A</b>	<b>03/28/17 09:38</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:08</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		90.6		0.500		1.00	
<b>Cher0871-04-005-02</b>	<b>17-03-2146-20-A</b>	<b>03/28/17 09:38</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:09</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		106		0.500		1.00	
<b>Cher0803-01-005-01</b>	<b>17-03-2146-22-A</b>	<b>03/28/17 10:12</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:11</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		6.19		0.750		1.00	
Lead		218		0.500		1.00	
<b>Cher0803-02-005-01</b>	<b>17-03-2146-24-A</b>	<b>03/28/17 10:25</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:12</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		163		0.493		0.985	
<b>Cher0803-03-005-01</b>	<b>17-03-2146-26-A</b>	<b>03/28/17 10:37</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:13</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		80.5		0.500		1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-04-005-01</b>	<b>17-03-2146-28-A</b>	<b>03/28/17 10:50</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:14</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		84.0		0.483		0.966	
<b>Flor3415-01-005-01</b>	<b>17-03-2146-30-A</b>	<b>03/28/17 11:14</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:15</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		53.9		0.478		0.957	
<b>Flor3415-02-005-01</b>	<b>17-03-2146-32-A</b>	<b>03/28/17 11:22</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:15</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		58.5		0.515		1.03	
<b>Flor3415-03-005-01</b>	<b>17-03-2146-34-A</b>	<b>03/28/17 11:30</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:16</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		90.7		0.488		0.976	
<b>Flor3415-04-005-01</b>	<b>17-03-2146-36-A</b>	<b>03/28/17 11:40</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:17</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		63.4		0.508		1.02	
<b>Flor3475-01-005-01</b>	<b>17-03-2146-38-A</b>	<b>03/28/17 11:56</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:18</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		4.75		0.739		0.985	
Lead		109		0.493		0.985	
<b>Flor3475-02-005-01</b>	<b>17-03-2146-40-A</b>	<b>03/28/17 12:10</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:19</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		88.5		0.521		1.04	
<b>Flor3475-03-005-01</b>	<b>17-03-2146-42-A</b>	<b>03/28/17 12:22</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:22</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		69.1		0.483		0.966	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-04-005-01	17-03-2146-44-A	03/28/17 12:32	Solid	ICP 7300	04/01/17	04/03/17 11:23	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		89.0		0.488		0.976	
Peac3397-01-005-01	17-03-2146-46-A	03/28/17 13:41	Solid	ICP 7300	04/01/17	04/03/17 11:24	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		136		0.495		0.990	
Peac3397-02-005-01	17-03-2146-48-A	03/28/17 13:54	Solid	ICP 7300	04/01/17	04/03/17 11:25	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		169		0.505		1.01	
Peac3397-03-005-01	17-03-2146-50-A	03/28/17 14:04	Solid	ICP 7300	04/01/17	04/03/17 11:25	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		194		0.505		1.01	
Peac3397-04-005-01	17-03-2146-52-A	03/28/17 14:10	Solid	ICP 7300	04/01/17	04/03/17 11:26	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		302		0.500		1.00	
Peac3392-01-005-01	17-03-2146-54-A	03/28/17 14:25	Solid	ICP 7300	04/01/17	04/03/17 11:27	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.77		0.758		1.01	
Lead		56.8		0.505		1.01	
Peac3392-02-005-01	17-03-2146-56-A	03/28/17 14:34	Solid	ICP 7300	04/01/17	04/03/17 11:28	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		73.7		0.485		0.971	
Peac3392-03-005-01	17-03-2146-58-A	03/28/17 14:40	Solid	ICP 7300	04/01/17	04/03/17 11:29	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		89.1		0.505		1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-04-005-01	17-03-2146-60-A	03/28/17 14:47	Solid	ICP 7300	04/01/17	04/03/17 11:30	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		137		0.485		0.971	
Peac3371-01-005-01	17-03-2146-62-A	03/28/17 15:07	Solid	ICP 7300	04/01/17	04/03/17 11:33	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		7.65		0.750		1.00	
Lead		141		0.500		1.00	
Peac3371-02-005-01	17-03-2146-64-A	03/28/17 15:16	Solid	ICP 7300	04/01/17	04/03/17 11:34	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		70.3		0.500		1.00	
Peac3371-03-005-01	17-03-2146-66-A	03/28/17 15:24	Solid	ICP 7300	04/01/17	04/03/17 11:35	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		72.6		0.521		1.04	
Peac3371-04-005-01	17-03-2146-68-A	03/28/17 15:33	Solid	ICP 7300	04/01/17	04/03/17 11:36	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		48.9		0.505		1.01	
Lind0687-02-005-01	17-03-2146-70-A	03/28/17 16:06	Solid	ICP 7300	04/01/17	04/03/17 11:36	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		28.6		0.485		0.971	
Lind0687-03-005-01	17-03-2146-71-A	03/28/17 16:15	Solid	ICP 7300	04/01/17	04/03/17 11:37	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.8		0.500		1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-01-005-01	17-03-2146-72-A	03/29/17 08:00	Solid	ICP 7300	04/01/17	04/03/17 11:38	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		7.44		0.739		0.985	
Lead		95.0		0.493		0.985	
Avoc3436-02-005-01	17-03-2146-75-A	03/29/17 08:13	Solid	ICP 7300	04/01/17	04/03/17 11:39	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		68.1		0.490		0.980	
Avoc3436-03-005-01	17-03-2146-78-A	03/29/17 08:21	Solid	ICP 7300	04/01/17	04/03/17 11:40	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		36.7		0.478		0.957	
Avoc3436-04-005-01	17-03-2146-81-A	03/29/17 08:31	Solid	ICP 7300	04/01/17	04/03/17 11:40	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.9		0.508		1.02	
Utah3323-01-005-01	17-03-2146-84-A	03/29/17 08:50	Solid	ICP 7300	04/01/17	04/03/17 11:44	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		4.08		0.777		1.04	
Lead		169		0.518		1.04	
Utah3323-02-005-01	17-03-2146-86-A	03/29/17 09:02	Solid	ICP 7300	04/01/17	04/03/17 11:45	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		240		0.503		1.01	
Utah3323-03-005-01	17-03-2146-88-A	03/29/17 09:11	Solid	ICP 7300	04/01/17	04/03/17 11:45	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.4		0.481		0.962	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-04-005-01	17-03-2146-90-A	03/29/17 09:22	Solid	ICP 7300	04/01/17	04/03/17 11:46	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		54.9		0.510		1.02	
Utah3315-01-005-01	17-03-2146-92-A	03/29/17 09:40	Solid	ICP 7300	04/01/17	04/03/17 11:47	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		124		0.500		1.00	
Utah3315-02-005-01	17-03-2146-94-A	03/29/17 09:50	Solid	ICP 7300	04/01/17	04/03/17 11:48	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		40.4		0.510		1.02	
Utah3315-03-005-01	17-03-2146-96-A	03/29/17 10:02	Solid	ICP 7300	04/01/17	04/03/17 11:49	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		27.6		0.510		1.02	
Utah3315-04-005-01	17-03-2146-98-A	03/29/17 10:11	Solid	ICP 7300	04/01/17	04/03/17 11:49	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		103		0.508		1.02	
Utah3348-01-005-01	17-03-2146-100-A	03/29/17 10:35	Solid	ICP 7300	04/01/17	04/03/17 11:50	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.20		0.758		1.01	
Lead		37.6		0.505		1.01	
Utah3348-02-005-01	17-03-2146-102-A	03/29/17 10:43	Solid	ICP 7300	04/01/17	04/03/17 11:51	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		95.0		0.495		0.990	
Utah3348-03-005-01	17-03-2146-104-A	03/29/17 10:51	Solid	ICP 7300	04/01/17	04/03/17 11:54	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.9		0.510		1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-005-01	17-03-2146-106-A	03/29/17 11:02	Solid	ICP 7300	04/01/17	04/03/17 11:55	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		143		0.495		0.990	
<b>Method Blank</b>	<b>097-01-002-24550</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:44</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.750		1.00	
Lead		ND		0.500		1.00	
<b>Method Blank</b>	<b>097-01-002-24551</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:46</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.718		0.957	
Lead		ND		0.478		0.957	
<b>Method Blank</b>	<b>097-01-002-24552</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:51</b>	<b>170401L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.785		1.05	
Lead		ND		0.524		1.05	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B  
 Units: mg/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032817	17-03-2146-1-A	03/28/17 16:20	Aqueous	ICP 7300	03/31/17	04/01/17 13:26	170331LA7

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-003-16392	N/A	Aqueous	ICP 7300	03/31/17	04/01/17 13:05	170331LA7

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-16</b>	<b>17-03-2146-108-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 04:47</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	440	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDT	25	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	22	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	7.7	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

Composite-16	17-03-2146-108-A	03/28/17 00:00	Solid	GC 41	04/03/17	04/07/17 04:47	170403L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	45	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-17</b>	<b>17-03-2146-109-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 05:02</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	34	50	26	1.00	J
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	3.0	5.0	2.2	1.00	J
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	2.2	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-18</b>	<b>17-03-2146-110-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 05:17</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	55	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDT	34	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	5.9	9.9	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

Composite-18	17-03-2146-110-A	03/28/17 00:00	Solid	GC 41	04/03/17	04/07/17 05:02	170403L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	55	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-18-Dup</b>	<b>17-03-2146-111-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 05:32</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	63	50	26	1.00	
4,4'-DDD	4.5	5.0	2.4	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	24	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-18-Dup</b>	<b>17-03-2146-111-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/07/17 05:17</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	55	25	11	5.00	
4,4'-DDT	45	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-19</b>	<b>17-03-2146-112-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 05:47</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	98	24-168			
2,4,5,6-Tetrachloro-m-Xylene	74	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-20</b>	<b>17-03-2146-113-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 06:02</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	780	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	37	5.0	2.2	1.00	
4,4'-DDT	13	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	2.8	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	11	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	113	24-168			
2,4,5,6-Tetrachloro-m-Xylene	75	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-21</b>	<b>17-03-2146-114-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 06:17</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	64	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	98	24-168			
2,4,5,6-Tetrachloro-m-Xylene	67	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-22</b>	<b>17-03-2146-115-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 06:32</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	99	50	26	1.00	
4,4'-DDD	2.6	5.0	2.4	1.00	J
4,4'-DDE	9.0	5.0	2.2	1.00	
4,4'-DDT	18	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	27	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	139	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-23</b>	<b>17-03-2146-116-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 06:47</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	4.6	5.0	2.2	1.00	J
4,4'-DDT	5.5	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-24</b>	<b>17-03-2146-117-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/07/17 05:47</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	25	11	5.00	
Alpha-BHC	ND	50	19	5.00	
Beta-BHC	ND	25	12	5.00	
Chlordane	360	250	130	5.00	
4,4'-DDD	ND	25	12	5.00	
4,4'-DDE	180	25	11	5.00	
4,4'-DDT	140	25	11	5.00	
Delta-BHC	ND	50	22	5.00	
Dieldrin	11	25	11	5.00	J
Endosulfan I	ND	25	9.9	5.00	
Endosulfan II	ND	25	12	5.00	
Endosulfan Sulfate	ND	25	13	5.00	
Endrin	ND	25	12	5.00	
Endrin Aldehyde	ND	25	15	5.00	
Endrin Ketone	ND	25	13	5.00	
Gamma-BHC	ND	25	11	5.00	
Heptachlor	ND	25	11	5.00	
Heptachlor Epoxide	ND	50	18	5.00	
Methoxychlor	ND	25	14	5.00	
Toxaphene	ND	500	220	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-25</b>	<b>17-03-2146-118-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 07:17</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	4.3	5.0	2.2	1.00	J
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	55	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-26</b>	<b>17-03-2146-119-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 07:32</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	730	50	26	1.00	
4,4'-DDD	28	5.0	2.4	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	33	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	8.1	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

Composite-26	17-03-2146-119-A	03/28/17 00:00	Solid	GC 41	04/03/17	04/07/17 06:17	170403L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	57	25	11	5.00	
4,4'-DDT	71	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-27</b>	<b>17-03-2146-120-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 07:47</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	64	50	26	1.00	
4,4'-DDD	3.6	5.0	2.4	1.00	J
4,4'-DDE	4.7	5.0	2.2	1.00	J
4,4'-DDT	2.2	5.0	2.2	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	4.3	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	107	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-28</b>	<b>17-03-2146-121-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 08:02</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	850	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	7.3	5.0	2.2	1.00	
4,4'-DDT	3.0	5.0	2.2	1.00	J
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	14	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	5.0	9.9	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-29</b>	<b>17-03-2146-122-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 08:17</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	210	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-30</b>	<b>17-03-2146-123-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 08:32</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	430	50	26	1.00	
4,4'-DDD	8.7	5.0	2.4	1.00	
4,4'-DDE	33	5.0	2.2	1.00	
4,4'-DDT	4.3	5.0	2.2	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	2.2	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	4.6	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	60	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-31</b>	<b>17-03-2146-124-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 09:48</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	57	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	2.6	5.0	2.2	1.00	J
4,4'-DDT	2.6	5.0	2.2	1.00	J
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-32</b>	<b>17-03-2146-125-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 10:03</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	16	5.0	2.2	1.00	
4,4'-DDT	33	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	13	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	10	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-32</b>	<b>17-03-2146-125-A</b>	<b>03/28/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/07/17 06:32</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	1300	250	130	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-33</b>	<b>17-03-2146-126-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 10:18</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	330	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	3.1	5.0	2.2	1.00	J
4,4'-DDT	20	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	31	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	4.7	9.9	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-33-Dup</b>	<b>17-03-2146-127-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 10:33</b>	<b>170403L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	580	50	26	1.00	
4,4'-DDD	9.2	5.0	2.4	1.00	
4,4'-DDE	37	5.0	2.2	1.00	
4,4'-DDT	29	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	8.5	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	109	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

<b>Composite-33-Dup</b>	<b>17-03-2146-127-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/07/17 06:47</b>	<b>170403L03</b>
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Dieldrin	44	25	11	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-34</b>	<b>17-03-2146-128-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 10:49</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	58	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	2.4	5.0	2.2	1.00	J
4,4'-DDT	5.2	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	5.2	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-35</b>	<b>17-03-2146-129-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 11:03</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	4.3	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	21	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-35</b>	<b>17-03-2146-129-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 04:57</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	910	250	130	5.00	
4,4'-DDD	74	25	12	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	82	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 23 of 32

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-35</b>	<b>17-03-2146-129-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 05:25</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	380	100	44	20.0	
4,4'-DDT	250	100	44	20.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	125	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-36</b>	<b>17-03-2146-130-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 11:17</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	100	50	26	1.00	
4,4'-DDD	10	5.0	2.4	1.00	
4,4'-DDE	34	5.0	2.2	1.00	
4,4'-DDT	11	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	5.0	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-37</b>	<b>17-03-2146-131-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 11:31</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	26	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	145	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-37</b>	<b>17-03-2146-131-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 05:39</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	190	25	11	5.00	
4,4'-DDT	65	25	11	5.00	
Heptachlor Epoxide	120	50	18	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	207	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	103	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 26 of 32

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-37</b>	<b>17-03-2146-131-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 06:08</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	6700	1000	520	20.0	
4,4'-DDD	420	100	47	20.0	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	173	24-168	1,2,7		
2,4,5,6-Tetrachloro-m-Xylene	112	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-38</b>	<b>17-03-2146-132-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 11:45</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	470	50	26	1.00	
4,4'-DDD	30	5.0	2.3	1.00	
4,4'-DDE	9.1	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	6.5	9.9	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-39</b>	<b>17-03-2146-133-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 12:00</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
4,4'-DDE	32	5.0	2.2	1.00	
4,4'-DDT	4.2	5.0	2.2	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	7.6	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	24-168	
2,4,5,6-Tetrachloro-m-Xylene	82	25-145	

Composite-39	17-03-2146-133-A	03/29/17 00:00	Solid	GC 44	04/03/17	04/07/17 06:36	170403L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Heptachlor	83	25	11	5.00	
Heptachlor Epoxide	93	50	18	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	24-168	
2,4,5,6-Tetrachloro-m-Xylene	90	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-39</b>	<b>17-03-2146-133-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 07:05</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	7700	1000	520	20.0	
4,4'-DDD	320	100	47	20.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	129	24-168	
2,4,5,6-Tetrachloro-m-Xylene	97	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-40</b>	<b>17-03-2146-134-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/06/17 12:14</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
4,4'-DDE	21	5.0	2.2	1.00	
4,4'-DDT	12	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	11	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-40</b>	<b>17-03-2146-134-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 07:19</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Heptachlor	64	25	11	5.00	
Heptachlor Epoxide	44	50	18	5.00	J

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	121	24-168	
2,4,5,6-Tetrachloro-m-Xylene	84	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-40</b>	<b>17-03-2146-134-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/07/17 07:47</b>	<b>170403L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	15000	1000	520	20.0	
4,4'-DDD	410	100	47	20.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	129	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2651	N/A	Solid	GC 44	04/03/17	04/05/17 14:02	170403L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	80	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2654	N/A	Solid	GC 41	04/03/17	04/06/17 03:47	170403L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3510C
	Method:	EPA 8081A
	Units:	ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032817	17-03-2146-1-B	03/28/17 16:20	Aqueous	GC 44	03/31/17	04/04/17 11:57	170331L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1.00	
Gamma-BHC	ND	0.10	0.030	1.00	
Beta-BHC	ND	0.10	0.030	1.00	
Heptachlor	ND	0.10	0.026	1.00	
Delta-BHC	ND	0.10	0.029	1.00	
Aldrin	ND	0.10	0.027	1.00	
Heptachlor Epoxide	ND	0.10	0.025	1.00	
Endosulfan I	ND	0.10	0.028	1.00	
Dieldrin	ND	0.10	0.029	1.00	
4,4'-DDE	ND	0.10	0.027	1.00	
Endrin	ND	0.10	0.031	1.00	
Endrin Aldehyde	ND	0.10	0.026	1.00	
4,4'-DDD	ND	0.10	0.027	1.00	
Endosulfan II	ND	0.10	0.027	1.00	
4,4'-DDT	ND	0.10	0.027	1.00	
Endosulfan Sulfate	ND	0.10	0.029	1.00	
Methoxychlor	ND	0.10	0.025	1.00	
Chlordane	ND	1.0	0.33	1.00	
Toxaphene	ND	2.0	0.59	1.00	
Endrin Ketone	ND	0.10	0.024	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-135	
2,4,5,6-Tetrachloro-m-Xylene	116	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-529-948	N/A	Aqueous	GC 44	03/31/17	04/04/17 11:00	170331L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1.00	
Gamma-BHC	ND	0.10	0.030	1.00	
Beta-BHC	ND	0.10	0.030	1.00	
Heptachlor	ND	0.10	0.026	1.00	
Delta-BHC	ND	0.10	0.029	1.00	
Aldrin	ND	0.10	0.027	1.00	
Heptachlor Epoxide	ND	0.10	0.025	1.00	
Endosulfan I	ND	0.10	0.028	1.00	
Dieldrin	ND	0.10	0.029	1.00	
4,4'-DDE	ND	0.10	0.027	1.00	
Endrin	ND	0.10	0.031	1.00	
Endrin Aldehyde	ND	0.10	0.026	1.00	
4,4'-DDD	ND	0.10	0.027	1.00	
Endosulfan II	ND	0.10	0.027	1.00	
4,4'-DDT	ND	0.10	0.027	1.00	
Endosulfan Sulfate	ND	0.10	0.029	1.00	
Methoxychlor	ND	0.10	0.025	1.00	
Chlordane	ND	1.0	0.33	1.00	
Toxaphene	ND	2.0	0.59	1.00	
Endrin Ketone	ND	0.10	0.024	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	50	50-135	
2,4,5,6-Tetrachloro-m-Xylene	100	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Kent3433-01-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401S04
Kent3433-01-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:53	170401S04
Kent3433-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:54	170401S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.907	25.00	27.69	99	28.93	104	75-125	4	0-20	
Lead	43.48	25.00	64.21	83	68.71	101	75-125	7	0-20	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Flor3475-01-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 11:18	170401S05
Flor3475-01-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:55	170401S05
Flor3475-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:55	170401S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	4.753	25.00	29.18	98	30.23	102	75-125	4	0-20	
Lead	109.3	25.00	124.6	4X	132.8	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3348-04-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 11:55	170401S06
Utah3348-04-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:56	170401S06
Utah3348-04-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	4.029	25.00	31.33	109	29.32	101	75-125	7	0-20	
Lead	143.0	25.00	202.9	4X	171.2	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2286-2	Sample	Aqueous	ICP 7300	03/31/17	04/01/17 13:12	170331SA7
17-03-2286-2	Matrix Spike	Aqueous	ICP 7300	03/31/17	04/01/17 13:13	170331SA7
17-03-2286-2	Matrix Spike Duplicate	Aqueous	ICP 7300	03/31/17	04/01/17 13:14	170331SA7

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.5000	0.5499	110	0.5369	107	80-140	2	0-11	
Lead	ND	0.5000	0.5213	104	0.5124	102	84-120	2	0-7	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite-25	Sample	Solid	GC 41	04/03/17	04/06/17 07:17	170403S03
Composite-25	Matrix Spike	Solid	GC 41	04/03/17	04/06/17 04:17	170403S03
Composite-25	Matrix Spike Duplicate	Solid	GC 41	04/03/17	04/06/17 04:32	170403S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	14.98	60	14.42	58	50-135	4	0-25	
Alpha-BHC	ND	25.00	14.67	59	14.34	57	50-135	2	0-25	
Beta-BHC	ND	25.00	16.42	66	15.74	63	50-135	4	0-25	
4,4'-DDD	ND	25.00	19.39	78	18.51	74	50-135	5	0-25	
4,4'-DDE	ND	25.00	20.60	82	20.50	82	50-135	0	0-25	
4,4'-DDT	ND	25.00	23.51	94	22.98	92	50-135	2	0-25	
Delta-BHC	ND	25.00	16.94	68	16.32	65	50-135	4	0-25	
Dieldrin	ND	25.00	18.06	72	17.19	69	50-135	5	0-25	
Endosulfan I	ND	25.00	17.74	71	17.05	68	50-135	4	0-25	
Endosulfan II	ND	25.00	20.54	82	19.37	77	50-135	6	0-25	
Endosulfan Sulfate	ND	25.00	20.00	80	18.61	74	50-135	7	0-25	
Endrin	ND	25.00	18.31	73	17.62	70	50-135	4	0-25	
Endrin Aldehyde	ND	25.00	18.09	72	17.24	69	50-135	5	0-25	
Gamma-BHC	ND	25.00	15.36	61	14.98	60	50-135	3	0-25	
Heptachlor	ND	25.00	15.42	62	15.08	60	50-135	2	0-25	
Heptachlor Epoxide	ND	25.00	16.04	64	15.51	62	50-135	3	0-25	
Methoxychlor	ND	25.00	20.65	83	19.67	79	50-135	5	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2380-47	Sample	Solid	GC 44	04/03/17	04/05/17 14:59	170403S02
17-03-2380-47	Matrix Spike	Solid	GC 44	04/03/17	04/05/17 14:16	170403S02
17-03-2380-47	Matrix Spike Duplicate	Solid	GC 44	04/03/17	04/05/17 14:30	170403S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	21.67	87	21.02	84	50-135	3	0-25	
Alpha-BHC	ND	25.00	21.52	86	20.94	84	50-135	3	0-25	
Beta-BHC	ND	25.00	22.58	90	22.28	89	50-135	1	0-25	
4,4'-DDD	ND	25.00	24.73	99	24.08	96	50-135	3	0-25	
4,4'-DDE	ND	25.00	24.54	98	23.53	94	50-135	4	0-25	
4,4'-DDT	ND	25.00	25.72	103	24.94	100	50-135	3	0-25	
Delta-BHC	ND	25.00	23.74	95	22.82	91	50-135	4	0-25	
Dieldrin	ND	25.00	23.56	94	22.67	91	50-135	4	0-25	
Endosulfan I	ND	25.00	23.72	95	22.80	91	50-135	4	0-25	
Endosulfan II	ND	25.00	25.19	101	24.28	97	50-135	4	0-25	
Endosulfan Sulfate	ND	25.00	24.50	98	23.54	94	50-135	4	0-25	
Endrin	ND	25.00	20.44	82	20.25	81	50-135	1	0-25	
Endrin Aldehyde	ND	25.00	24.82	99	23.98	96	50-135	3	0-25	
Gamma-BHC	ND	25.00	22.23	89	21.58	86	50-135	3	0-25	
Heptachlor	ND	25.00	22.30	89	21.80	87	50-135	2	0-25	
Heptachlor Epoxide	ND	25.00	21.92	88	21.16	85	50-135	4	0-25	
Methoxychlor	ND	25.00	24.49	98	23.90	96	50-135	2	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24550</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:45</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	24.09	96	80-120	
Lead		25.00	26.70	107	80-120	



## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24551</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:47</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	23.82	95	80-120	
Lead		25.00	27.06	108	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24552</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:52</b>	<b>170401L06</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	24.01	96	80-120	
Lead		25.00	26.81	107	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-003-16392</b>	<b>LCS</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>03/31/17</b>	<b>04/01/17 13:06</b>	<b>170331LA7</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		0.5000	0.4779	96	80-120	
Lead		0.5000	0.5174	103	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2654</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/03/17</b>	<b>04/06/17 04:02</b>	<b>170403L03</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	20.92	84	50-135	36-149	
Alpha-BHC		25.00	24.15	97	50-135	36-149	
Beta-BHC		25.00	22.88	92	50-135	36-149	
4,4'-DDD		25.00	22.65	91	50-135	36-149	
4,4'-DDE		25.00	22.59	90	50-135	36-149	
4,4'-DDT		25.00	24.80	99	50-135	36-149	
Delta-BHC		25.00	23.43	94	50-135	36-149	
Dieldrin		25.00	24.24	97	50-135	36-149	
Endosulfan I		25.00	25.65	103	50-135	36-149	
Endosulfan II		25.00	25.82	103	50-135	36-149	
Endosulfan Sulfate		25.00	25.51	102	50-135	36-149	
Endrin		25.00	21.94	88	50-135	36-149	
Endrin Aldehyde		25.00	25.40	102	50-135	36-149	
Gamma-BHC		25.00	24.20	97	50-135	36-149	
Heptachlor		25.00	24.27	97	50-135	36-149	
Heptachlor Epoxide		25.00	23.37	93	50-135	36-149	
Methoxychlor		25.00	23.99	96	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2651</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/03/17</b>	<b>04/05/17 15:13</b>	<b>170403L02</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.06	92	50-135	36-149	
Alpha-BHC		25.00	24.72	99	50-135	36-149	
Beta-BHC		25.00	22.86	91	50-135	36-149	
4,4'-DDD		25.00	24.90	100	50-135	36-149	
4,4'-DDE		25.00	25.68	103	50-135	36-149	
4,4'-DDT		25.00	26.21	105	50-135	36-149	
Delta-BHC		25.00	25.14	101	50-135	36-149	
Dieldrin		25.00	25.34	101	50-135	36-149	
Endosulfan I		25.00	25.90	104	50-135	36-149	
Endosulfan II		25.00	26.20	105	50-135	36-149	
Endosulfan Sulfate		25.00	25.30	101	50-135	36-149	
Endrin		25.00	25.52	102	50-135	36-149	
Endrin Aldehyde		25.00	24.70	99	50-135	36-149	
Gamma-BHC		25.00	24.76	99	50-135	36-149	
Heptachlor		25.00	25.42	102	50-135	36-149	
Heptachlor Epoxide		25.00	24.42	98	50-135	36-149	
Methoxychlor		25.00	24.60	98	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3510C  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-529-948	LCS	Aqueous	GC 44	03/31/17	04/03/17 15:07	170331L09				
099-12-529-948	LCSD	Aqueous	GC 44	03/31/17	04/03/17 15:21	170331L09				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.4550	91	0.5095	102	50-135	36-149	11	0-25	
Gamma-BHC	0.5000	0.4572	91	0.5157	103	50-135	36-149	12	0-25	
Beta-BHC	0.5000	0.4321	86	0.4844	97	50-135	36-149	11	0-25	
Heptachlor	0.5000	0.4646	93	0.5267	105	50-135	36-149	13	0-25	
Delta-BHC	0.5000	0.4649	93	0.5167	103	50-135	36-149	11	0-25	
Aldrin	0.5000	0.4468	89	0.5037	101	50-135	36-149	12	0-25	
Heptachlor Epoxide	0.5000	0.4495	90	0.4972	99	50-135	36-149	10	0-25	
Endosulfan I	0.5000	0.4804	96	0.5295	106	50-135	36-149	10	0-25	
Dieldrin	0.5000	0.4737	95	0.5198	104	50-135	36-149	9	0-25	
4,4'-DDE	0.5000	0.4756	95	0.5204	104	50-135	36-149	9	0-25	
Endrin	0.5000	0.4953	99	0.5399	108	50-135	36-149	9	0-25	
Endrin Aldehyde	0.5000	0.4673	93	0.5054	101	50-135	36-149	8	0-25	
4,4'-DDD	0.5000	0.4728	95	0.5140	103	50-135	36-149	8	0-25	
Endosulfan II	0.5000	0.4820	96	0.5244	105	50-135	36-149	8	0-25	
4,4'-DDT	0.5000	0.4914	98	0.5325	106	50-135	36-149	8	0-25	
Endosulfan Sulfate	0.5000	0.4572	91	0.4957	99	50-135	36-149	8	0-25	
Methoxychlor	0.5000	0.4728	95	0.5032	101	50-135	36-149	6	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 17-03-2146

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3010A Total	935	ICP 7300	1
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3545	669	GC 44	1
EPA 8081A	EPA 3510C	669	GC 44	1

## Glossary of Terms and Qualifiers

Work Order: 17-03-2146

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.

Table received from Matt Raithel  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-16 - 108	X	Kent3433-01-005-01 - 2 Kent3433-02-005-01 - 4 Kent3433-03-005-01 - 6 Kent3433-04-005-01 - 8
Composite-17 - 109	X	Kent3433-01-025-01 - 3 Kent3433-02-025-01 - 5 Kent3433-03-025-01 - 7 Kent3433-04-025-01 - 9
Composite-18 - 110	X	Cher0871-01-005-01 - 10 Cher0871-02-005-01 - 13 Cher0871-03-005-01 - 16 Cher0871-04-005-01 - 19
Composite-18-Dup - 111	X	Cher0871-01-005-02 - 11 Cher0871-02-005-02 - 14 Cher0871-03-005-02 - 17 Cher0871-04-005-02 - 20
Composite-19 - 112	X	Cher0871-01-025-01 - 12 Cher0871-02-025-01 - 15 Cher0871-03-025-01 - 18 Cher0871-04-025-01 - 21
Composite-20 - 113	X	Cher0803-01-005-01 - 22 Cher0803-02-005-01 - 24 Cher0803-03-005-01 - 26 Cher0803-04-005-01 - 28
Composite-21 - 114	X	Cher0803-01-025-01 - 23 Cher0803-02-025-01 - 25 Cher0803-03-025-01 - 27 Cher0803-04-025-01 - 29
Composite-22 - 115	X	Flor3415-01-005-01 - 30 Flor3415-02-005-01 - 32 Flor3415-03-005-01 - 34 Flor3415-04-005-01 - 36

Table received from Matt Raithel  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-23 - 116	X	Flor3415-01-025-01 - 31 Flor3415-02-025-01 - 33 Flor3415-03-025-01 - 35 Flor3415-04-025-01 - 37
Composite-24 - 117	X	Flor3475-01-005-01 - 38 Flor3475-02-005-01 - 40 Flor3475-03-005-01 - 42 Flor3475-04-005-01 - 44
Composite-25 - 118	X	Flor3475-01-025-01 - 39 Flor3475-02-025-01 - 41 Flor3475-03-025-01 - 43 Flor3475-04-025-01 - 45
Composite-26 - 119	X	Peac3397-01-005-01 - 46 Peac3397-02-005-01 - 48 Peac3397-03-005-01 - 50 Peac3397-04-005-01 - 52
Composite-27 - 120	X	Peac3397-01-025-01 - 47 Peac3397-02-025-01 - 49 Peac3397-03-025-01 - 51 Peac3397-04-025-01 - 53
Composite-28 - 121	X	Peac3392-01-005-01 - 54 Peac3392-02-005-01 - 56 Peac3392-03-005-01 - 58 Peac3392-04-005-01 - 60
Composite-29 - 122	X	Peac3392-01-025-01 - 55 Peac3392-02-025-01 - 57 Peac3392-03-025-01 - 59 Peac3392-04-025-01 - 61
Composite-30 - 123	X	Peac3371-01-005-01 - 62 Peac3371-02-005-01 - 64 Peac3371-03-005-01 - 66 Peac3371-04-005-01 - 68

Table received from Matt Raithe  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-31 - 124	X	Peac3371-01-025-01 ~63 Peac3371-02-025-01 ~65 Peac3371-03-025-01 ~67 Peac3371-04-025-01 ~69
Composite-32 - 125	X	Lind0687-02-005-01 ~70 Lind0687-03-005-01 ~71
Composite-33 - 126	X	Avoc3436-01-005-01 ~72 Avoc3436-02-005-01 ~75 Avoc3436-03-005-01 ~78 Avoc3436-04-005-01 ~81
Composite-33-Dup - 127	X	Avoc3436-01-005-02 ~73 Avoc3436-02-005-02 ~76 Avoc3436-03-005-02 ~79 Avoc3436-04-005-02 ~82
Composite-34 - 128	X	Avoc3436-01-025-01 ~74 Avoc3436-02-025-01 ~77 Avoc3436-03-025-01 ~80 Avoc3436-04-025-01 ~83
Composite-35 - 129	X	Utah3323-01-005-01 ~84 Utah3323-02-005-01 ~86 Utah3323-03-005-01 ~88 Utah3323-04-005-01 ~90
Composite-36 - 130	X	Utah3323-01-025-01 ~85 Utah3323-02-025-01 ~87 Utah3323-03-025-01 ~89 Utah3323-04-025-01 ~91
Composite-37 - 131	X	Utah3315-01-005-01 ~92 Utah3315-02-005-01 ~94 Utah3315-03-005-01 ~96 Utah3315-04-005-01 ~98
Composite-38 - 132	X	Utah3315-01-025-01 ~93 Utah3315-02-025-01 ~95 Utah3315-03-025-01 ~97 Utah3315-04-025-01 ~99

Table received from Matt Raithe  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

### Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-39 -- 133	X	Utah3348-01-005-01 ~100 Utah3348-02-005-01 ~102 Utah3348-03-005-01 ~104 Utah3348-04-005-01 ~106
Composite-40 - 134	X	Utah3348-01-025-01 ~101 Utah3348-02-025-01 ~103 Utah3348-03-025-01 ~105 Utah3348-04-025-01 ~107

Revised COC received from Matt Raitheal (H&A) on 03/30/17 at 14:08pm. - Vitendra (ECI)

**euofins** | Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-6494

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa

STATE: CA ZIP: 92626

E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TEL: 714-371-1802

TURNAROUND TIME (rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Geotracker EDF

H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

**Special Instructions:**

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
1	EB-032817		3/28/17	1620	2
2	Kent3433-01-005-01		0801	SO	1
3	Kent3433-01-025-01		0805		
4	Kent3433-02-005-01		0812		
5	Kent3433-02-025-01		0816		
6	Kent3433-03-005-01		0820		
7	Kent3433-03-025-01		0823		
8	Kent3433-04-005-01		0831		
9	Kent3433-04-025-01		0837		
10	Cher0871-01-005-01		0854		

UNPRESERVED	PRESERVED	FIELD FILTERED	LEAD - 6010B (SOIL)	ARSENIC - 6010B (SOIL)	ORGANOCHLORINE PESTICIDES 8081A (SOIL)	DATE	TIME
1	1		X	X		3/29/17	1110
X			X	X		3/29/17	1220
			X				
			X				
			X				
			X				
			X				

**HALEY & ALDRICH CHAIN OF CUSTODY**

WO 7/LAB USE ONLY  
**17-03-2146**  
 DATE: 3/28/17 PAGE: 1 OF 1

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0

PROJECT CONTACT: Colleen Canfield

**REQUESTED ANALYSES**

UNPRESERVED	PRESERVED	FIELD FILTERED	LEAD - 6010B (SOIL)	ARSENIC - 6010B (SOIL)	ORGANOCHLORINE PESTICIDES 8081A (SOIL)	DATE	TIME
1	1		X	X		3/29/17	1110
X			X	X		3/29/17	1220
			X				
			X				
			X				
			X				
			X				

Received by: (Signature/Affiliation) *[Signature]*  
 Received by: (Signature/Affiliation) *[Signature]*  
 Received by: (Signature/Affiliation) *[Signature]*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and Eurofins and Eurofins Calscience Inc.



Revised COC received from  
 Matt Raithe (H&A) on  
 03/30/17 at 14:09pm. -  
 Virendra (ECI)



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/28/17  
 PAGE: 3 OF 11

2146

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccantfield@haleyaldrich.com">ccantfield@haleyaldrich.com</a>		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson																	
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0		PROJECT CONTACT: Colleen Cantfield																	
<b>REQUESTED ANALYSES</b>																			
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES												
			DATE	TIME			Unpreserved	Preserved	Field Filtered										
21	Cher0803-04-025-01		3/28/17	0942	SO	1	X												
22	Cher0803-01-005-01			1012						X									
23	Cher0803-01-025-01			1016						X									
24	Cher0803-02-005-01			1025						X									
25	Cher0803-02-025-01			1030						X									
26	Cher0803-03-005-01			1037						X									
27	Cher0803-03-025-01			1041						X									
28	Cher0803-04-005-01			1050						X									
29	Cher0803-04-025-01			1054						X									
30	F1073415-01-005-01			1114						X									
Relinquished by: (Signature) <i>[Signature]</i>			Received by: (Signature/Affiliation) ECI		Date: 3/29/17 Time: 1110														
Relinquished by: (Signature) <i>[Signature]</i>			Received by: (Signature/Affiliation) ECI		Date: 3/29/17 Time: 1220														
Relinquished by: (Signature)			Received by: (Signature/Affiliation)																

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

Revised COC received from Matt Raithehl (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



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# HALEY & ALDRICH CHAIN OF CUSTODY

WO # / LAB USE ONLY

DATE: 3/28/17  
PAGE: 4 OF 8

2146

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		<b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson			
<b>REQUESTED ANALYSES</b>							
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Requested Analytes
31	Flor2415-01-025-01		3/28/17	1119	SO	1	Unpreserved X Preserved Field Filtered Lead - 6010B (Soil) Arsenic - 6010B (Soil) Organochlorine Pesticides 8081A (Soil) <b>Hold</b>
32	Flor2415-02-005-01			1122			X
33	Flor2415-02-025-01			1126			X
34	Flor2415-03-005-01			1130			X
35	Flor2415-03-025-01			1134			X
36	Flor2415-04-005-01			1140			X
37	Flor2415-04-025-01			1146			X
38	Flor2415-01-005-01			1156			X
39	Flor2415-01-025-01			1204			X
40	Flor2415-02-005-01			1210			X
Relinquished by: (Signature) <i>[Signature]</i>							Received by: (Signature/Affiliation) <i>Aly ECI</i>
Relinquished by: (Signature) <i>[Signature]</i>							Received by: (Signature/Affiliation) <i>[Signature]</i>
Relinquished by: (Signature)							Received by: (Signature/Affiliation)
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):							Date: <u>3/29/17</u> Time: <u>1220</u> Date: <u>3/29/17</u> Time: <u>1220</u> Date:

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





Revised COC received from Matt Raithehl (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME								
51	Pac3397-03-025-01		3/28/17	1407	80	X						
52	Pac3397-04-005-01			1410				X				
53	Pac3397-04-025-01			1413				X				
54	Pac3397-01-005-01			1425				X	X			
55	Pac3397-01-025-01			1428				X				
56	Pac3397-02-005-01			1434				X				
57	Pac3397-02-025-01			1436				X				
58	Pac3397-03-005-01			1440				X				
59	Pac3397-03-025-01			1443				X				
60	Pac3397-04-005-01			1447				X				

Requested by: (Signature) *[Signature]* Date: 3/29/17 Time: 1110

Relinquished by: (Signature) *[Signature]* Date: 3/29/17 Time: 1220

Relinquished by: (Signature) *[Signature]* Date: 3/29/17 Time: 1221

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

Revised COC received from  
 Matt Raitheal (H&A) on  
 03/30/17 at 14:08pm. -  
 Virendra (ECI)



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

Calscience

**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

21416

DATE: 3/28/17  
 PAGE: 7 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 E-MAIL: ccanfield@haleyaldrich.com		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson	
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		REQUESTED ANALYSES	
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110		NO. OF CONT. 1 MATRIX SO DATE 3/28/17 TIME 1451 LOG CODE:	
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	NO. OF CONT.
61	Reac3392-04-025-01		1
62	Reac3337-01-005-01		1
63	Reac3337-01-025-01		1
64	Reac3371-02-005-01		1
65	Reac3371-02-025-01		1
66	Reac3371-03-005-01		1
67	Reac3371-03-025-01		1
68	Reac3371-04-005-01		1
69	Reac3371-04-025-01		1
70	Lead D1687-02-005-01		1
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>	
Date: 3/28/17 Time: 1110		Date: 3/29/17 Time: 1220	

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

Revised COC received from Matt Raitheal (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

2146

DATE: 3/28/17 13:29/17  
PAGE: 8 OF 11

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa  
 STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-Eurofins Calscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128885-006 2.0  
 PROJECT CONTACT: Colleen Canfield

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD")  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):  
 GLOBAL ID: LOG CODE:

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME								
71	L1nd0687-03-005-01		3/28/17	1615	50	X			X			
72	AVOC3436-01-005-01		3/29/17	0800				X	X			
73	AVOC3436-01-005-02			0800				X	X			
74	AVOC3436-01-005-01			0807				X	X			
75	AVOC3436-02-005-01			0813				X	X			
76	AVOC3436-02-005-01			0813				X	X			
77	AVOC3436-02-005-01			0817				X	X			
78	AVOC3436-03-005-01			0821				X	X			
79	AVOC3436-03-005-02			0821				X	X			
80	AVOC3436-03-005-01			0826				X	X			

Requested Analyses

Received by: (Signature/Affiliation) *AV* Date: 3/29/17 Time: 1116  
 Received by: (Signature/Affiliation) *AV* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *AV* Date: 3/29/17 Time: 1220

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

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Revised COC received from Matt Raithel (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

DATE: 3/29/17  
PAGE: 9 OF 11

2146

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 E-MAIL: ccanfield@haleyaldrich.com TEL: 714-371-1802		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 <b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson										
<b>PROJECT CONTACT:</b> Colleen Canfield		<b>REQUESTED ANALYSES</b>										
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110												
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
81	Utah3323-01-005-01		3/29/17 0831	SO	1	X			X			
82	Utah3323-01-005-02		0831						X			
83	Utah3323-01-005-01		0836						X			
84	Utah3323-01-005-01		0850						X			
85	Utah3323-01-025-01		0856						X			
86	Utah3323-02-005-01		0902						X			
87	Utah3323-02-025-01		0906						X			
88	Utah3323-03-005-01		0911						X			
89	Utah3323-03-025-01		0914						X			
90	Utah3323-04-005-01		0922						X			
Relinquished by: (Signature) <i>Chya A...</i>						Received by: (Signature/Affiliation) <i>Avy ECI</i>		Date: 3/29/17		Time: 1110		
Relinquished by: (Signature) <i>Avy</i>						Received by: (Signature/Affiliation) <i>Avy ECI</i>		Date: 3/29/17		Time: 1220		
Relinquished by: (Signature)						Received by: (Signature/Affiliation)		Date:		Time:		

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



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Calscience

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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

DATE: 3/29/17  
PAGE: 11 OF 11

2146

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 <b>PROJECT CONTACT:</b> Colleen Canfield		<b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-EurofinsCalscience <b>Quote:</b> 963193 <b>SAMPLER(S): (PRINT)</b> Tanya Nelson																																					
<b>TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																																									
<input type="checkbox"/> Geotracker EDF LOG CODE: <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):																																									
<b>Special Instructions:</b> Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110																																									
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.																																			
101	12ah3348-01-025-01		3/29/17	1038	SO	1																																			
102	12ah3348-02-005-01			1043																																					
103	12ah3348-02-005-01			1047																																					
104	12ah3348-03-005-01			1051																																					
105	12ah3348-03-025-01			1055																																					
106	12ah3348-04-005-01			1102																																					
107	12ah3348-04-025-01			1106																																					
<table border="1"> <thead> <tr> <th>Requested Analytes</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> <th>Lead - 6010B (Soil)</th> <th>Arsenic - 6010B (Soil)</th> <th>Organochlorine Pesticides 8081A (Soil)</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> </tr> </tbody> </table>							Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)		X			X		X					X		X					X		X					X		X
Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)																																			
	X			X		X																																			
				X		X																																			
				X		X																																			
				X		X																																			
Relinquished by: (Signature) <i>Signature</i>			Received by: (Signature/Affiliation) <i>AY ECI</i>		Date: 3/29/17 Time: 1100																																				
Relinquished by: (Signature) <i>AY</i>			Received by: (Signature/Affiliation) <i>Signature</i>		Date: 3/29/17 Time: 1220																																				
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		Date:																																				

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

WORK ORDER NUMBER: 17-03- 2146

**SAMPLE ANOMALY REPORT**

DATE: 03 / 29 / 2017

SAMPLES, CONTAINERS, AND LABELS:	Comments																																																		
<input type="checkbox"/> Sample(s) NOT RECEIVED but listed on COC <input type="checkbox"/> Sample(s) received but NOT LISTED on COC <input type="checkbox"/> Holding time expired (list client or ECI sample ID and analysis) <input type="checkbox"/> Insufficient sample amount for requested analysis (list analysis) <input type="checkbox"/> Improper container(s) used (list analysis) <input type="checkbox"/> Improper preservative used (list analysis) <input type="checkbox"/> No preservative noted on COC or label (list analysis and notify lab) <input type="checkbox"/> Sample container(s) not labeled <input type="checkbox"/> Client sample label(s) illegible (list container type and analysis) <input checked="" type="checkbox"/> Client sample label(s) do not match COC (comment) <ul style="list-style-type: none"> <li><input type="checkbox"/> Project information</li> <li><input checked="" type="checkbox"/> Client sample ID                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Sampling date and/or time</li> <li><input type="checkbox"/> Number of container(s)</li> <li><input type="checkbox"/> Requested analysis</li> </ul> </li> <li><input type="checkbox"/> Sample container(s) compromised (comment)                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Broken</li> <li><input type="checkbox"/> Water present in sample container</li> </ul> </li> <li><input type="checkbox"/> Air sample container(s) compromised (comment)                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Flat</li> <li><input type="checkbox"/> Very low in volume</li> <li><input type="checkbox"/> Leaking (not transferred; duplicate bag submitted)</li> <li><input type="checkbox"/> Leaking (transferred into ECI Tedlar™ bags*)</li> <li><input type="checkbox"/> Leaking (transferred into client's Tedlar™ bags*)</li> </ul> </li> </ul> <p><small>* Transferred at client's request.</small></p>	<div style="border: 1px solid red; padding: 5px; margin-bottom: 10px;">                     Revised COC received from Matt Raitel (H&amp;A) on 03/30/17 at 14:08pm. - Virendra (ECI)                 </div> <p><i>Labeled as:</i></p> <p><i>(-25) Cher0803-02-005-01</i></p> <p><i>(-04) Peac 3371-03-005-01</i></p> <p><i>(-05) Peac 3371-03-025-01</i></p> <p><i>date and time matched</i></p>																																																		
<p><b>MISCELLANEOUS:</b> (Describe)</p> <hr/>	<p><b>Comments</b></p> <hr/>																																																		
<p><b>HEADSPACE:</b></p> <p>(Containers with bubble &gt; 6 mm or ¼ Inch for volatile organic or dissolved gas analysis)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**																									<p>(Containers with bubble for other analysis)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> <th>Requested Analysis</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis																
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ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis																																																
<p>Comments: _____</p> <hr/>	<p>Reported by: <u>1110</u></p> <p>Reviewed by: <u>1077/836</u></p>																																																		
<p><small>** Record the total number of containers (i.e., vials or bottles) for the affected sample.</small></p>																																																			

Return to Contents

WO # / LAB USE ONLY  
**17-03-2146**  
 DATE: 3/28/17 PAGE: 1 OF 8

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT:  
 Colleen Cantfield

LABORATORY CLIENT:  
 Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 COSTA MESA, CA 92626  
 TEL: 714-371-1802  
 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 LOG CODE:  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES										
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)					
1	EB-032817		3/28/17	1620	H <sub>2</sub> O	2											
2	Kent3433-01-005-01			0801	SO	1	X										
3	Kent3433-01-025-01			0805		1					X						
4	Kent3433-02-005-01			0812		1					X						
5	Kent3433-02-025-01			0816		1					X						
6	Kent3433-03-005-01			0820		1					X						
7	Kent3433-03-025-01			0823		1					X						
8	Kent3433-04-005-01			0831		1					X						
9	Kent3433-04-025-01			0837		1					X						
10	Cher0871-01-005-01			0854		1					X						

Received by: (Signature/Affiliation) *AW* E-CX  
 Date: 3/29/17 Time: 110  
 Relinquished by: (Signature) *AW*  
 Relinquished by: (Signature/Affiliation) *AW*  
 Date: 3/29/17 Time: 1220  
 Relinquished by: (Signature) *AW*  
 Relinquished by: (Signature/Affiliation) *AW*  
 Date: 3/29/17 Time: 1220





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 2 OF 1

LABORATORY CLIENT: **Haley & Aldrich, Inc.**

ADDRESS: **3187 Red Hill Ave., Suite 155**

CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**

TEL: **714-371-1802** E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: **UC Riverside North District / 128685-006 2.0**

PROJECT CONTACT: **Colleen Canfield**

BLANKET SERVICE AGREEMENT NO.: **2015-18-EurofinsCalscience Quote: 963193**

SAMPLER(S): (PRINT) **Tanya Nelson**

REQUESTED ANALYSES		Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
11	Cher0871-01-005-02	X			X		Hold
12	Cher0871-01-025-01				X		X
13	Cher0871-02-005-01				X		
14	Cher0871-02-005-02				X		
15	Cher0871-02-025-01				X		X
16	Cher0871-03-005-01				X		
17	Cher0871-03-005-02				X		X
18	Cher0871-03-025-01				X		
19	Cher0871-04-005-01				X		
20	Cher0871-04-005-02				X		

Received by: (Signature/Affiliation) **ALY** **ECA**

Date: **3/29/17** Time: **110**

Received by: (Signature/Affiliation) **ALY**

Date: **3/29/17** Time: **1220**

Received by: (Signature/Affiliation)

Date:

TURNAROUND TIME (Flush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE:

Geotracker EDF

H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
11	Cher0871-01-005-02		3/28/17	0854	SO	1
12	Cher0871-01-025-01			0859		
13	Cher0871-02-005-01			0907		
14	Cher0871-02-005-02			0907		
15	Cher0871-02-025-01			0913		
16	Cher0871-03-005-01			0919		
17	Cher0871-03-005-02			0919		
18	Cher0871-03-025-01			0924		
19	Cher0871-04-005-01			0938		
20	Cher0871-04-005-02			0938		

Relinquished by: (Signature) **ALY**

Relinquished by: (Signature)

Relinquished by: (Signature)



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17  
PAGE: 3 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: scanfield@haleyaldrich.com				
CITY: Costa Mesa		TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):				
TEL: 714-371-1802		<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD				
GLOBAL ID:		LOG CODE:				
<input type="checkbox"/> Geotracker EDF		Sample Archiving requirements (if required to be held greater than 30 days):				
<input checked="" type="checkbox"/> H&A Standard EDD		Special Instructions:				
Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
21	Cher087104-025-01		3/28/17	0942	SO	1
22	Cher0803-01-005-01			1012		
23	Cher0803-01-025-01			1010		
24	Cher0803-02-005-01			1025		
25	Cher0803-02-025-01			1030		
26	Cher0803-03-005-01			1037		
27	Cher0803-03-025-01			1041		
28	Cher0803-04-005-01			1050		
29	Cher0803-04-025-01			1054		
30	Flor3415-01-005-01			1114		

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
<i>[Signature]</i>	AY ECI	3/29/17	1110
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
<i>[Signature]</i>	AY ECI	3/29/17	1220
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

REQUESTED ANALYSES										
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold				
X			X		X	X				
		X								
		X								
		X								
		X								
		X								
		X								
		X								
		X								



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

DATE: 3/28/17

PAGE: 4 OF 8

WO # / LAB USE ONLY  
2146

BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
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SAMPLER(S): (PRINT)  
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CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
Pricing provided on Eurofins Quote 963193  
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
31	Flor3415-01-025-01		3/28/17	1119	SO	1
32	Flor3415-02-005-01			1122		
33	Flor3415-02-025-01			1126		
34	Flor3415-03-005-01			1130		
35	Flor3415-03-025-01			1134		
36	Flor3415-04-005-01			1140		
37	Flor3415-04-025-01			1146		
38	Flor3475-01-005-01			1156		
39	Flor3475-01-025-01			1204		
40	Flor3475-02-005-01			1210		

Requested Analyzes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Time
	X						110
		X					1220
		X					
		X					
		X					
		X					
		X					
		X					
		X					
		X					

Received by: (Signature/Affiliation) Aly ECE Date: 3/29/17 Time: 110

Received by: (Signature/Affiliation) [Signature] Date: 3/29/17 Time: 1220

Received by: (Signature/Affiliation) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 5 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193			
ADDRESS: 3187 Red Hill Ave., Suite 155		PROJECT CONTACT: Colleen Cantfield			
CITY: Costa Mesa	STATE: CA	ZIP: 92626			
TEL: 714-371-1802	E-MAIL: ccantfield@haleyaldrich.com				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
GLOBAL ID:		LOG CODE:			
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days): EDD					
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110					
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
41	FL03475-02-025-01		3/28/17	1214	1
42	FL03475-03-005-01			1222	1
43	FL03475-03-025-01			1226	1
44	FL03475-04-005-01			1232	1
45	FL03475-04-025-01			1236	1
46	RA03397-01-005-01			1341	1
47	RA03397-01-025-01			1346	1
48	RA03397-02-005-01			1354	1
49	RA03397-02-025-01			1359	1
50	RA03397-03-005-01			1404	1
Relinquished by: (Signature) <i>Chloe</i>			Received by: (Signature/Affiliation) <i>My FCI</i>		Date: 3/29/17
Relinquished by: (Signature)			Received by: (Signature/Affiliation) <i>My FCI</i>		Date: 3/29/17
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		Date: 3/29/17

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 6 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:

2015-18-EurofinsCalscience  
Quote: 963193

PROJECT CONTACT:

Colleen Canfield

SAMPLER(S): (PRINT)

Tanya Nelson

STATE: CA ZIP: 92626

E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE:

Geotracker EDF

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raihel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
S1	PeaC33917-03-025-01		3/28/17	1407	SO	1
S2	PeaC33917-04-005-01			1410		
S3	PeaC33917-04-005-01			1413		
S4	PeaC33917-01-005-01			1425		
S5	PeaC33912-01-025-01			1428		
S6	PeaC33912-02-005-01			1434		
S7	PeaC33912-02-025-01			1436		
S8	PeaC33912-03-005-01			1440		
S9	PeaC33912-03-025-01			1443		
S60	PeaC33912-04-005-01			1447		

### REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		X
			X		X
			X		X
			X		X
			X		X
			X		X

Received by: (Signature/Affiliation)

Aly ECI

Date: 3/29/17 Time: 1110

Received by: (Signature/Affiliation)

Aly

Date: 3/29/17 Time: 1220

Received by: (Signature/Affiliation)

Relinquished by: (Signature)

Relinquished by: (Signature)

Aly

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Aly ECI

Date: 3/29/17 Time: 1110





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17-3/29/17

PAGE: 8 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience	
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: 963193	
CITY: Costa Mesa	STATE: CA	PROJECT CONTACT: Colleen Canfield	SAMPLER(S): (PRINT) Tanya Nelson
TEL: 714-371-1802	E-MAIL: ccanfield@haleyaldrich.com	PROJECT NO.: UC Riverside North District / 128685-006 2.0	
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):		REQUESTED ANALYSES	
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Field Filtered Preserved Unpreserved	
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD		Arsenic - 6010B (Soil) Lead - 6010B (Soil) Organochlorine Pesticides 8081A (Soil)	
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110		Field Filtered Preserved Unpreserved	
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	NO. OF CONT.
71	Lind0687-03-005-01		1
72	AVOC3436-01-005-01		1
73	AVOC3436-01-005-02		1
74	AVOC3436-01-005-01		1
75	AVOC3436-07-005-01		1
76	AVOC3436-02-005-01		1
77	AVOC3436-02-005-01		1
78	AVOC3436-03-005-01		1
79	AVOC3436-03-005-02		1
80	AVOC3436-03-005-01		1
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) Aly Eer	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)	
		Date: 3/29/17	Time: 1116
		Date: 3/29/17	Time: 1220
		Date:	Time:







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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/29/17

PAGE: 10 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF GLOBAL ID: LOG CODE:  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
-------------	-----------	----------------	---------------------	------------------------	--

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
91	Utah3315-01-005-01		3/29/17	0927	50
92	Utah3315-01-005-01			0940	1
93	Utah3315-01-005-01			0943	
94	Utah3315-02-005-01			0950	
95	Utah3315-02-025-01			0954	
96	Utah3315-03-005-01			1002	
97	Utah3315-03-025-01			1006	
98	Utah3315-04-005-01			1011	
99	Utah3315-04-025-01			1015	
100	Utah3315-01-005-01			1035	

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		X
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		

Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*

Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1110  
 Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/29/17

PAGE: 11 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: gcanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H004
			DATE	TIME									
101	Utah3348-01-025-01		3/29/17	1038	SO	1	X						
102	Utah3348-02-005-01			1043				X					
103	Utah3348-02-025-01			1047				X					
104	Utah3348-03-005-01			1051				X					
105	Utah3348-03-025-01			1055				X					
106	Utah3348-04-005-01			1102				X					
107	Utah3348-04-025-01			1106				X					

Requested Analyses

Relinquished by: (Signature) *Colleen Canfield* Date: 3/29/17 Time: 1100  
 Received by: (Signature/Affiliation) *AG* Date: 3/29/17 Time: 1220  
 Relinquished by: (Signature) *AG* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *AG* Date: 3/29/17 Time: 1220  
 Relinquished by: (Signature) *AG* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *AG* Date: 3/29/17 Time: 1220

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: H & A

DATE: 03/29/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 678

CUSTODY SEAL:

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 678

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 1110

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....  Yes  No  N/A

COC document(s) received complete .....  Yes  No  N/A

Sampling date  Sampling time  Matrix  Number of containers

No analysis requested  Not relinquished  No relinquished date  No relinquished time

Sampler's name indicated on COC .....  Yes  No  N/A

Sample container label(s) consistent with COC .....  Yes  No  N/A

Sample container(s) intact and in good condition .....  Yes  No  N/A

Proper containers for analyses requested .....  Yes  No  N/A

Sufficient volume/mass for analyses requested .....  Yes  No  N/A

Samples received within holding time .....  Yes  No  N/A

Aqueous samples for certain analyses received within 15-minute holding time

pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....  Yes  No  N/A

Proper preservation chemical(s) noted on COC and/or sample container .....  Yes  No  N/A

Unpreserved aqueous sample(s) received for certain analyses

Volatile Organics  Total Metals  Dissolved Metals

Container(s) for certain analysis free of headspace .....  Yes  No  N/A

Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500)

Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation .....  Yes  No  N/A

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB

125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AG<sub>J</sub>  500AG<sub>J</sub><sub>s</sub>

500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>,

Labeled/Checked by: 1110

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH

Reviewed by: 1017 836

\* Sampling date per label is 3/29/17

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: H & A

DATE: 03 / 29 / 2017

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.8 °C (w/ CF): 3.8 °C;  Blank  Sample  
 Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)  
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter Checked by: 678

**CUSTODY SEAL:**  
 Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 678  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1110

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

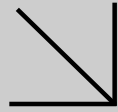
**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)  
**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  
 125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AGJ  500AGJ<sub>s</sub>  
 500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_\_)  TerraCores® (\_\_\_\_\_)  \_\_\_\_\_  
**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  
 Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag  
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1110  
 s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 107/876

Return to Contents

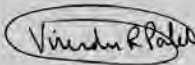


Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

**WORK ORDER NUMBER: 17-03-2146***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For****Client:** Haley & Aldrich, Inc.**Client Project Name:** UC Riverside North District / 128685-006  
2.0**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453



---

 Approved for release on 04/26/2017 by:  
 Virendra Patel  
 Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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Work Order Number: 17-03-2146

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/29/17. They were assigned to Work Order 17-03-2146.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Kent3433-01-005-01	17-03-2146-2	03/28/17 08:01	1	Solid
Kent3433-02-005-01	17-03-2146-4	03/28/17 08:12	1	Solid
Kent3433-03-005-01	17-03-2146-6	03/28/17 08:20	1	Solid
Kent3433-03-025-01	17-03-2146-7	03/28/17 08:23	1	Solid
Kent3433-04-005-01	17-03-2146-8	03/28/17 08:31	1	Solid
Kent3433-04-025-01	17-03-2146-9	03/28/17 08:37	1	Solid
Cher0871-01-005-02	17-03-2146-11	03/28/17 08:54	1	Solid
Cher0871-01-025-01	17-03-2146-12	03/28/17 08:59	1	Solid
Cher0871-02-005-02	17-03-2146-14	03/28/17 09:07	1	Solid
Cher0871-03-005-02	17-03-2146-17	03/28/17 09:19	1	Solid
Cher0871-03-025-01	17-03-2146-18	03/28/17 09:24	1	Solid
Cher0871-04-005-02	17-03-2146-20	03/28/17 09:38	1	Solid
Cher0871-04-025-01	17-03-2146-21	03/28/17 09:42	1	Solid
Cher0803-01-005-01	17-03-2146-22	03/28/17 10:12	1	Solid
Cher0803-01-025-01	17-03-2146-23	03/28/17 10:16	1	Solid
Cher0803-02-005-01	17-03-2146-24	03/28/17 10:25	1	Solid
Cher0803-02-025-01	17-03-2146-25	03/28/17 10:30	1	Solid
Cher0803-03-005-01	17-03-2146-26	03/28/17 10:37	1	Solid
Cher0803-03-025-01	17-03-2146-27	03/28/17 10:41	1	Solid
Cher0803-04-005-01	17-03-2146-28	03/28/17 10:50	1	Solid
Cher0803-04-025-01	17-03-2146-29	03/28/17 10:54	1	Solid
Flor3415-01-005-01	17-03-2146-30	03/28/17 11:14	1	Solid
Flor3415-02-005-01	17-03-2146-32	03/28/17 11:22	1	Solid
Flor3415-03-005-01	17-03-2146-34	03/28/17 11:30	1	Solid
Flor3415-03-025-01	17-03-2146-35	03/28/17 11:34	1	Solid
Flor3415-04-005-01	17-03-2146-36	03/28/17 11:40	1	Solid
Flor3475-01-005-01	17-03-2146-38	03/28/17 11:56	1	Solid
Flor3475-01-025-01	17-03-2146-39	03/28/17 12:04	1	Solid
Flor3475-02-005-01	17-03-2146-40	03/28/17 12:10	1	Solid
Flor3475-02-025-01	17-03-2146-41	03/28/17 12:14	1	Solid
Flor3475-03-005-01	17-03-2146-42	03/28/17 12:22	1	Solid
Flor3475-04-005-01	17-03-2146-44	03/28/17 12:32	1	Solid
Flor3475-04-025-01	17-03-2146-45	03/28/17 12:36	1	Solid
Peac3397-01-005-01	17-03-2146-46	03/28/17 13:41	1	Solid
Peac3397-01-025-01	17-03-2146-47	03/28/17 13:46	1	Solid
Peac3397-02-005-01	17-03-2146-48	03/28/17 13:54	1	Solid
Peac3397-02-025-01	17-03-2146-49	03/28/17 13:59	1	Solid
Peac3397-03-005-01	17-03-2146-50	03/28/17 14:04	1	Solid
Peac3397-03-025-01	17-03-2146-51	03/28/17 14:07	1	Solid
Peac3397-04-005-01	17-03-2146-52	03/28/17 14:10	1	Solid
Peac3397-04-025-01	17-03-2146-53	03/28/17 14:13	1	Solid
Peac3392-01-005-01	17-03-2146-54	03/28/17 14:25	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Peac3392-01-025-01	17-03-2146-55	03/28/17 14:28	1	Solid
Peac3392-02-005-01	17-03-2146-56	03/28/17 14:34	1	Solid
Peac3392-02-025-01	17-03-2146-57	03/28/17 14:36	1	Solid
Peac3392-03-005-01	17-03-2146-58	03/28/17 14:40	1	Solid
Peac3392-03-025-01	17-03-2146-59	03/28/17 14:43	1	Solid
Peac3392-04-005-01	17-03-2146-60	03/28/17 14:47	1	Solid
Peac3392-04-025-01	17-03-2146-61	03/28/17 14:51	1	Solid
Peac3371-01-005-01	17-03-2146-62	03/28/17 15:07	1	Solid
Peac3371-01-025-01	17-03-2146-63	03/28/17 15:11	1	Solid
Peac3371-02-005-01	17-03-2146-64	03/28/17 15:16	1	Solid
Peac3371-03-005-01	17-03-2146-66	03/28/17 15:24	1	Solid
Peac3371-04-005-01	17-03-2146-68	03/28/17 15:33	1	Solid
Lind0687-02-005-01	17-03-2146-70	03/28/17 16:06	1	Solid
Lind0687-03-005-01	17-03-2146-71	03/28/17 16:15	1	Solid
Avoc3436-01-005-02	17-03-2146-73	03/29/17 08:00	1	Solid
Avoc3436-01-025-01	17-03-2146-74	03/29/17 08:07	1	Solid
Avoc3436-02-005-02	17-03-2146-76	03/29/17 08:13	1	Solid
Avoc3436-02-025-01	17-03-2146-77	03/29/17 08:17	1	Solid
Avoc3436-03-005-02	17-03-2146-79	03/29/17 08:21	1	Solid
Avoc3436-03-025-01	17-03-2146-80	03/29/17 08:26	1	Solid
Avoc3436-04-005-02	17-03-2146-82	03/29/17 08:31	1	Solid
Avoc3436-04-025-01	17-03-2146-83	03/29/17 08:36	1	Solid
Utah3323-01-005-01	17-03-2146-84	03/29/17 08:50	1	Solid
Utah3323-01-025-01	17-03-2146-85	03/29/17 08:56	1	Solid
Utah3323-02-005-01	17-03-2146-86	03/29/17 09:02	1	Solid
Utah3323-02-025-01	17-03-2146-87	03/29/17 09:06	1	Solid
Utah3323-03-005-01	17-03-2146-88	03/29/17 09:11	1	Solid
Utah3323-04-005-01	17-03-2146-90	03/29/17 09:22	1	Solid
Utah3315-01-005-01	17-03-2146-92	03/29/17 09:40	1	Solid
Utah3315-01-025-01	17-03-2146-93	03/29/17 09:43	1	Solid
Utah3315-02-005-01	17-03-2146-94	03/29/17 09:50	1	Solid
Utah3315-02-025-01	17-03-2146-95	03/29/17 09:54	1	Solid
Utah3315-03-005-01	17-03-2146-96	03/29/17 10:02	1	Solid
Utah3315-03-025-01	17-03-2146-97	03/29/17 10:06	1	Solid
Utah3315-04-005-01	17-03-2146-98	03/29/17 10:11	1	Solid
Utah3315-04-025-01	17-03-2146-99	03/29/17 10:15	1	Solid
Utah3348-01-005-01	17-03-2146-100	03/29/17 10:35	1	Solid
Utah3348-01-025-01	17-03-2146-101	03/29/17 10:38	1	Solid
Utah3348-02-005-01	17-03-2146-102	03/29/17 10:43	1	Solid
Utah3348-02-025-01	17-03-2146-103	03/29/17 10:47	1	Solid
Utah3348-03-005-01	17-03-2146-104	03/29/17 10:51	1	Solid
Utah3348-03-025-01	17-03-2146-105	03/29/17 10:55	1	Solid

## Sample Summary

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Client: Haley & Aldrich, Inc.	Work Order: 17-03-2146
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/29/17 12:20
	Number of Containers: 135

Attn: Colleen Canfield

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Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Utah3348-04-005-01	17-03-2146-106	03/29/17 11:02	1	Solid
Utah3348-04-025-01	17-03-2146-107	03/29/17 11:06	1	Solid



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## QC Association Summary

Work Order: 17-03-2146

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Kent3433-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Kent3433-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Kent3433-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Kent3433-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Kent3433-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Kent3433-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Kent3433-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Kent3433-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Kent3433-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Kent3433-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Kent3433-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Kent3433-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0871-01-005-02	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0871-01-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0871-01-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Cher0871-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0871-02-005-02	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0871-02-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0871-03-005-02	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0871-03-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0871-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0871-04-005-02	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0871-04-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0871-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0803-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0803-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0803-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Cher0803-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0803-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0803-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0803-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Cher0803-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0803-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0803-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Cher0803-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Cher0803-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Cher0803-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Cher0803-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Cher0803-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Flor3415-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Flor3415-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3415-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Flor3415-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3415-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Flor3415-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03

R = Rerun



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## QC Association Summary

Work Order: 17-03-2146

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Flor3415-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Flor3415-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S04	170401L04
Flor3415-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3415-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Flor3475-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Flor3475-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3475-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Flor3475-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Flor3475-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3475-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Flor3475-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Flor3475-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Flor3475-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3475-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S12	170418L12
Flor3475-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Flor3475-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S12	170418L12
Flor3475-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3397-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3397-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3397-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3397-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3397-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170420S05	170420L05
Peac3397-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170420S05	170420L05
Peac3397-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3397-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3397-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3397-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3397-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3397-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3397-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3397-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3397-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3392-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3392-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3392-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3392-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3392-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3392-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3392-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05

R = Rerun



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## QC Association Summary

Work Order: 17-03-2146

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Peac3392-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3392-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3392-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3392-04-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3371-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3371-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3371-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3371-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S01	170421L01
Peac3371-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3371-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3371-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Peac3371-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3371-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Peac3371-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Peac3371-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Lind0687-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Lind0687-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Lind0687-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Lind0687-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S05	170401L05
Lind0687-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Lind0687-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170419S04	170419L04
Avoc3436-01-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Avoc3436-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Avoc3436-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170419S04	170419L04
Avoc3436-02-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Avoc3436-02-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170419S05	170419L05
Avoc3436-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Avoc3436-03-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170420S05	170420L05
Avoc3436-03-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170420S05	170420L05
Avoc3436-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Avoc3436-04-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Avoc3436-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3323-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3323-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3323-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3323-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3323-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3323-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170419S05	170419L05
Utah3323-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3323-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3323-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3323-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3323-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3323-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170419S05	170419L05

R = Rerun



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## QC Association Summary

Work Order: 17-03-2146

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Utah3315-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3315-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3315-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3315-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3315-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3315-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3315-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170419S05	170419L05
Utah3315-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3315-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3315-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170420S05	170420L05
Utah3315-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3315-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3315-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 44	170420S05	170420L05
Utah3315-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 44	170420S05	170420L05
Utah3315-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3315-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3348-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3348-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3348-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170419S05	170419L05
Utah3348-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3348-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S13	170418L13
Utah3348-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S13	170418L13
Utah3348-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3348-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S13	170418L13
Utah3348-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3348-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 51	170418S13	170418L13
Utah3348-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S13	170418L13
Utah3348-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 51	170418S13	170418L13
Utah3348-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Utah3348-03-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Utah3348-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170401S06	170401L06
Utah3348-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Utah3348-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Utah3348-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S02	170421L02
Utah3348-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Utah3348-04-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03

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R = Rerun

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Kent3433-01-005-01 (17-03-2146-2)						
Arsenic	2.91		0.718	mg/kg	EPA 6010B	EPA 3050B
Lead	43.5		0.478	mg/kg	EPA 6010B	EPA 3050B
Chlordane	68	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	7.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.7	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Kent3433-02-005-01 (17-03-2146-4)						
Lead	40.3		0.488	mg/kg	EPA 6010B	EPA 3050B
Chlordane	810	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	6.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.7	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	3.5	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	17	ET	10	ug/kg	EPA 8081A	EPA 3545
Kent3433-03-005-01 (17-03-2146-6)						
Lead	295		0.513	mg/kg	EPA 6010B	EPA 3050B
Chlordane	350	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	13	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	76	ET	25	ug/kg	EPA 8081A	EPA 3545
Kent3433-03-025-01 (17-03-2146-7)						
Lead	4.95		0.518	mg/kg	EPA 6010B	EPA 3050B
Kent3433-04-005-01 (17-03-2146-8)						
Lead	121		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	310	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	73	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	27	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	19	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Kent3433-04-025-01 (17-03-2146-9)						
Lead	5.02		0.515	mg/kg	EPA 6010B	EPA 3050B
Cher0871-01-005-02 (17-03-2146-11)						
Lead	73.7		0.500	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	5.4	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	52	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Cher0871-01-025-01 (17-03-2146-12)						
Lead	5.65		0.513	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown



## Detections Summary

Client: Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	Work Order:	17-03-2146  Project Name: UC Riverside North District / 128685-006 2.0 Received: 03/29/17
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Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Cher0871-02-005-02 (17-03-2146-14)						
Lead	45.0		0.508	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	6.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	35	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Cher0871-03-005-02 (17-03-2146-17)						
Lead	51.8		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	37	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	6.7	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	25	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	3.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Cher0871-03-025-01 (17-03-2146-18)						
Lead	7.80		0.488	mg/kg	EPA 6010B	EPA 3050B
Cher0871-04-005-02 (17-03-2146-20)						
Lead	106		0.500	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	24	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	13	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Cher0871-04-025-01 (17-03-2146-21)						
Lead	6.88		0.493	mg/kg	EPA 6010B	EPA 3050B
Cher0803-01-005-01 (17-03-2146-22)						
Arsenic	6.19		0.750	mg/kg	EPA 6010B	EPA 3050B
Lead	218		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	430	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	38	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	30	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.1	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Cher0803-01-025-01 (17-03-2146-23)						
Lead	6.00		0.478	mg/kg	EPA 6010B	EPA 3050B
Cher0803-02-005-01 (17-03-2146-24)						
Lead	163		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	890	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	18	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	11	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	8.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.6	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Cher0803-02-025-01 (17-03-2146-25)						
Lead	26.7		0.503	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Cher0803-03-005-01 (17-03-2146-26)						
Lead	80.5		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	280	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.5	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.5	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Cher0803-03-025-01 (17-03-2146-27)						
Lead	5.93		0.508	mg/kg	EPA 6010B	EPA 3050B
Cher0803-04-005-01 (17-03-2146-28)						
Lead	84.0		0.483	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	3.2	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	53	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.0	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Cher0803-04-025-01 (17-03-2146-29)						
Lead	5.01		0.493	mg/kg	EPA 6010B	EPA 3050B
Flor3415-01-005-01 (17-03-2146-30)						
Lead	53.9		0.478	mg/kg	EPA 6010B	EPA 3050B
Chlordane	96	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	6.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.7	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.4	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Flor3415-02-005-01 (17-03-2146-32)						
Lead	58.5		0.515	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDT	10	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Flor3415-03-005-01 (17-03-2146-34)						
Lead	90.7		0.488	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	2.7	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Flor3415-03-025-01 (17-03-2146-35)						
Lead	6.70		0.483	mg/kg	EPA 6010B	EPA 3050B
Flor3415-04-005-01 (17-03-2146-36)						
Lead	63.4		0.508	mg/kg	EPA 6010B	EPA 3050B
Chlordane	540	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	80	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	40	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	7.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	56	ET	50	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Flor3475-01-005-01 (17-03-2146-38)						
Arsenic	4.75		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	109		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	140	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	5.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	24	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Flor3475-01-025-01 (17-03-2146-39)						
Lead	6.56		0.498	mg/kg	EPA 6010B	EPA 3050B
Flor3475-02-005-01 (17-03-2146-40)						
Lead	88.5		0.521	mg/kg	EPA 6010B	EPA 3050B
Chlordane	400	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	35	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	240	ET	100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	160	ET	100	ug/kg	EPA 8081A	EPA 3545
Dieldrin	6.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	14	ET	10	ug/kg	EPA 8081A	EPA 3545
Flor3475-02-025-01 (17-03-2146-41)						
Lead	6.51		0.483	mg/kg	EPA 6010B	EPA 3050B
Flor3475-03-005-01 (17-03-2146-42)						
Lead	69.1		0.483	mg/kg	EPA 6010B	EPA 3050B
Chlordane	260	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	23	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	46	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	120	ET	25	ug/kg	EPA 8081A	EPA 3545
Flor3475-04-005-01 (17-03-2146-44)						
Lead	89.0		0.488	mg/kg	EPA 6010B	EPA 3050B
Chlordane	45	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	2.4	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Flor3475-04-025-01 (17-03-2146-45)						
Lead	3.95		0.478	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
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Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Peac3397-01-005-01 (17-03-2146-46)						
Lead	136		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	380	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	39	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	36	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	25	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.9	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Peac3397-01-025-01 (17-03-2146-47)						
Lead	13.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Peac3397-02-005-01 (17-03-2146-48)						
Lead	169		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	880	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	81	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	120	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	55	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	10	ET	10	ug/kg	EPA 8081A	EPA 3545
Peac3397-02-025-01 (17-03-2146-49)						
Lead	34.2		0.485	mg/kg	EPA 6010B	EPA 3050B
Peac3397-03-005-01 (17-03-2146-50)						
Lead	194		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	930	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	54	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	43	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	200	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	55	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor	3.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	21	ET	10	ug/kg	EPA 8081A	EPA 3545
Peac3397-03-025-01 (17-03-2146-51)						
Lead	32.1		0.513	mg/kg	EPA 6010B	EPA 3050B
Peac3397-04-005-01 (17-03-2146-52)						
Lead	302		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	250	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	52	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	38	J,ET	22*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	170	ET	50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Peac3397-04-025-01 (17-03-2146-53)						
Lead	10.7		0.495	mg/kg	EPA 6010B	EPA 3050B
Peac3392-01-005-01 (17-03-2146-54)						
Arsenic	2.77		0.758	mg/kg	EPA 6010B	EPA 3050B
Lead	56.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	75	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	11	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Peac3392-02-005-01 (17-03-2146-56)						
Lead	73.7		0.485	mg/kg	EPA 6010B	EPA 3050B
Chlordane	380	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	18	J,ET	12*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Peac3392-02-025-01 (17-03-2146-57)						
Chlordane	41	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
Peac3392-03-005-01 (17-03-2146-58)						
Lead	89.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	700	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	110	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	3.5	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.2	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Peac3392-03-025-01 (17-03-2146-59)						
Lead	20.6		0.483	mg/kg	EPA 6010B	EPA 3050B
Chlordane	120	ET	50	ug/kg	EPA 8081A	EPA 3545
Peac3392-04-005-01 (17-03-2146-60)						
Lead	137		0.485	mg/kg	EPA 6010B	EPA 3050B
Chlordane	1500	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	130	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	26	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.6	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.1	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	14	ET	9.9	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

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Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Peac3392-04-025-01 (17-03-2146-61)						
Lead	25.2		0.524	mg/kg	EPA 6010B	EPA 3050B
Chlordane	540	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	54	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	7.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Peac3371-01-005-01 (17-03-2146-62)						
Arsenic	7.65		0.750	mg/kg	EPA 6010B	EPA 3050B
Lead	141		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	760	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	49	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	18	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	9.0	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Peac3371-01-025-01 (17-03-2146-63)						
Lead	21.6		0.476	mg/kg	EPA 6010B	EPA 3050B
Peac3371-02-005-01 (17-03-2146-64)						
Lead	70.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	380	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	59	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	21	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	4.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.4	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Peac3371-03-005-01 (17-03-2146-66)						
Lead	72.6		0.521	mg/kg	EPA 6010B	EPA 3050B
Chlordane	200	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	18	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	5.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Peac3371-04-005-01 (17-03-2146-68)						
Lead	48.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	63	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	17	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32	ET	5.0	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

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3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/29/17	

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Lind0687-02-005-01 (17-03-2146-70)						
Lead	28.6		0.485	mg/kg	EPA 6010B	EPA 3050B
Chlordane	490	J,ET	260*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	90	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	6.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	11	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Lind0687-03-005-01 (17-03-2146-71)						
Lead	45.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	970	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	88	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	24	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	6.3	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.0	J,ET	3.6*	ug/kg	EPA 8081A	EPA 3545
Avoc3436-01-005-02 (17-03-2146-73)						
Chlordane	120	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	15	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	5.3	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	8.0	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Avoc3436-01-025-01 (17-03-2146-74)						
Lead	14.9		0.510	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	3.5	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Avoc3436-02-005-02 (17-03-2146-76)						
Chlordane	690	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	43	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	59	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.9	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Avoc3436-02-025-01 (17-03-2146-77)						
Chlordane	57	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.0	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

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 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

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Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Avoc3436-03-005-02 (17-03-2146-79)						
Chlordane	420	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	47	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	78	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	29	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	2.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	11	ET	10	ug/kg	EPA 8081A	EPA 3545
Avoc3436-04-005-02 (17-03-2146-82)						
Chlordane	77	ET	50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.9	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Utah3323-01-005-01 (17-03-2146-84)						
Arsenic	4.08		0.777	mg/kg	EPA 6010B	EPA 3050B
Lead	169		0.518	mg/kg	EPA 6010B	EPA 3050B
Chlordane	330	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	21	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	38	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.5	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3323-01-025-01 (17-03-2146-85)						
Lead	69.1		0.485	mg/kg	EPA 6010B	EPA 3050B
Utah3323-02-005-01 (17-03-2146-86)						
Lead	240		0.503	mg/kg	EPA 6010B	EPA 3050B
Chlordane	210	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	26	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	440	ET	100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	190	ET	100	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Utah3323-02-025-01 (17-03-2146-87)						
Lead	4.67		0.513	mg/kg	EPA 6010B	EPA 3050B
Utah3323-03-005-01 (17-03-2146-88)						
Lead	31.4		0.481	mg/kg	EPA 6010B	EPA 3050B
Chlordane	110	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.0	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	28	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	16	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown



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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Utah3323-04-005-01 (17-03-2146-90)						
Lead	54.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	660	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	130	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	150	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.9	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3315-01-005-01 (17-03-2146-92)						
Lead	124		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	6400	ET	490	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	38	J,ET	22*	ug/kg	EPA 8081A	EPA 3545
Utah3315-01-025-01 (17-03-2146-93)						
Lead	25.3		0.498	mg/kg	EPA 6010B	EPA 3050B
Chlordane	790	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	3.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.3	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3315-02-005-01 (17-03-2146-94)						
Lead	40.4		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	1600	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	36	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	27	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Endrin Ketone	3.6	J,ET	2.5*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	11	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Utah3315-02-025-01 (17-03-2146-95)						
Chlordane	560	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.0	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.0	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3315-03-005-01 (17-03-2146-96)						
Lead	27.6		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	3500	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	190	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	76	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	87	ET	50	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	69	J,ET	37*	ug/kg	EPA 8081A	EPA 3545
Utah3315-03-025-01 (17-03-2146-97)						
Chlordane	56	ET	49	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

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3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
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<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Utah3315-04-005-01 (17-03-2146-98)						
Lead	103		0.508	mg/kg	EPA 6010B	EPA 3050B
Chlordane	9500	ET	2500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	520	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	74	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	19	J,ET	11*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	14	J,ET	11*	ug/kg	EPA 8081A	EPA 3545
Heptachlor	28	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	86	ET	50	ug/kg	EPA 8081A	EPA 3545
Utah3315-04-025-01 (17-03-2146-99)						
Lead	8.27		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	160	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Utah3348-01-005-01 (17-03-2146-100)						
Arsenic	2.20		0.758	mg/kg	EPA 6010B	EPA 3050B
Lead	37.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	490	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	5.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.5	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3348-01-025-01 (17-03-2146-101)						
Chlordane	740	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	17	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.7	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	19	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Utah3348-02-005-01 (17-03-2146-102)						
Lead	95.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	1000	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	9.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.3	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	4.2	J,ET	2.1*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.9	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3348-02-025-01 (17-03-2146-103)						
Lead	57.7		0.481	mg/kg	EPA 6010B	EPA 3050B
Chlordane	230	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.9	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.8	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.7	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2146  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/29/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Utah3348-03-005-01 (17-03-2146-104)						
Lead	25.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Chlordane	4600	ET	2500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Endrin Ketone	5.0	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	23	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	44	J,ET	18*	ug/kg	EPA 8081A	EPA 3545
Utah3348-03-025-01 (17-03-2146-105)						
Chlordane	980	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	29	ET	10	ug/kg	EPA 8081A	EPA 3545
Utah3348-04-005-01 (17-03-2146-106)						
Lead	143		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	11000	ET	2500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	29	ET	10	ug/kg	EPA 8081A	EPA 3545
Utah3348-04-025-01 (17-03-2146-107)						
Lead	21.4		0.483	mg/kg	EPA 6010B	EPA 3050B
Chlordane	9200	ET	2500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	7.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	16	ET	10	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-01-005-01	17-03-2146-2-A	03/28/17 08:01	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.91		0.718		0.957	
Lead		43.5		0.478		0.957	
Kent3433-02-005-01	17-03-2146-4-A	03/28/17 08:12	Solid	ICP 7300	04/01/17	04/03/17 10:58	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		40.3		0.488		0.976	
Kent3433-03-005-01	17-03-2146-6-A	03/28/17 08:20	Solid	ICP 7300	04/01/17	04/03/17 11:01	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		295		0.513		1.03	
Kent3433-03-025-01	17-03-2146-7-A	03/28/17 08:23	Solid	ICP 7300	04/21/17	04/21/17 13:31	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		4.95		0.518		1.04	
Kent3433-04-005-01	17-03-2146-8-A	03/28/17 08:31	Solid	ICP 7300	04/01/17	04/03/17 11:02	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		121		0.500		1.00	
Kent3433-04-025-01	17-03-2146-9-A	03/28/17 08:37	Solid	ICP 7300	04/21/17	04/21/17 13:34	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.02		0.515		1.03	
Cher0871-01-005-02	17-03-2146-11-A	03/28/17 08:54	Solid	ICP 7300	04/01/17	04/03/17 11:04	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		73.7		0.500		1.00	
Cher0871-01-025-01	17-03-2146-12-A	03/28/17 08:59	Solid	ICP 7300	04/21/17	04/21/17 13:35	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.65		0.513		1.03	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-02-005-02</b>	<b>17-03-2146-14-A</b>	<b>03/28/17 09:07</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:05</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.0		0.508		1.02	
<b>Cher0871-03-005-02</b>	<b>17-03-2146-17-A</b>	<b>03/28/17 09:19</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:07</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		51.8		0.510		1.02	
<b>Cher0871-03-025-01</b>	<b>17-03-2146-18-A</b>	<b>03/28/17 09:24</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:36</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		7.80		0.488		0.976	
<b>Cher0871-04-005-02</b>	<b>17-03-2146-20-A</b>	<b>03/28/17 09:38</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:09</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		106		0.500		1.00	
<b>Cher0871-04-025-01</b>	<b>17-03-2146-21-A</b>	<b>03/28/17 09:42</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:38</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.88		0.493		0.985	
<b>Cher0803-01-005-01</b>	<b>17-03-2146-22-A</b>	<b>03/28/17 10:12</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:11</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		6.19		0.750		1.00	
Lead		218		0.500		1.00	
<b>Cher0803-01-025-01</b>	<b>17-03-2146-23-A</b>	<b>03/28/17 10:16</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:39</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.00		0.478		0.957	
<b>Cher0803-02-005-01</b>	<b>17-03-2146-24-A</b>	<b>03/28/17 10:25</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:12</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		163		0.493		0.985	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-02-025-01</b>	<b>17-03-2146-25-A</b>	<b>03/28/17 10:30</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:40</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		26.7		0.503		1.01	
<b>Cher0803-03-005-01</b>	<b>17-03-2146-26-A</b>	<b>03/28/17 10:37</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:13</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		80.5		0.500		1.00	
<b>Cher0803-03-025-01</b>	<b>17-03-2146-27-A</b>	<b>03/28/17 10:41</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:41</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.93		0.508		1.02	
<b>Cher0803-04-005-01</b>	<b>17-03-2146-28-A</b>	<b>03/28/17 10:50</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:14</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		84.0		0.483		0.966	
<b>Cher0803-04-025-01</b>	<b>17-03-2146-29-A</b>	<b>03/28/17 10:54</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:42</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.01		0.493		0.985	
<b>Flor3415-01-005-01</b>	<b>17-03-2146-30-A</b>	<b>03/28/17 11:14</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:15</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		53.9		0.478		0.957	
<b>Flor3415-02-005-01</b>	<b>17-03-2146-32-A</b>	<b>03/28/17 11:22</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:15</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		58.5		0.515		1.03	
<b>Flor3415-03-005-01</b>	<b>17-03-2146-34-A</b>	<b>03/28/17 11:30</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 11:16</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		90.7		0.488		0.976	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-03-025-01	17-03-2146-35-A	03/28/17 11:34	Solid	ICP 7300	04/21/17	04/21/17 13:42	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.70		0.483		0.966	
Flor3415-04-005-01	17-03-2146-36-A	03/28/17 11:40	Solid	ICP 7300	04/01/17	04/03/17 11:17	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		63.4		0.508		1.02	
Flor3475-01-005-01	17-03-2146-38-A	03/28/17 11:56	Solid	ICP 7300	04/01/17	04/03/17 11:18	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		4.75		0.739		0.985	
Lead		109		0.493		0.985	
Flor3475-01-025-01	17-03-2146-39-A	03/28/17 12:04	Solid	ICP 7300	04/21/17	04/21/17 13:43	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.56		0.498		0.995	
Flor3475-02-005-01	17-03-2146-40-A	03/28/17 12:10	Solid	ICP 7300	04/01/17	04/03/17 11:19	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		88.5		0.521		1.04	
Flor3475-02-025-01	17-03-2146-41-A	03/28/17 12:14	Solid	ICP 7300	04/21/17	04/21/17 13:44	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		6.51		0.483		0.966	
Flor3475-03-005-01	17-03-2146-42-A	03/28/17 12:22	Solid	ICP 7300	04/01/17	04/03/17 11:22	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		69.1		0.483		0.966	
Flor3475-04-005-01	17-03-2146-44-A	03/28/17 12:32	Solid	ICP 7300	04/01/17	04/03/17 11:23	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		89.0		0.488		0.976	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-04-025-01	17-03-2146-45-A	03/28/17 12:36	Solid	ICP 7300	04/21/17	04/21/17 13:45	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		3.95		0.478		0.957	
Peac3397-01-005-01	17-03-2146-46-A	03/28/17 13:41	Solid	ICP 7300	04/01/17	04/03/17 11:24	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		136		0.495		0.990	
Peac3397-01-025-01	17-03-2146-47-A	03/28/17 13:46	Solid	ICP 7300	04/21/17	04/21/17 13:46	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		13.8		0.500		1.00	
Peac3397-02-005-01	17-03-2146-48-A	03/28/17 13:54	Solid	ICP 7300	04/01/17	04/03/17 11:25	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		169		0.505		1.01	
Peac3397-02-025-01	17-03-2146-49-A	03/28/17 13:59	Solid	ICP 7300	04/21/17	04/21/17 13:48	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		34.2		0.485		0.971	
Peac3397-03-005-01	17-03-2146-50-A	03/28/17 14:04	Solid	ICP 7300	04/01/17	04/03/17 11:25	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		194		0.505		1.01	
Peac3397-03-025-01	17-03-2146-51-A	03/28/17 14:07	Solid	ICP 7300	04/21/17	04/21/17 13:49	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		32.1		0.513		1.03	
Peac3397-04-005-01	17-03-2146-52-A	03/28/17 14:10	Solid	ICP 7300	04/01/17	04/03/17 11:26	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		302		0.500		1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-04-025-01	17-03-2146-53-A	03/28/17 14:13	Solid	ICP 7300	04/21/17	04/21/17 13:50	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		10.7		0.495		0.990	
Peac3392-01-005-01	17-03-2146-54-A	03/28/17 14:25	Solid	ICP 7300	04/01/17	04/03/17 11:27	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.77		0.758		1.01	
Lead		56.8		0.505		1.01	
Peac3392-02-005-01	17-03-2146-56-A	03/28/17 14:34	Solid	ICP 7300	04/01/17	04/03/17 11:28	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		73.7		0.485		0.971	
Peac3392-03-005-01	17-03-2146-58-A	03/28/17 14:40	Solid	ICP 7300	04/01/17	04/03/17 11:29	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		89.1		0.505		1.01	
Peac3392-03-025-01	17-03-2146-59-A	03/28/17 14:43	Solid	ICP 7300	04/21/17	04/21/17 13:51	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		20.6		0.483		0.966	
Peac3392-04-005-01	17-03-2146-60-A	03/28/17 14:47	Solid	ICP 7300	04/01/17	04/03/17 11:30	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		137		0.485		0.971	
Peac3392-04-025-01	17-03-2146-61-A	03/28/17 14:51	Solid	ICP 7300	04/21/17	04/21/17 13:52	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.2		0.524		1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-01-005-01	17-03-2146-62-A	03/28/17 15:07	Solid	ICP 7300	04/01/17	04/03/17 11:33	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		7.65		0.750		1.00	
Lead		141		0.500		1.00	
Peac3371-01-025-01	17-03-2146-63-A	03/28/17 15:11	Solid	ICP 7300	04/21/17	04/21/17 13:53	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		21.6		0.476		0.952	
Peac3371-02-005-01	17-03-2146-64-A	03/28/17 15:16	Solid	ICP 7300	04/01/17	04/03/17 11:34	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		70.3		0.500		1.00	
Peac3371-03-005-01	17-03-2146-66-A	03/28/17 15:24	Solid	ICP 7300	04/01/17	04/03/17 11:35	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		72.6		0.521		1.04	
Peac3371-04-005-01	17-03-2146-68-A	03/28/17 15:33	Solid	ICP 7300	04/01/17	04/03/17 11:36	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		48.9		0.505		1.01	
Lind0687-02-005-01	17-03-2146-70-A	03/28/17 16:06	Solid	ICP 7300	04/01/17	04/03/17 11:36	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		28.6		0.485		0.971	
Lind0687-03-005-01	17-03-2146-71-A	03/28/17 16:15	Solid	ICP 7300	04/01/17	04/03/17 11:37	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.8		0.500		1.00	
Avoc3436-01-025-01	17-03-2146-74-A	03/29/17 08:07	Solid	ICP 7300	04/21/17	04/21/17 13:53	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		14.9		0.510		1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-01-005-01	17-03-2146-84-A	03/29/17 08:50	Solid	ICP 7300	04/01/17	04/03/17 11:44	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		4.08		0.777		1.04	
Lead		169		0.518		1.04	
Utah3323-01-025-01	17-03-2146-85-A	03/29/17 08:56	Solid	ICP 7300	04/21/17	04/21/17 13:54	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		69.1		0.485		0.971	
Utah3323-02-005-01	17-03-2146-86-A	03/29/17 09:02	Solid	ICP 7300	04/01/17	04/03/17 11:45	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		240		0.503		1.01	
Utah3323-02-025-01	17-03-2146-87-A	03/29/17 09:06	Solid	ICP 7300	04/21/17	04/21/17 13:55	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		4.67		0.513		1.03	
Utah3323-03-005-01	17-03-2146-88-A	03/29/17 09:11	Solid	ICP 7300	04/01/17	04/03/17 11:45	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		31.4		0.481		0.962	
Utah3323-04-005-01	17-03-2146-90-A	03/29/17 09:22	Solid	ICP 7300	04/01/17	04/03/17 11:46	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		54.9		0.510		1.02	
Utah3315-01-005-01	17-03-2146-92-A	03/29/17 09:40	Solid	ICP 7300	04/01/17	04/03/17 11:47	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		124		0.500		1.00	
Utah3315-01-025-01	17-03-2146-93-A	03/29/17 09:43	Solid	ICP 7300	04/21/17	04/21/17 13:56	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.3		0.498		0.995	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-02-005-01	17-03-2146-94-A	03/29/17 09:50	Solid	ICP 7300	04/01/17	04/03/17 11:48	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		40.4		0.510		1.02	
Utah3315-03-005-01	17-03-2146-96-A	03/29/17 10:02	Solid	ICP 7300	04/01/17	04/03/17 11:49	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		27.6		0.510		1.02	
Utah3315-04-005-01	17-03-2146-98-A	03/29/17 10:11	Solid	ICP 7300	04/01/17	04/03/17 11:49	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		103		0.508		1.02	
Utah3315-04-025-01	17-03-2146-99-A	03/29/17 10:15	Solid	ICP 7300	04/21/17	04/21/17 13:59	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		8.27		0.493		0.985	
Utah3348-01-005-01	17-03-2146-100-A	03/29/17 10:35	Solid	ICP 7300	04/01/17	04/03/17 11:50	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.20		0.758		1.01	
Lead		37.6		0.505		1.01	
Utah3348-02-005-01	17-03-2146-102-A	03/29/17 10:43	Solid	ICP 7300	04/01/17	04/03/17 11:51	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		95.0		0.495		0.990	
Utah3348-02-025-01	17-03-2146-103-A	03/29/17 10:47	Solid	ICP 7300	04/21/17	04/21/17 14:00	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		57.7		0.481		0.962	
Utah3348-03-005-01	17-03-2146-104-A	03/29/17 10:51	Solid	ICP 7300	04/01/17	04/03/17 11:54	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.9		0.510		1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-005-01	17-03-2146-106-A	03/29/17 11:02	Solid	ICP 7300	04/01/17	04/03/17 11:55	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		143		0.495		0.990	
Utah3348-04-025-01	17-03-2146-107-A	03/29/17 11:06	Solid	ICP 7300	04/21/17	04/21/17 14:01	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		21.4		0.483		0.966	
Method Blank	097-01-002-24550	N/A	Solid	ICP 7300	04/01/17	04/03/17 10:44	170401L04
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.750		1.00	
Lead		ND		0.500		1.00	
Method Blank	097-01-002-24551	N/A	Solid	ICP 7300	04/01/17	04/03/17 10:46	170401L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.718		0.957	
Lead		ND		0.478		0.957	
Method Blank	097-01-002-24552	N/A	Solid	ICP 7300	04/01/17	04/03/17 10:51	170401L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.785		1.05	
Lead		ND		0.524		1.05	
Method Blank	097-01-002-24700	N/A	Solid	ICP 7300	04/21/17	04/21/17 13:27	170421L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.490		0.980	
Method Blank	097-01-002-24701	N/A	Solid	ICP 7300	04/21/17	04/21/17 13:28	170421L02
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.481		0.962	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-01-005-01	17-03-2146-2-A	03/28/17 08:01	Solid	GC 51	04/18/17	04/19/17 15:51	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	68	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	7.6	5.0	2.2	1.00	ET
4,4'-DDT	6.7	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-02-005-01	17-03-2146-4-A	03/28/17 08:12	Solid	GC 51	04/18/17	04/19/17 16:05	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	810	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	6.2	5.0	2.2	1.00	ET
4,4'-DDT	6.7	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	3.5	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	17	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-03-005-01	17-03-2146-6-A	03/28/17 08:20	Solid	GC 51	04/18/17	04/19/17 16:19	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	350	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	13	5.0	2.2	1.00	ET
4,4'-DDT	15	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 4 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-03-005-01	17-03-2146-6-A	03/28/17 08:20	Solid	GC 51	04/18/17	04/20/17 11:52	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Dieldrin	76	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	77	24-168			
2,4,5,6-Tetrachloro-m-Xylene	75	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-04-005-01	17-03-2146-8-A	03/28/17 08:31	Solid	GC 51	04/18/17	04/19/17 16:34	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	310	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDT	27	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	19	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	40	24-168	
2,4,5,6-Tetrachloro-m-Xylene	35	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 6 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Kent3433-04-005-01	17-03-2146-8-A	03/28/17 08:31	Solid	GC 51	04/18/17	04/22/17 14:15	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	73	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	43	24-168	
2,4,5,6-Tetrachloro-m-Xylene	41	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-01-005-02</b>	<b>17-03-2146-11-A</b>	<b>03/28/17 08:54</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/19/17 16:48</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	5.4	5.0	2.4	1.00	ET
4,4'-DDT	12	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	57	24-168	
2,4,5,6-Tetrachloro-m-Xylene	53	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 8 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-01-005-02</b>	<b>17-03-2146-11-A</b>	<b>03/28/17 08:54</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/22/17 14:29</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	52	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	60	24-168			
2,4,5,6-Tetrachloro-m-Xylene	59	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-02-005-02</b>	<b>17-03-2146-14-A</b>	<b>03/28/17 09:07</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/19/17 17:02</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	6.5	5.0	2.4	1.00	ET
4,4'-DDE	35	5.0	2.2	1.00	ET
4,4'-DDT	7.9	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	35	24-168	
2,4,5,6-Tetrachloro-m-Xylene	34	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-03-005-02</b>	<b>17-03-2146-17-A</b>	<b>03/28/17 09:19</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/19/17 17:16</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	37	50	26	1.00	J,ET
4,4'-DDD	6.7	5.0	2.4	1.00	ET
4,4'-DDE	15	5.0	2.2	1.00	ET
4,4'-DDT	25	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	3.3	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0871-04-005-02</b>	<b>17-03-2146-20-A</b>	<b>03/28/17 09:38</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/24/17 11:00</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	24	5.0	2.2	1.00	ET
4,4'-DDT	13	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	50	24-168	
2,4,5,6-Tetrachloro-m-Xylene	41	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-01-005-01</b>	<b>17-03-2146-22-A</b>	<b>03/28/17 10:12</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 06:10</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	430	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDT	30	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	5.1	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-01-005-01</b>	<b>17-03-2146-22-A</b>	<b>03/28/17 10:12</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 12:50</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	38	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	74	24-168			
2,4,5,6-Tetrachloro-m-Xylene	61	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-02-005-01</b>	<b>17-03-2146-24-A</b>	<b>03/28/17 10:25</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 06:25</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	18	5.0	2.2	1.00	ET
4,4'-DDT	11	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	8.6	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	7.6	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 15 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-02-005-01</b>	<b>17-03-2146-24-A</b>	<b>03/28/17 10:25</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 13:04</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	890	250	130	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	88	24-168			
2,4,5,6-Tetrachloro-m-Xylene	66	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-03-005-01</b>	<b>17-03-2146-26-A</b>	<b>03/28/17 10:37</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 06:39</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	280	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	2.3	5.0	2.2	1.00	J,ET
4,4'-DDT	2.5	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	7.5	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	38	24-168	
2,4,5,6-Tetrachloro-m-Xylene	31	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-04-005-01</b>	<b>17-03-2146-28-A</b>	<b>03/28/17 10:50</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 05:17</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	3.2	5.0	2.3	1.00	J,ET
4,4'-DDT	7.3	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	6.0	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	165	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 18 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Cher0803-04-005-01</b>	<b>17-03-2146-28-A</b>	<b>03/28/17 10:50</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 11:33</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	53	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	148	24-168			
2,4,5,6-Tetrachloro-m-Xylene	92	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-01-005-01	17-03-2146-30-A	03/28/17 11:14	Solid	GC 51	04/18/17	04/20/17 06:53	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	96	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	6.9	5.0	2.2	1.00	ET
4,4'-DDT	2.7	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	4.4	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	71	24-168	
2,4,5,6-Tetrachloro-m-Xylene	51	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-02-005-01	17-03-2146-32-A	03/28/17 11:22	Solid	GC 51	04/18/17	04/20/17 07:07	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	10	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	37	24-168	
2,4,5,6-Tetrachloro-m-Xylene	32	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-03-005-01	17-03-2146-34-A	03/28/17 11:30	Solid	GC 41	04/19/17	04/21/17 05:32	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	2.7	5.0	2.2	1.00	J,ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	28	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-04-005-01	17-03-2146-36-A	03/28/17 11:40	Solid	GC 51	04/18/17	04/20/17 07:22	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	540	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDT	40	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	7.5	5.0	2.2	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	149	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3415-04-005-01	17-03-2146-36-A	03/28/17 11:40	Solid	GC 51	04/18/17	04/20/17 13:18	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	80	25	11	5.00	ET
Heptachlor Epoxide	56	50	18	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	146	24-168	
2,4,5,6-Tetrachloro-m-Xylene	55	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-01-005-01	17-03-2146-38-A	03/28/17 11:56	Solid	GC 51	04/18/17	04/20/17 07:36	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	140	50	26	1.00	ET
4,4'-DDD	5.5	5.0	2.4	1.00	ET
4,4'-DDE	24	5.0	2.2	1.00	ET
4,4'-DDT	7.1	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-02-005-01	17-03-2146-40-A	03/28/17 12:10	Solid	GC 51	04/18/17	04/20/17 07:50	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	400	50	26	1.00	ET
4,4'-DDD	35	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	6.1	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	14	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	60	24-168	
2,4,5,6-Tetrachloro-m-Xylene	43	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	Date Received: 03/29/17 Work Order: 17-03-2146 Preparation: EPA 3545 Method: EPA 8081A Units: ug/kg
Project: UC Riverside North District / 128685-006 2.0	Page 26 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-02-005-01	17-03-2146-40-A	03/28/17 12:10	Solid	GC 51	04/18/17	04/20/17 13:47	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	240	100	44	20.0	ET
4,4'-DDT	160	100	44	20.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	54	24-168	
2,4,5,6-Tetrachloro-m-Xylene	43	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-03-005-01	17-03-2146-42-A	03/28/17 12:22	Solid	GC 51	04/18/17	04/20/17 08:05	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	260	50	26	1.00	ET
4,4'-DDD	23	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	55	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 28 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-03-005-01	17-03-2146-42-A	03/28/17 12:22	Solid	GC 51	04/18/17	04/20/17 14:01	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	46	25	11	5.00	ET
4,4'-DDT	120	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	24-168	
2,4,5,6-Tetrachloro-m-Xylene	56	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Flor3475-04-005-01	17-03-2146-44-A	03/28/17 12:32	Solid	GC 51	04/18/17	04/20/17 08:19	170418L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	45	50	26	1.00	J,ET
4,4'-DDD	2.4	5.0	2.4	1.00	J,ET
4,4'-DDE	12	5.0	2.2	1.00	ET
4,4'-DDT	7.9	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-01-005-01	17-03-2146-46-A	03/28/17 13:41	Solid	GC 44	04/19/17	04/21/17 05:41	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	380	50	26	1.00	ET
4,4'-DDD	39	5.0	2.3	1.00	ET
4,4'-DDE	22	5.0	2.2	1.00	ET
4,4'-DDT	36	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	25	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	5.9	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-02-005-01	17-03-2146-48-A	03/28/17 13:54	Solid	GC 44	04/20/17	04/22/17 09:17	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	880	50	26	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	15	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	10	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

### Analytical Report

Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	Date Received: 03/29/17 Work Order: 17-03-2146 Preparation: EPA 3545 Method: EPA 8081A Units: ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-02-005-01	17-03-2146-48-A	03/28/17 13:54	Solid	GC 44	04/20/17	04/22/17 10:43	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	81	25	12	5.00	ET
4,4'-DDE	120	25	11	5.00	ET
4,4'-DDT	55	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Peac3397-03-005-01</b>	<b>17-03-2146-50-A</b>	<b>03/28/17 14:04</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/19/17</b>	<b>04/21/17 05:55</b>	<b>170419L04</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	930	50	26	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	3.4	5.0	2.2	1.00	J,ET
Heptachlor Epoxide	21	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	118	24-168	
2,4,5,6-Tetrachloro-m-Xylene	82	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-03-005-01	17-03-2146-50-A	03/28/17 14:04	Solid	GC 44	04/19/17	04/22/17 06:13	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	54	25	12	5.00	ET
4,4'-DDE	43	25	11	5.00	ET
4,4'-DDT	200	25	11	5.00	ET
Dieldrin	55	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-04-005-01	17-03-2146-52-A	03/28/17 14:10	Solid	GC 44	04/19/17	04/21/17 06:09	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	250	50	26	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	22	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 36 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3397-04-005-01	17-03-2146-52-A	03/28/17 14:10	Solid	GC 44	04/19/17	04/22/17 06:41	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	52	50	24	10.0	ET
4,4'-DDE	38	50	22	10.0	J,ET
4,4'-DDT	170	50	22	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	24-168	
2,4,5,6-Tetrachloro-m-Xylene	84	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-01-005-01	17-03-2146-54-A	03/28/17 14:25	Solid	GC 44	04/19/17	04/21/17 06:24	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	75	50	26	1.00	ET
4,4'-DDD	11	5.0	2.4	1.00	ET
4,4'-DDE	2.8	5.0	2.2	1.00	J,ET
4,4'-DDT	4.8	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-01-025-01	17-03-2146-55-A	03/28/17 14:28	Solid	GC 44	04/19/17	04/21/17 06:38	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	74	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-02-005-01	17-03-2146-56-A	03/28/17 14:34	Solid	GC 44	04/19/17	04/21/17 06:52	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	380	50	26	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	4.4	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	4.8	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-02-005-01	17-03-2146-56-A	03/28/17 14:34	Solid	GC 44	04/19/17	04/22/17 06:55	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	18	25	12	5.00	J,ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	45	24-168			
2,4,5,6-Tetrachloro-m-Xylene	35	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-02-025-01	17-03-2146-57-A	03/28/17 14:36	Solid	GC 44	04/19/17	04/21/17 07:06	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	41	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-03-005-01	17-03-2146-58-A	03/28/17 14:40	Solid	GC 44	04/19/17	04/21/17 07:21	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDE	9.2	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	3.5	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	5.2	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 43 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-03-005-01	17-03-2146-58-A	03/28/17 14:40	Solid	GC 44	04/19/17	04/22/17 07:10	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	700	500	260	10.0	ET
4,4'-DDD	110	50	24	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	188	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	152	25-145	1,2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-03-025-01	17-03-2146-59-A	03/28/17 14:43	Solid	GC 44	04/19/17	04/21/17 07:35	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	120	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-04-005-01	17-03-2146-60-A	03/28/17 14:47	Solid	GC 44	04/19/17	04/21/17 07:49	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDE	26	5.0	2.2	1.00	ET
4,4'-DDT	4.6	5.0	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	4.1	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	14	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 46 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-04-005-01	17-03-2146-60-A	03/28/17 14:47	Solid	GC 44	04/19/17	04/22/17 07:24	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	1500	500	260	10.0	ET
4,4'-DDD	130	50	23	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-04-025-01	17-03-2146-61-A	03/28/17 14:51	Solid	GC 44	04/19/17	04/21/17 08:03	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	540	50	26	1.00	ET
4,4'-DDE	7.3	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 48 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3392-04-025-01	17-03-2146-61-A	03/28/17 14:51	Solid	GC 44	04/19/17	04/22/17 07:38	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	54	25	12	5.00	ET
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	60	24-168			
2,4,5,6-Tetrachloro-m-Xylene	39	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-01-005-01	17-03-2146-62-A	03/28/17 15:07	Solid	GC 44	04/19/17	04/21/17 08:17	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	760	50	26	1.00	ET
4,4'-DDE	18	5.0	2.2	1.00	ET
4,4'-DDT	4.2	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	4.2	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	9.0	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	24-168	
2,4,5,6-Tetrachloro-m-Xylene	59	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 50 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-01-005-01	17-03-2146-62-A	03/28/17 15:07	Solid	GC 44	04/19/17	04/22/17 07:52	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	49	25	12	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	98	24-168			
2,4,5,6-Tetrachloro-m-Xylene	71	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-02-005-01	17-03-2146-64-A	03/28/17 15:16	Solid	GC 44	04/19/17	04/21/17 08:31	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	380	50	26	1.00	ET
4,4'-DDE	21	5.0	2.2	1.00	ET
4,4'-DDT	4.3	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	5.3	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	8.4	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-02-005-01	17-03-2146-64-A	03/28/17 15:16	Solid	GC 44	04/19/17	04/22/17 08:06	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	59	25	12	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	59	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-03-005-01	17-03-2146-66-A	03/28/17 15:24	Solid	GC 44	04/19/17	04/21/17 08:46	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	200	50	26	1.00	ET
4,4'-DDD	18	5.0	2.3	1.00	ET
4,4'-DDE	5.9	5.0	2.2	1.00	ET
4,4'-DDT	5.3	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac3371-04-005-01	17-03-2146-68-A	03/28/17 15:33	Solid	GC 44	04/19/17	04/21/17 09:00	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	63	50	26	1.00	ET
4,4'-DDD	17	5.0	2.3	1.00	ET
4,4'-DDE	32	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-02-005-01	17-03-2146-70-A	03/28/17 16:06	Solid	GC 44	04/19/17	04/21/17 09:14	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDE	6.9	5.0	2.2	1.00	ET
4,4'-DDT	2.4	5.0	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	11	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	74	24-168	
2,4,5,6-Tetrachloro-m-Xylene	60	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-02-005-01	17-03-2146-70-A	03/28/17 16:06	Solid	GC 44	04/19/17	04/22/17 08:21	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	490	500	260	10.0	J,ET
4,4'-DDD	90	50	23	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	199	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	122	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-03-005-01	17-03-2146-71-A	03/28/17 16:15	Solid	GC 44	04/19/17	04/21/17 09:28	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	970	49	26	1.00	ET
4,4'-DDE	24	4.9	2.2	1.00	ET
4,4'-DDT	ND	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	6.3	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	6.0	9.9	3.6	1.00	J,ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0687-03-005-01	17-03-2146-71-A	03/28/17 16:15	Solid	GC 44	04/19/17	04/22/17 08:35	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	88	49	23	10.0	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	86	24-168			
2,4,5,6-Tetrachloro-m-Xylene	64	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Avoc3436-01-005-02</b>	<b>17-03-2146-73-A</b>	<b>03/29/17 08:00</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/19/17</b>	<b>04/21/17 09:42</b>	<b>170419L04</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	120	49	26	1.00	ET
4,4'-DDD	15	4.9	2.3	1.00	ET
4,4'-DDE	5.3	4.9	2.2	1.00	ET
4,4'-DDT	ND	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	8.0	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	80	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-01-025-01	17-03-2146-74-A	03/29/17 08:07	Solid	GC 44	04/19/17	04/22/17 08:49	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	3.5	5.0	2.3	1.00	J,ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.4	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-02-005-02	17-03-2146-76-A	03/29/17 08:13	Solid	GC 51	04/19/17	04/21/17 05:43	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	690	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	14	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	7.9	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	43	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-02-005-02	17-03-2146-76-A	03/29/17 08:13	Solid	GC 51	04/19/17	04/21/17 14:21	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	43	25	11	5.00	ET
Dieldrin	59	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	66	24-168	
2,4,5,6-Tetrachloro-m-Xylene	42	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-02-025-01	17-03-2146-77-A	03/29/17 08:17	Solid	GC 51	04/19/17	04/21/17 05:57	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	57	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	5.0	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	5.2	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	57	24-168	
2,4,5,6-Tetrachloro-m-Xylene	47	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-03-005-02	17-03-2146-79-A	03/29/17 08:21	Solid	GC 44	04/20/17	04/22/17 09:32	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	420	50	26	1.00	ET
4,4'-DDT	20	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	29	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	2.2	5.0	2.2	1.00	J,ET
Heptachlor Epoxide	11	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	80	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 65 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-03-005-02	17-03-2146-79-A	03/29/17 08:21	Solid	GC 44	04/20/17	04/22/17 13:47	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	47	25	12	5.00	ET
4,4'-DDE	78	25	11	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	95	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-03-025-01	17-03-2146-80-A	03/29/17 08:26	Solid	GC 51	04/19/17	04/21/17 06:12	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-04-005-02	17-03-2146-82-A	03/29/17 08:31	Solid	GC 51	04/19/17	04/21/17 06:26	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	77	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.9	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	40	24-168	
2,4,5,6-Tetrachloro-m-Xylene	25	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3436-04-025-01	17-03-2146-83-A	03/29/17 08:36	Solid	GC 51	04/19/17	04/21/17 16:16	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	ND	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDE	ND	4.9	2.2	1.00	ET
4,4'-DDT	ND	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	ND	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	60	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-01-005-01	17-03-2146-84-A	03/29/17 08:50	Solid	GC 51	04/19/17	04/21/17 06:54	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	330	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	21	5.0	2.2	1.00	ET
4,4'-DDT	38	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	6.5	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-02-005-01	17-03-2146-86-A	03/29/17 09:02	Solid	GC 51	04/19/17	04/21/17 07:09	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	210	50	26	1.00	ET
4,4'-DDD	26	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	5.6	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	51	24-168	
2,4,5,6-Tetrachloro-m-Xylene	45	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-02-005-01	17-03-2146-86-A	03/29/17 09:02	Solid	GC 51	04/19/17	04/24/17 10:22	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	440	100	44	20.0	ET
4,4'-DDT	190	100	44	20.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	56	24-168	
2,4,5,6-Tetrachloro-m-Xylene	50	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-03-005-01	17-03-2146-88-A	03/29/17 09:11	Solid	GC 51	04/19/17	04/21/17 07:23	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	110	49	26	1.00	ET
4,4'-DDD	4.0	4.9	2.3	1.00	J,ET
4,4'-DDE	28	4.9	2.2	1.00	ET
4,4'-DDT	16	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	2.4	4.9	2.2	1.00	J,ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	41	24-168	
2,4,5,6-Tetrachloro-m-Xylene	29	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-04-005-01	17-03-2146-90-A	03/29/17 09:22	Solid	GC 51	04/19/17	04/21/17 07:37	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	660	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	8.9	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	24-168	
2,4,5,6-Tetrachloro-m-Xylene	53	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3323-04-005-01	17-03-2146-90-A	03/29/17 09:22	Solid	GC 51	04/19/17	04/21/17 15:04	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	130	25	11	5.00	ET
4,4'-DDT	150	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	69	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-01-005-01	17-03-2146-92-A	03/29/17 09:40	Solid	GC 51	04/19/17	04/21/17 15:18	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	49	22	10.0	ET
Alpha-BHC	ND	99	36	10.0	ET
Beta-BHC	ND	49	24	10.0	ET
Chlordane	6400	490	260	10.0	ET
4,4'-DDD	ND	49	23	10.0	ET
4,4'-DDE	38	49	22	10.0	J,ET
4,4'-DDT	ND	49	22	10.0	ET
Delta-BHC	ND	99	43	10.0	ET
Dieldrin	ND	49	22	10.0	ET
Endosulfan I	ND	49	20	10.0	ET
Endosulfan II	ND	49	23	10.0	ET
Endosulfan Sulfate	ND	49	26	10.0	ET
Endrin	ND	49	23	10.0	ET
Endrin Aldehyde	ND	49	30	10.0	ET
Endrin Ketone	ND	49	25	10.0	ET
Gamma-BHC	ND	49	22	10.0	ET
Heptachlor	ND	49	21	10.0	ET
Heptachlor Epoxide	ND	99	36	10.0	ET
Methoxychlor	ND	49	27	10.0	ET
Toxaphene	ND	990	440	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	24-168	
2,4,5,6-Tetrachloro-m-Xylene	52	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-01-025-01	17-03-2146-93-A	03/29/17 09:43	Solid	GC 51	04/19/17	04/21/17 08:06	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	790	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	3.4	5.0	2.2	1.00	J,ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	5.3	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-02-005-01	17-03-2146-94-A	03/29/17 09:50	Solid	GC 51	04/19/17	04/21/17 08:20	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	36	5.0	2.2	1.00	ET
4,4'-DDT	5.3	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	27	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	3.6	5.0	2.5	1.00	J,ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	11	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-02-005-01	17-03-2146-94-A	03/29/17 09:50	Solid	GC 51	04/19/17	04/21/17 15:47	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	1600	500	260	10.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	73	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-02-025-01	17-03-2146-95-A	03/29/17 09:54	Solid	GC 51	04/19/17	04/21/17 08:34	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	560	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	9.9	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	5.0	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	4.0	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-03-005-01	17-03-2146-96-A	03/29/17 10:02	Solid	GC 44	04/20/17	04/24/17 15:13	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	50	22	10.0	ET
Alpha-BHC	ND	100	37	10.0	ET
Beta-BHC	ND	50	25	10.0	ET
Chlordane	3500	500	260	10.0	ET
4,4'-DDD	190	50	24	10.0	ET
4,4'-DDE	76	50	22	10.0	ET
4,4'-DDT	87	50	22	10.0	ET
Delta-BHC	ND	100	44	10.0	ET
Dieldrin	ND	50	22	10.0	ET
Endosulfan I	ND	50	20	10.0	ET
Endosulfan II	ND	50	24	10.0	ET
Endosulfan Sulfate	ND	50	26	10.0	ET
Endrin	ND	50	24	10.0	ET
Endrin Aldehyde	ND	50	30	10.0	ET
Endrin Ketone	ND	50	25	10.0	ET
Gamma-BHC	ND	50	22	10.0	ET
Heptachlor	ND	50	22	10.0	ET
Heptachlor Epoxide	69	100	37	10.0	J,ET
Methoxychlor	ND	50	27	10.0	ET
Toxaphene	ND	1000	450	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	159	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-03-025-01	17-03-2146-97-A	03/29/17 10:06	Solid	GC 51	04/19/17	04/21/17 08:49	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	56	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDE	ND	4.9	2.2	1.00	ET
4,4'-DDT	ND	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	ND	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-04-005-01	17-03-2146-98-A	03/29/17 10:11	Solid	GC 44	04/20/17	04/22/17 10:14	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	18	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
4,4'-DDE	74	25	11	5.00	ET
4,4'-DDT	19	25	11	5.00	J,ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	14	25	11	5.00	J,ET
Endosulfan I	ND	25	9.9	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	13	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	28	25	11	5.00	ET
Heptachlor Epoxide	86	50	18	5.00	ET
Methoxychlor	ND	25	14	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	177	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	115	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 83 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-04-005-01	17-03-2146-98-A	03/29/17 10:11	Solid	GC 44	04/20/17	04/22/17 10:28	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	9500	2500	1300	50.0	ET
4,4'-DDD	520	250	120	50.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	232	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	129	25-145	



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3315-04-025-01	17-03-2146-99-A	03/29/17 10:15	Solid	GC 51	04/19/17	04/21/17 09:03	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	160	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	2.8	5.0	2.2	1.00	J,ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-01-005-01	17-03-2146-100-A	03/29/17 10:35	Solid	GC 51	04/19/17	04/21/17 09:17	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	490	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	5.2	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	6.5	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	27	24-168	
2,4,5,6-Tetrachloro-m-Xylene	23	25-145	2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-01-025-01	17-03-2146-101-A	03/29/17 10:38	Solid	GC 51	04/19/17	04/21/17 09:31	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	740	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	17	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.7	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	19	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	24-168	
2,4,5,6-Tetrachloro-m-Xylene	51	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-02-005-01	17-03-2146-102-A	03/29/17 10:43	Solid	GC 51	04/18/17	04/20/17 08:48	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	14	5.0	2.2	1.00	ET
4,4'-DDT	9.9	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	9.3	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	4.2	5.0	2.1	1.00	J,ET
Heptachlor Epoxide	5.9	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 88 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-02-005-01	17-03-2146-102-A	03/29/17 10:43	Solid	GC 51	04/18/17	04/21/17 16:01	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	1000	250	130	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	76	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 89 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-02-025-01	17-03-2146-103-A	03/29/17 10:47	Solid	GC 51	04/18/17	04/20/17 09:02	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	230	50	26	1.00	ET
4,4'-DDD	3.9	5.0	2.4	1.00	J,ET
4,4'-DDE	2.3	5.0	2.2	1.00	J,ET
4,4'-DDT	6.8	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	4.7	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	59	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-03-005-01	17-03-2146-104-A	03/29/17 10:51	Solid	GC 51	04/18/17	04/20/17 09:16	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	20	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	20	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	5.0	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	23	5.0	2.1	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	24-168	
2,4,5,6-Tetrachloro-m-Xylene	56	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-03-005-01	17-03-2146-104-A	03/29/17 10:51	Solid	GC 51	04/18/17	04/20/17 14:15	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Heptachlor Epoxide	44	50	18	5.00	J,ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	24-168	
2,4,5,6-Tetrachloro-m-Xylene	55	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-03-005-01	17-03-2146-104-A	03/29/17 10:51	Solid	GC 51	04/18/17	04/20/17 14:30	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	4600	2500	1300	50.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-03-025-01	17-03-2146-105-A	03/29/17 10:55	Solid	GC 41	04/19/17	04/21/17 05:47	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	2.8	5.0	2.2	1.00	J,ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	2.2	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	29	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	139	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 93 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-03-025-01	17-03-2146-105-A	03/29/17 10:55	Solid	GC 41	04/19/17	04/21/17 11:48	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	980	250	130	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	153	24-168			
2,4,5,6-Tetrachloro-m-Xylene	91	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-005-01	17-03-2146-106-A	03/29/17 11:02	Solid	GC 41	04/19/17	04/21/17 06:02	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	20	5.0	2.2	1.00	ET
4,4'-DDT	22	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	20	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	14	5.0	2.2	1.00	ET
Heptachlor Epoxide	29	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	155	24-168	
2,4,5,6-Tetrachloro-m-Xylene	98	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 95 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-005-01	17-03-2146-106-A	03/29/17 11:02	Solid	GC 41	04/19/17	04/24/17 11:29	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	11000	2500	1300	50.0	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	157	24-168			
2,4,5,6-Tetrachloro-m-Xylene	141	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-025-01	17-03-2146-107-A	03/29/17 11:06	Solid	GC 41	04/19/17	04/21/17 06:17	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	22	5.0	2.2	1.00	ET
4,4'-DDT	14	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	12	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	7.9	5.0	2.2	1.00	ET
Heptachlor Epoxide	16	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	65	24-168	
2,4,5,6-Tetrachloro-m-Xylene	38	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 97 of 103

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3348-04-025-01	17-03-2146-107-A	03/29/17 11:06	Solid	GC 41	04/19/17	04/24/17 11:44	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Chlordane	9200	2500	1300	50.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	66	24-168	
2,4,5,6-Tetrachloro-m-Xylene	48	25-145	

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-537-2668</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/19/17 14:53</b>	<b>170418L12</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	109	24-168			
2,4,5,6-Tetrachloro-m-Xylene	96	25-145			

[Return to Contents](#)

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/29/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2146
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2669	N/A	Solid	GC 51	04/18/17	04/21/17 14:07	170418L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	69	24-168	
2,4,5,6-Tetrachloro-m-Xylene	59	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2670	N/A	Solid	GC 41	04/19/17	04/20/17 15:04	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	102	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2673	N/A	Solid	GC 44	04/19/17	04/21/17 05:13	170419L04

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2671	N/A	Solid	GC 51	04/19/17	04/21/17 05:15	170419L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	78	24-168			
2,4,5,6-Tetrachloro-m-Xylene	64	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2674	N/A	Solid	GC 44	04/20/17	04/21/17 11:08	170420L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	92	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Kent3433-01-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401S04
Kent3433-01-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:53	170401S04
Kent3433-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:54	170401S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.907	25.00	27.69	99	28.93	104	75-125	4	0-20	
Lead	43.48	25.00	64.21	83	68.71	101	75-125	7	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Flor3475-01-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 11:18	170401S05
Flor3475-01-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:55	170401S05
Flor3475-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:55	170401S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	4.753	25.00	29.18	98	30.23	102	75-125	4	0-20	
Lead	109.3	25.00	124.6	4X	132.8	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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**Quality Control - Spike/Spike Duplicate**

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3348-04-005-01	Sample	Solid	ICP 7300	04/01/17	04/03/17 11:55	170401S06
Utah3348-04-005-01	Matrix Spike	Solid	ICP 7300	04/01/17	04/03/17 10:56	170401S06
Utah3348-04-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/01/17	04/03/17 10:57	170401S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	4.029	25.00	31.33	109	29.32	101	75-125	7	0-20	
Lead	143.0	25.00	202.9	4X	171.2	4X	75-125	4X	0-20	Q

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Kent3433-03-025-01	Sample	Solid	ICP 7300	04/21/17	04/21/17 13:31	170421S01
Kent3433-03-025-01	Matrix Spike	Solid	ICP 7300	04/21/17	04/21/17 13:32	170421S01
Kent3433-03-025-01	Matrix Spike Duplicate	Solid	ICP 7300	04/21/17	04/21/17 13:33	170421S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	4.945	25.00	29.89	100	31.96	108	75-125	7	0-20	

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RPD: Relative Percent Difference. CL: Control Limits





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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3348-04-025-01	Sample	Solid	ICP 7300	04/21/17	04/21/17 14:01	170421S02
Utah3348-04-025-01	Matrix Spike	Solid	ICP 7300	04/21/17	04/21/17 14:01	170421S02
Utah3348-04-025-01	Matrix Spike Duplicate	Solid	ICP 7300	04/21/17	04/21/17 14:02	170421S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	21.41	25.00	48.82	110	44.40	92	75-125	9	0-20	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2252-71	Sample	Solid	GC 41	04/19/17	04/21/17 06:47	170419S03
17-03-2252-71	Matrix Spike	Solid	GC 41	04/19/17	04/21/17 09:02	170419S03
17-03-2252-71	Matrix Spike Duplicate	Solid	GC 41	04/19/17	04/21/17 09:17	170419S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.96	80	20.58	82	50-135	3	0-25	
Alpha-BHC	ND	25.00	18.67	75	19.19	77	50-135	3	0-25	
Beta-BHC	ND	25.00	20.40	82	21.38	86	50-135	5	0-25	
4,4'-DDD	19.85	25.00	62.23	170	65.29	182	50-135	5	0-25	3
4,4'-DDE	94.52	25.00	123.6	116	129.6	140	50-135	5	0-25	3
4,4'-DDT	38.49	25.00	38.34	0	41.61	13	50-135	8	0-25	3
Delta-BHC	ND	25.00	21.89	88	22.90	92	50-135	4	0-25	
Dieldrin	7.141	25.00	39.53	130	41.88	139	50-135	6	0-25	3
Endosulfan I	ND	25.00	32.74	131	35.96	144	50-135	9	0-25	3
Endosulfan II	ND	25.00	28.43	114	30.05	120	50-135	6	0-25	
Endosulfan Sulfate	ND	25.00	26.95	108	28.71	115	50-135	6	0-25	
Endrin	ND	25.00	30.80	123	32.42	130	50-135	5	0-25	
Endrin Aldehyde	ND	25.00	23.53	94	24.06	96	50-135	2	0-25	
Gamma-BHC	ND	25.00	19.35	77	19.88	80	50-135	3	0-25	
Heptachlor	ND	25.00	18.29	73	18.89	76	50-135	3	0-25	
Heptachlor Epoxide	ND	25.00	82.60	330	92.90	372	50-135	12	0-25	3
Methoxychlor	ND	25.00	14.59	58	15.87	63	50-135	8	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Peac3397-01-005-01	Sample	Solid	GC 44	04/19/17	04/21/17 05:41	170419S04
Peac3397-01-005-01	Matrix Spike	Solid	GC 44	04/19/17	04/22/17 09:46	170419S04
Peac3397-01-005-01	Matrix Spike Duplicate	Solid	GC 44	04/19/17	04/22/17 10:00	170419S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	21.22	85	24.44	98	50-135	14	0-25	
Alpha-BHC	ND	25.00	18.94	76	21.68	87	50-135	13	0-25	
Beta-BHC	ND	25.00	19.66	79	22.97	92	50-135	16	0-25	
4,4'-DDD	38.92	25.00	65.37	106	71.54	130	50-135	9	0-25	
4,4'-DDE	22.01	25.00	35.09	52	40.72	75	50-135	15	0-25	
4,4'-DDT	35.81	25.00	15.18	0	21.20	0	50-135	33	0-25	3,4
Delta-BHC	ND	25.00	21.70	87	25.02	100	50-135	14	0-25	
Dieldrin	25.33	25.00	38.30	52	43.91	74	50-135	14	0-25	
Endosulfan I	ND	25.00	21.72	87	25.80	103	50-135	17	0-25	
Endosulfan II	ND	25.00	28.10	112	31.78	127	50-135	12	0-25	
Endosulfan Sulfate	ND	25.00	22.08	88	25.84	103	50-135	16	0-25	
Endrin	ND	25.00	25.00	100	28.44	114	50-135	13	0-25	
Endrin Aldehyde	ND	25.00	15.56	62	17.42	70	50-135	11	0-25	
Gamma-BHC	ND	25.00	18.70	75	21.22	85	50-135	13	0-25	
Heptachlor	ND	25.00	15.28	61	17.15	69	50-135	12	0-25	
Heptachlor Epoxide	ND	25.00	22.56	90	28.80	115	50-135	24	0-25	
Methoxychlor	ND	25.00	12.33	49	11.94	48	50-135	3	0-25	3

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3315-03-005-01	Sample	Solid	GC 44	04/20/17	04/24/17 15:13	170420S05
Utah3315-03-005-01	Matrix Spike	Solid	GC 44	04/20/17	04/21/17 15:10	170420S05
Utah3315-03-005-01	Matrix Spike Duplicate	Solid	GC 44	04/20/17	04/21/17 15:25	170420S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	27.32	109	23.63	95	50-135	14	0-25	
Alpha-BHC	ND	25.00	27.60	110	23.06	92	50-135	18	0-25	
Beta-BHC	ND	25.00	25.09	100	23.01	92	50-135	9	0-25	
4,4'-DDD	190.4	25.00	272.5	329	284.4	376	50-135	4	0-25	3
4,4'-DDE	75.65	25.00	173.9	393	212.2	546	50-135	20	0-25	3
4,4'-DDT	86.80	25.00	44.87	0	58.98	0	50-135	27	0-25	3,4
Delta-BHC	ND	25.00	27.63	111	23.38	94	50-135	17	0-25	
Dieldrin	ND	25.00	95.91	384	123.0	492	50-135	25	0-25	3
Endosulfan I	ND	25.00	88.55	354	115.8	463	50-135	27	0-25	3,4
Endosulfan II	ND	25.00	45.58	182	52.18	209	50-135	14	0-25	3
Endosulfan Sulfate	ND	25.00	52.03	208	78.18	313	50-135	40	0-25	3,4
Endrin	ND	25.00	40.17	161	51.18	205	50-135	24	0-25	3
Endrin Aldehyde	ND	25.00	26.40	106	39.86	159	50-135	41	0-25	3,4
Gamma-BHC	ND	25.00	25.04	100	21.18	85	50-135	17	0-25	
Heptachlor	ND	25.00	21.34	85	20.14	81	50-135	6	0-25	
Heptachlor Epoxide	ND	25.00	194.9	780	269.1	1076	50-135	32	0-25	3,4
Methoxychlor	ND	25.00	22.68	91	74.46	298	50-135	107	0-25	3,4

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Kent3433-01-005-01	Sample	Solid	GC 51	04/18/17	04/19/17 15:51	170418S12
Kent3433-01-005-01	Matrix Spike	Solid	GC 51	04/18/17	04/19/17 15:22	170418S12
Kent3433-01-005-01	Matrix Spike Duplicate	Solid	GC 51	04/18/17	04/19/17 15:36	170418S12

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	18.24	73	19.06	76	50-135	4	0-25	
Alpha-BHC	ND	25.00	18.83	75	19.71	79	50-135	5	0-25	
Beta-BHC	ND	25.00	17.66	71	18.56	74	50-135	5	0-25	
4,4'-DDD	ND	25.00	37.59	150	37.04	148	50-135	1	0-25	3
4,4'-DDE	7.635	25.00	33.48	103	35.47	111	50-135	6	0-25	
4,4'-DDT	6.688	25.00	36.08	118	30.85	97	50-135	16	0-25	
Delta-BHC	ND	25.00	19.63	79	19.66	79	50-135	0	0-25	
Dieldrin	ND	25.00	22.18	89	22.65	91	50-135	2	0-25	
Endosulfan I	ND	25.00	20.88	84	21.73	87	50-135	4	0-25	
Endosulfan II	ND	25.00	22.75	91	22.55	90	50-135	1	0-25	
Endosulfan Sulfate	ND	25.00	22.74	91	22.81	91	50-135	0	0-25	
Endrin	ND	25.00	26.39	106	27.27	109	50-135	3	0-25	
Endrin Aldehyde	ND	25.00	14.46	58	15.91	64	50-135	10	0-25	
Gamma-BHC	ND	25.00	19.07	76	20.11	80	50-135	5	0-25	
Heptachlor	ND	25.00	18.65	75	20.01	80	50-135	7	0-25	
Heptachlor Epoxide	ND	25.00	20.62	82	22.32	89	50-135	8	0-25	
Methoxychlor	ND	25.00	28.92	116	24.57	98	50-135	16	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3348-02-005-01	Sample	Solid	GC 51	04/18/17	04/20/17 08:48	170418S13
Utah3348-02-005-01	Matrix Spike	Solid	GC 51	04/18/17	04/20/17 12:21	170418S13
Utah3348-02-005-01	Matrix Spike Duplicate	Solid	GC 51	04/18/17	04/20/17 12:35	170418S13

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	18.09	72	17.92	72	50-135	1	0-25	
Alpha-BHC	ND	25.00	18.47	74	18.11	72	50-135	2	0-25	
Beta-BHC	ND	25.00	13.20	53	13.36	53	50-135	1	0-25	
4,4'-DDD	ND	25.00	0	0	130.8	523	50-135	200	0-25	3,4
4,4'-DDE	13.85	25.00	30.29	66	27.32	54	50-135	10	0-25	
4,4'-DDT	9.932	25.00	40.80	123	36.93	108	50-135	10	0-25	
Delta-BHC	ND	25.00	16.11	64	15.83	63	50-135	2	0-25	
Dieldrin	9.302	25.00	38.97	119	38.05	115	50-135	2	0-25	
Endosulfan I	ND	25.00	23.64	95	22.80	91	50-135	4	0-25	
Endosulfan II	ND	25.00	22.30	89	21.66	87	50-135	3	0-25	
Endosulfan Sulfate	ND	25.00	27.56	110	23.89	96	50-135	14	0-25	
Endrin	ND	25.00	104.7	419	0	0	50-135	200	0-25	3,4
Endrin Aldehyde	ND	25.00	14.74	59	12.54	50	50-135	16	0-25	
Gamma-BHC	ND	25.00	18.93	76	18.42	74	50-135	3	0-25	
Heptachlor	ND	25.00	21.25	85	21.79	87	50-135	2	0-25	
Heptachlor Epoxide	ND	25.00	29.21	117	30.89	124	50-135	6	0-25	
Methoxychlor	ND	25.00	37.66	151	23.60	94	50-135	46	0-25	3,4

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3545  
Method: EPA 8081A

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Avoc3436-02-005-02	Sample	Solid	GC 51	04/19/17	04/21/17 05:43	170419S05
Avoc3436-02-005-02	Matrix Spike	Solid	GC 51	04/19/17	04/21/17 09:46	170419S05
Avoc3436-02-005-02	Matrix Spike Duplicate	Solid	GC 51	04/19/17	04/21/17 13:53	170419S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	22.22	89	17.28	69	50-135	25	0-25	
Alpha-BHC	ND	25.00	22.31	89	16.71	67	50-135	29	0-25	4
Beta-BHC	ND	25.00	21.51	86	15.56	62	50-135	32	0-25	4
4,4'-DDD	ND	25.00	69.64	279	142.8	571	50-135	69	0-25	3,4
4,4'-DDE	14.26	25.00	146.9	530	36.01	87	50-135	121	0-25	3,4
4,4'-DDT	42.80	25.00	48.52	23	72.02	117	50-135	39	0-25	3,4
Delta-BHC	ND	25.00	23.20	93	15.74	63	50-135	38	0-25	4
Dieldrin	59.36	25.00	40.75	0	141.3	328	50-135	110	0-25	3,4
Endosulfan I	ND	25.00	27.33	109	25.75	103	50-135	6	0-25	
Endosulfan II	ND	25.00	27.41	110	25.02	100	50-135	9	0-25	
Endosulfan Sulfate	ND	25.00	27.27	109	23.56	94	50-135	15	0-25	
Endrin	ND	25.00	28.43	114	0	0	50-135	200	0-25	3,4
Endrin Aldehyde	ND	25.00	24.72	99	15.08	60	50-135	48	0-25	4
Gamma-BHC	ND	25.00	22.78	91	16.32	65	50-135	33	0-25	4
Heptachlor	ND	25.00	21.41	86	17.66	71	50-135	19	0-25	
Heptachlor Epoxide	ND	25.00	33.76	135	42.55	170	50-135	23	0-25	3
Methoxychlor	ND	25.00	15.09	60	27.53	110	50-135	58	0-25	4

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24550</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:45</b>	<b>170401L04</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	24.09	96	80-120	
Lead		25.00	26.70	107	80-120	



## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24551</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:47</b>	<b>170401L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	23.82	95	80-120	
Lead		25.00	27.06	108	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24552</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/01/17</b>	<b>04/03/17 10:52</b>	<b>170401L06</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	24.01	96	80-120	
Lead		25.00	26.81	107	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24700</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:29</b>	<b>170421L01</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	25.35	101	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
Work Order: 17-03-2146  
Preparation: EPA 3050B  
Method: EPA 6010B

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24701</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 13:30</b>	<b>170421L02</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	24.41	98	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2670</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 11:03</b>	<b>170419L03</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.33	89	50-135	36-149	
Alpha-BHC		25.00	21.85	87	50-135	36-149	
Beta-BHC		25.00	22.88	92	50-135	36-149	
4,4'-DDD		25.00	29.06	116	50-135	36-149	
4,4'-DDE		25.00	26.98	108	50-135	36-149	
4,4'-DDT		25.00	29.21	117	50-135	36-149	
Delta-BHC		25.00	25.42	102	50-135	36-149	
Dieldrin		25.00	25.31	101	50-135	36-149	
Endosulfan I		25.00	24.46	98	50-135	36-149	
Endosulfan II		25.00	28.00	112	50-135	36-149	
Endosulfan Sulfate		25.00	28.22	113	50-135	36-149	
Endrin		25.00	26.98	108	50-135	36-149	
Endrin Aldehyde		25.00	26.97	108	50-135	36-149	
Gamma-BHC		25.00	22.55	90	50-135	36-149	
Heptachlor		25.00	22.75	91	50-135	36-149	
Heptachlor Epoxide		25.00	23.23	93	50-135	36-149	
Methoxychlor		25.00	28.89	116	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2673</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/19/17</b>	<b>04/21/17 05:27</b>	<b>170419L04</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	19.84	79	50-135	36-149	
Alpha-BHC		25.00	19.84	79	50-135	36-149	
Beta-BHC		25.00	20.36	81	50-135	36-149	
4,4'-DDD		25.00	23.34	93	50-135	36-149	
4,4'-DDE		25.00	21.66	87	50-135	36-149	
4,4'-DDT		25.00	25.14	101	50-135	36-149	
Delta-BHC		25.00	20.63	83	50-135	36-149	
Dieldrin		25.00	21.46	86	50-135	36-149	
Endosulfan I		25.00	21.71	87	50-135	36-149	
Endosulfan II		25.00	23.99	96	50-135	36-149	
Endosulfan Sulfate		25.00	23.45	94	50-135	36-149	
Endrin		25.00	22.70	91	50-135	36-149	
Endrin Aldehyde		25.00	15.90	64	50-135	36-149	
Gamma-BHC		25.00	20.33	81	50-135	36-149	
Heptachlor		25.00	20.61	82	50-135	36-149	
Heptachlor Epoxide		25.00	20.49	82	50-135	36-149	
Methoxychlor		25.00	25.90	104	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2674</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 44</b>	<b>04/20/17</b>	<b>04/21/17 10:54</b>	<b>170420L05</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.45	94	50-135	36-149	
Alpha-BHC		25.00	23.36	93	50-135	36-149	
Beta-BHC		25.00	24.50	98	50-135	36-149	
4,4'-DDD		25.00	28.86	115	50-135	36-149	
4,4'-DDE		25.00	26.94	108	50-135	36-149	
4,4'-DDT		25.00	28.60	114	50-135	36-149	
Delta-BHC		25.00	26.78	107	50-135	36-149	
Dieldrin		25.00	26.06	104	50-135	36-149	
Endosulfan I		25.00	25.80	103	50-135	36-149	
Endosulfan II		25.00	28.26	113	50-135	36-149	
Endosulfan Sulfate		25.00	27.96	112	50-135	36-149	
Endrin		25.00	27.35	109	50-135	36-149	
Endrin Aldehyde		25.00	26.84	107	50-135	36-149	
Gamma-BHC		25.00	24.12	96	50-135	36-149	
Heptachlor		25.00	24.16	97	50-135	36-149	
Heptachlor Epoxide		25.00	24.12	96	50-135	36-149	
Methoxychlor		25.00	27.84	111	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2668</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 05:13</b>	<b>170418L12</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.73	91	50-135	36-149	
Alpha-BHC		25.00	23.82	95	50-135	36-149	
Beta-BHC		25.00	22.61	90	50-135	36-149	
4,4'-DDD		25.00	24.56	98	50-135	36-149	
4,4'-DDE		25.00	24.75	99	50-135	36-149	
4,4'-DDT		25.00	25.47	102	50-135	36-149	
Delta-BHC		25.00	24.35	97	50-135	36-149	
Dieldrin		25.00	24.63	99	50-135	36-149	
Endosulfan I		25.00	24.62	98	50-135	36-149	
Endosulfan II		25.00	25.27	101	50-135	36-149	
Endosulfan Sulfate		25.00	24.62	98	50-135	36-149	
Endrin		25.00	24.38	98	50-135	36-149	
Endrin Aldehyde		25.00	24.49	98	50-135	36-149	
Gamma-BHC		25.00	24.23	97	50-135	36-149	
Heptachlor		25.00	24.50	98	50-135	36-149	
Heptachlor Epoxide		25.00	23.42	94	50-135	36-149	
Methoxychlor		25.00	24.65	99	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass


  
 Return to Contents



## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 10 of 11

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2669</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/18/17</b>	<b>04/20/17 05:42</b>	<b>170418L13</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.39	90	50-135	36-149	
Alpha-BHC		25.00	23.66	95	50-135	36-149	
Beta-BHC		25.00	22.40	90	50-135	36-149	
4,4'-DDD		25.00	24.42	98	50-135	36-149	
4,4'-DDE		25.00	24.35	97	50-135	36-149	
4,4'-DDT		25.00	25.44	102	50-135	36-149	
Delta-BHC		25.00	24.01	96	50-135	36-149	
Dieldrin		25.00	24.38	98	50-135	36-149	
Endosulfan I		25.00	24.42	98	50-135	36-149	
Endosulfan II		25.00	25.08	100	50-135	36-149	
Endosulfan Sulfate		25.00	24.26	97	50-135	36-149	
Endrin		25.00	24.16	97	50-135	36-149	
Endrin Aldehyde		25.00	24.28	97	50-135	36-149	
Gamma-BHC		25.00	24.01	96	50-135	36-149	
Heptachlor		25.00	24.12	96	50-135	36-149	
Heptachlor Epoxide		25.00	23.16	93	50-135	36-149	
Methoxychlor		25.00	24.21	97	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/29/17  
 Work Order: 17-03-2146  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

Page 11 of 11

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2671</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 51</b>	<b>04/19/17</b>	<b>04/21/17 05:29</b>	<b>170419L05</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	19.10	76	50-135	36-149	
Alpha-BHC		25.00	19.20	77	50-135	36-149	
Beta-BHC		25.00	18.32	73	50-135	36-149	
4,4'-DDD		25.00	21.11	84	50-135	36-149	
4,4'-DDE		25.00	20.87	83	50-135	36-149	
4,4'-DDT		25.00	21.82	87	50-135	36-149	
Delta-BHC		25.00	19.77	79	50-135	36-149	
Dieldrin		25.00	20.20	81	50-135	36-149	
Endosulfan I		25.00	19.69	79	50-135	36-149	
Endosulfan II		25.00	21.32	85	50-135	36-149	
Endosulfan Sulfate		25.00	21.16	85	50-135	36-149	
Endrin		25.00	20.24	81	50-135	36-149	
Endrin Aldehyde		25.00	18.02	72	50-135	36-149	
Gamma-BHC		25.00	19.58	78	50-135	36-149	
Heptachlor		25.00	20.10	80	50-135	36-149	
Heptachlor Epoxide		25.00	19.01	76	50-135	36-149	
Methoxychlor		25.00	21.46	86	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass


 Return to Contents

## Sample Analysis Summary Report

Work Order: 17-03-2146

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3545	669	GC 44	1
EPA 8081A	EPA 3545	669	GC 51	1
EPA 8081A	EPA 3545	944	GC 41	1
EPA 8081A	EPA 3545	944	GC 51	1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

# HALEY & ALDRICH CHAIN OF CUSTODY

Revised COC page received from Matt Raithe (H&A) on 04/17/2017 at 13:0pm. - Virendra (ECI)

**Calscience**

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-6494

DATE: 3/28/17 OF 17  
 PAGE: 1

17-03-2146

LABORATORY CLIENT: <b>Haley &amp; Aldrich, Inc.</b> ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: <b>963193</b> SAMPLER(S): (PRINT) Tanya Nelson									
REQUESTED ANALYSES													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Date:	Time:
	1 EB-032817		3/28/17	1620	H <sub>2</sub> O	2	X	1	1	X	X	3/29/17	1100
	2 Kent3433-01-005-01			0801	SO	1	X	X	X	X	X	3/29/17	1220
	3 Kent3433-01-025-01			0805			X			X	X		
	4 Kent3433-02-005-01			0812			X			X	X		
	5 Kent3433-02-025-01			0816			X			X	X		
	6 Kent3433-03-005-01			0820			X			X	X		
	7 Kent3433-03-025-01			0823			X			X	X		
	8 Kent3433-04-005-01			0831			X			X	X		
	9 Kent3433-04-025-01			0837			X			X	X		
	10 One0871-01-005-01			0854			X			X	X		
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature/Affiliation) <i>[Signature]</i>		Date: 3/29/17 Time: 1100	
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature/Affiliation) <i>[Signature]</i>		Date: 3/29/17 Time: 1220	
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature/Affiliation) <i>[Signature]</i>		Date: <i>[Blank]</i> Time: <i>[Blank]</i>	

**Special Instructions:**  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY

WORK # / LAB USE ONLY

DATE: 3/28/17

PAGE: 2 OF 1

2146

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

Requested Analyses:

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES							
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)		
	11	Cher0871-01-005-02	3/28/17	0854	So	1	X							
	12	Cher0871-01-025-01		0859						X				
	13	Cher0871-02-005-01		0907						X				
	14	Cher0871-02-005-01		0907						X				
	15	Cher0871-02-025-01		0913						X				
	16	Cher0871-03-005-01		0919						X				
	17	Cher0871-03-005-02		0919						X				
	18	Cher0871-03-025-01		0924						X				
	19	Cher0871-04-005-01		0938						X				
	20	Cher0871-04-005-02		0938						X				

Special Instructions: Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

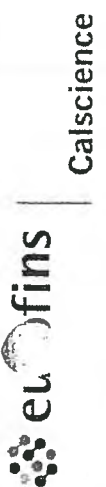
Received by: (Signature/Affiliation) *AMY*  
 Received by: (Signature/Affiliation) *AMY*  
 Received by: (Signature/Affiliation) *AMY*

Date: 3/29/17 Time: 1100  
 Date: 3/29/17 Time: 1220  
 Date: 3/29/17 Time: 1220

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC page received from Matt Raiithel (H&A) on 04/17/2017 at 13:00pm. - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY** **CORD**

DATE: 3/28/17  
PAGE: 4 OF 8

WG # / LAB USE ONLY  
2146

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: gcanfield@haleyaldrich.com		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 <b>PROJECT CONTACT:</b> Colleen Canfield		<b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-Eurofins-Calscience <b>Quote:</b> 963193 <b>SAMPLER(S): (PRINT)</b> Tanya Nelson		
<b>TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days): LOG CODE:						
<b>Special Instructions:</b> Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raiithel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
31	Flor2415-01-025-01		3/28/17	1119	SO	1
32	Flor2415-02-005-01			1122		
33	Flor2415-02-025-01			1126		
34	Flor2415-03-005-01			1130		
35	Flor2415-03-025-01			1134		
36	Flor2415-04-005-01			1140		
37	Flor2415-04-025-01			1146		
38	Flor2475-01-005-01			1156		
39	Flor2475-01-025-01			1204		
40	Flor2475-02-005-01			1210		
Relinquished by: (Signature) <i>[Signature]</i> Relinquished by: (Signature) <i>[Signature]</i> Relinquished by: (Signature) <i>[Signature]</i>						
Received by: (Signature/Affiliation) <i>[Signature]</i> Received by: (Signature/Affiliation) <i>[Signature]</i> Received by: (Signature/Affiliation) <i>[Signature]</i>						
Date: 3/29/17 Time: 1220 Date: 3/29/17 Time: 1220 Date: 3/29/17 Time: 1220						

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.











Revised COC page received from Matt Raithehl (H&A) on 04/17/2017 at 13:0pm. - Virendra (ECI)

**eurolfins** | Calscience

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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY: 2146  
 DATE: 3/28/17 ~~3/29/17~~  
 PAGE: 8 OF 11

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: **3187 Red Hill Ave., Suite 155**  
 CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**  
 TEL: **714-371-1802** E-MAIL: **ccanfield@haleyaldrich.com**

BLANKET SERVICE AGREEMENT NO.: **2015-18-Eurofins Calscience Quote: 963193**  
 PROJECT CONTACT: **Tanya Nelson**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: **UC Riverside North District / 128685-006 2.0**  
 PROJECT CONTACT: **Colleen Canfield**

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME									
71	LIND0687-03-005-01		3/28/17	1615	SO	1	X			X			
72	AVOC3436-01-005-01		3/29/17	0800					X	X			
73	AVOC3436-01-005-02			0800					X	X			
74	AVOC3436-01-025-01			0807					X	X			
75	AVOC3436-02-005-01			0813					X	X			
76	AVOC3436-02-005-01			0813					X	X			
77	AVOC3436-02-005-01			0817					X	X			
78	AVOC3436-03-005-01			0821					X	X			
79	AVOC3436-03-005-02			0821					X	X			
80	AVOC3436-03-005-01			0826					X	X			

Requested Analyses: **H&A**

Received by: (Signature/Affiliation) **Aly Eer** Date: **3/29/17** Time: **1220**  
 Received by: (Signature/Affiliation) **VP** Date: **3/29/17** Time: **1220**  
 Received by: (Signature/Affiliation) **VP** Date: **3/29/17** Time: **1220**



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY  
**2146**

DATE: 3/29/17  
PAGE: 9 OF 11

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**Calscience**

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com		HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson		
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF <input type="checkbox"/> H&A Standard EDD						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raihel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
81	Ave323604-05-01		3/29/17	0831	SO	1
82	Ave343604-05-02			0831		
83	Ave343604-05-01			0836		
84	Uta3223-01-025-01			0850		
85	Uta3223-01-025-01			0856		
86	Uta3223-02-005-01			0902		
87	Uta3223-02-005-01			0906		
88	Uta3223-03-005-01			0911		
89	Uta3223-03-025-01			0914		
90	Uta3223-04-005-01			0922		
Relinquished by: (Signature) <i>Chaya Raihel</i>						
Relinquished by: (Signature) <i>AR</i>						
Relinquished by: (Signature)						
Received by: (Signature/Affiliation) <i>AVY ECI</i> Date: <u>3/29/17</u> Time: <u>1110</u>						
Received by: (Signature/Affiliation) <i>AVY ECI</i> Date: <u>3/29/17</u> Time: <u>1220</u>						
Received by: (Signature/Affiliation)						

**REQUESTED ANALYSES**

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X





Calscience

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HALEY & ALDRICH CHAIN OF CUSTODY

WO # / LAB USE ONLY: 2146

DATE: 3/29/17 PAGE: 10 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson

Requested Analyses: Arsenic - 6010B (Soil), Lead - 6010B (Soil), Field Filtered, Preserved, Unpreserved, Organochlorine Pesticides 8081A (Soil)

Table with columns: LAB USE ONLY, SAMPLE ID, FIELD POINT NAME, SAMPLING DATE, TIME, MATRIX, NO. OF CONT., and analysis results for various pesticides and metals.

Signatures and dates for Relinquished by, Received by, and Relinquished by (Signature/Affiliation).



Revised COC page received from Matt Raitheal (H&A) on 04/17/2017 at 13:0pm. - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY  
 2146

DATE: 3/29/17  
 PAGE: 11 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

PROJECT CONTACT: Colleen Canfield

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
101	Utah3348-01-025-01		3/29/17	1038	SO	1
102	Utah3348-02-005-01		1043			
103	Utah3348-02-005-01		1047			
104	Utah3348-03-005-01		1051			
105	Utah3348-03-025-01		1055			
106	Utah3348-04-005-01		1102			
107	Utah3348-04-025-01		1106			

Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	HOOP
	X			X	X	X	X
				X	X	X	X
			X	X	X	X	X
			X	X	X	X	X
			X	X	X	X	X
			X	X	X	X	X

Requested Analytes

Received by: (Signature/Affiliation) *AY* ECI Date: 3/29/17 Time: 110

Received by: (Signature/Affiliation) *AY* Date: 3/29/17 Time: 1220

Received by: (Signature/Affiliation) *AY* Date: \_\_\_\_\_ Time: \_\_\_\_\_



## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.



Table received from Matt Raithel  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-16 - 108	X	Kent3433-01-005-01 - 2 Kent3433-02-005-01 - 4 Kent3433-03-005-01 - 6 Kent3433-04-005-01 - 8
Composite-17 - 109	X	Kent3433-01-025-01 - 3 Kent3433-02-025-01 - 5 Kent3433-03-025-01 - 7 Kent3433-04-025-01 - 9
Composite-18 - 110	X	Cher0871-01-005-01 - 10 Cher0871-02-005-01 - 13 Cher0871-03-005-01 - 16 Cher0871-04-005-01 - 19
Composite-18-Dup - 111	X	Cher0871-01-005-02 - 11 Cher0871-02-005-02 - 14 Cher0871-03-005-02 - 17 Cher0871-04-005-02 - 20
Composite-19 - 112	X	Cher0871-01-025-01 - 12 Cher0871-02-025-01 - 15 Cher0871-03-025-01 - 18 Cher0871-04-025-01 - 21
Composite-20 - 113	X	Cher0803-01-005-01 - 22 Cher0803-02-005-01 - 24 Cher0803-03-005-01 - 26 Cher0803-04-005-01 - 28
Composite-21 - 114	X	Cher0803-01-025-01 - 23 Cher0803-02-025-01 - 25 Cher0803-03-025-01 - 27 Cher0803-04-025-01 - 29
Composite-22 - 115	X	Flor3415-01-005-01 - 30 Flor3415-02-005-01 - 32 Flor3415-03-005-01 - 34 Flor3415-04-005-01 - 36

Table received from Matt Raithel  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-23 - 116	X	Flor3415-01-025-01 - 31 Flor3415-02-025-01 - 33 Flor3415-03-025-01 - 35 Flor3415-04-025-01 - 37
Composite-24 - 117	X	Flor3475-01-005-01 - 38 Flor3475-02-005-01 - 40 Flor3475-03-005-01 - 42 Flor3475-04-005-01 - 44
Composite-25 - 118	X	Flor3475-01-025-01 - 39 Flor3475-02-025-01 - 41 Flor3475-03-025-01 - 43 Flor3475-04-025-01 - 45
Composite-26 - 119	X	Peac3397-01-005-01 - 46 Peac3397-02-005-01 - 48 Peac3397-03-005-01 - 50 Peac3397-04-005-01 - 52
Composite-27 - 120	X	Peac3397-01-025-01 - 47 Peac3397-02-025-01 - 49 Peac3397-03-025-01 - 51 Peac3397-04-025-01 - 53
Composite-28 - 121	X	Peac3392-01-005-01 - 54 Peac3392-02-005-01 - 56 Peac3392-03-005-01 - 58 Peac3392-04-005-01 - 60
Composite-29 - 122	X	Peac3392-01-025-01 - 55 Peac3392-02-025-01 - 57 Peac3392-03-025-01 - 59 Peac3392-04-025-01 - 61
Composite-30 - 123	X	Peac3371-01-005-01 - 62 Peac3371-02-005-01 - 64 Peac3371-03-005-01 - 66 Peac3371-04-005-01 - 68

Table received from Matt Raithe  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-31 - 124	X	Peac3371-01-025-01 ~63 Peac3371-02-025-01 ~65 Peac3371-03-025-01 ~67 Peac3371-04-025-01 ~69
Composite-32 - 125	X	Lind0687-02-005-01 ~70 Lind0687-03-005-01 ~71
Composite-33 - 126	X	Avoc3436-01-005-01 ~72 Avoc3436-02-005-01 ~75 Avoc3436-03-005-01 ~78 Avoc3436-04-005-01 ~81
Composite-33-Dup - 127	X	Avoc3436-01-005-02 ~73 Avoc3436-02-005-02 ~76 Avoc3436-03-005-02 ~79 Avoc3436-04-005-02 ~82
Composite-34 - 128	X	Avoc3436-01-025-01 ~74 Avoc3436-02-025-01 ~77 Avoc3436-03-025-01 ~80 Avoc3436-04-025-01 ~83
Composite-35 - 129	X	Utah3323-01-005-01 ~84 Utah3323-02-005-01 ~86 Utah3323-03-005-01 ~88 Utah3323-04-005-01 ~90
Composite-36 - 130	X	Utah3323-01-025-01 ~85 Utah3323-02-025-01 ~87 Utah3323-03-025-01 ~89 Utah3323-04-025-01 ~91
Composite-37 - 131	X	Utah3315-01-005-01 ~92 Utah3315-02-005-01 ~94 Utah3315-03-005-01 ~96 Utah3315-04-005-01 ~98
Composite-38 - 132	X	Utah3315-01-025-01 ~93 Utah3315-02-025-01 ~95 Utah3315-03-025-01 ~97 Utah3315-04-025-01 ~99

Table received from Matt Raithe  
(H&A) on 03/30/17 at 16:32 for  
ECI WO #17-03-2146.  
- Virendra (ECI)

### Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-39 -- 133	X	Utah3348-01-005-01 ~100 Utah3348-02-005-01 ~102 Utah3348-03-005-01 ~104 Utah3348-04-005-01 ~106
Composite-40 - 134	X	Utah3348-01-025-01 ~101 Utah3348-02-025-01 ~103 Utah3348-03-025-01 ~105 Utah3348-04-025-01 ~107

Revised COC received from Matt Raitheal (H&A) on 03/30/17 at 14:08pm. - Vitendra (ECI)

**euofins** | Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-6494

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa

STATE: CA ZIP: 92626

E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TEL: 714-371-1802

TURNAROUND TIME (rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Geotracker EDF

H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

**Special Instructions:**

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hand	Date:	Time:		
			DATE	TIME												
1	EB-032817		3/28/17	1620	2	1	1		X	X			3/29/17	1110		
2	Kent3433-01-005-01			0801	1	X			X							
3	Kent3433-01-025-01			0805				X								
4	Kent3433-02-005-01			0812				X								
5	Kent3433-02-025-01			0816				X								
6	Kent3433-03-005-01			0820				X								
7	Kent3433-03-025-01			0823				X								
8	Kent3433-04-005-01			0831				X								
9	Kent3433-04-025-01			0837				X								
10	Cher0871-01-005-01			0854				X	X				3/29/17	1110		
Relinquished by: (Signature) <i>[Signature]</i>													Date:	3/29/17	Time:	1110
Relinquished by: (Signature) <i>[Signature]</i>													Date:	3/29/17	Time:	1220
Relinquished by: (Signature) <i>[Signature]</i>													Date:		Time:	

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and Eurofins and Eurofins Calscience Inc.



Revised COC received from Matt Raithe (H&A) on 03/30/17 at 14:09pm. - Virendra (ECI)



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: 2146 DATE: 3/28/17 PAGE: 3 OF 11

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0

PROJECT CONTACT: Colleen Cantfield

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: [ccantfield@haleyaldrich.com](mailto:ccantfield@haleyaldrich.com)

TURNAROUND TIME (rush surcharges may apply to any TAT not STANDARD):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions: Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES											
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Head					
21	Cher0803-04-005-01		3/28/17	0942	SO	1	X											
22	Cher0803-01-005-01			1012						X								
23	Cher0803-01-005-01			1016						X								
24	Cher0803-02-005-01			1025						X								
25	Cher0803-02-005-01			1030						X								
26	Cher0803-03-005-01			1037						X								
27	Cher0803-03-005-01			1041						X								
28	Cher0803-04-005-01			1050						X								
29	Cher0803-04-005-01			1054						X								
30	F1073415-01-005-01			1114						X								

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *ECI* Date: 3/29/17 Time: 1110

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1220

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Raithe (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY

DATE: 3/28/17  
PAGE: 4 OF 8

2146

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 <b>PROJECT CONTACT:</b> Colleen Canfield		<b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-Eurofins Calscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson	
<b>REQUESTED ANALYSES</b>					
Unpreserved Preserved Field Filtered Arsenic - 6010B (Soil) Lead - 6010B (Soil) Organochlorine Pesticides 8081A (Soil)	X	X	X	X	X
Received by: (Signature/Affiliation) Received by: (Signature/Affiliation) Received by: (Signature/Affiliation)	Date: 3/29/17 Date: 3/29/17 Date: 3/29/17				Time: 1220 Time: 1220 Time: 1220

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
31	FL023415-01-025-01		3/28/17	1119	SO	1
32	FL023415-02-005-01			1122		
33	FL023415-02-025-01			1126		
34	FL023415-03-005-01			1130		
35	FL023415-03-025-01			1134		
36	FL023415-04-005-01			1140		
37	FL023415-04-025-01			1146		
38	FL023415-01-005-01			1156		
39	FL023415-01-025-01			1204		
40	FL023415-02-005-01			1210		

Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Raithehl (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME								
51	Pac3397-03-025-01		3/28/17	1407	80	X						
52	Pac3397-04-005-01			1410				X				
53	Pac3397-04-025-01			1413				X				
54	Pac3397-01-005-01			1425				X	X			
55	Pac3392-01-025-01			1428				X				
56	Pac3392-02-005-01			1434				X				
57	Pac3392-02-025-01			1436				X				
58	Pac3392-03-005-01			1440				X				
59	Pac3392-03-025-01			1443				X				
60	Pac3392-04-005-01			1447				X				

Requested by: (Signature) *[Signature]* Date: 3/29/17 Time: 1110

Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1220

Relinquished by: (Signature) *[Signature]* Date: 3/29/17 Time: 1220

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.







Calscience

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Revised COC received from Matt Raithehl (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY

21416

DATE: 3/28/17  
PAGE: 7 OF 11

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 E-MAIL: ccanfield@haleyaldrich.com		<b>HALEY &amp; ALDRICH CLIENT NAME / PROJECT NO.:</b> UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		<b>BLANKET SERVICE AGREEMENT NO.:</b> 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson	
<b>TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>REQUESTED ANALYSES</b>			
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD		Field Filtered Preserved Unpreserved			
<b>Special Instructions:</b> Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110		Organochlorine Pesticides 8081A (Soil) Arsenic - 6010B (Soil) Lead - 6010B (Soil)			
LAB USE ONLY NO. OF CONT.	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE TIME	MATRIX	NO. OF CONT.	Date: 3/28/17 Time: 1110
61	Peac3392-04-025-01	3/28/17 1451	SO	1	X
62	Peac3371-01-005-01	1507		1	X
63	Peac3371-01-025-01	1511		1	X
64	Peac3371-02-005-01	1516		1	X
65	Peac3371-02-025-01	1520		1	X
66	Peac3371-05-005-01	1524		1	X
67	Peac3371-03-025-01	1527		1	X
68	Peac3371-04-005-01	1533		1	X
69	Peac3371-04-025-01	1536		1	X
70	LineD1687-02-005-01	1606		1	X
Relinquished by: (Signature) 		Received by: (Signature/Affiliation) AY ECI		Date: 3/29/17 Time: 1220	
Relinquished by: (Signature) 		Received by: (Signature/Affiliation) 		Date: 3/29/17 Time: 1220	
Relinquished by: (Signature) 		Received by: (Signature/Affiliation) 		Date: 3/29/17 Time: 1220	

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Raitheal (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)



Calscience

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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

DATE: 3/28/17 ~~3/29/17~~  
 PAGE: 8 OF 11

2146

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: **3187 Red Hill Ave., Suite 155**  
 CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**  
 TEL: **714-371-1802** E-MAIL: **ccanfield@haleyaldrich.com**  
 BLANKET SERVICE AGREEMENT NO.: **2015-18-EurofinsCalscience**  
 Quote: **963193**  
 SAMPLER(S): (PRINT) **Tanya Nelson**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: **UC Riverside North District / 128885-006 2.0**  
 PROJECT CONTACT: **Colleen Canfield**

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):  
 GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME								
71	Li nd0687-03-005-01		3/28/17	1615	50	X			X			
72	AVOC3436-01-005-01		3/29/17	0800				X	X			
73	AVOC3436-01-005-02			0800				X	X			
74	AVOC3436-01-005-01			0807				X	X			
75	AVOC3436-02-005-01			0813				X	X			
76	AVOC3436-02-005-01			0813				X	X			
77	AVOC3436-02-005-01			0817				X	X			
78	AVOC3436-03-005-01			0821				X	X			
79	AVOC3436-03-005-02			0821				X	X			
80	AVOC3436-03-005-01			0826				X	X			

Requested Analyses

Received by: (Signature/Affiliation) **AV** Date: **3/29/17** Time: **1116**  
 Received by: (Signature/Affiliation) **AV** Date: **3/29/17** Time: **1220**  
 Received by: (Signature/Affiliation) **AV** Date: **3/29/17** Time: **1220**

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Calscience

7440 Lincoln Way, Garden Grove, CA 92641-1427 • (714) 895-5494

Revised COC received from Matt Raithel (H&A) on 03/30/17 at 14:08pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY

DATE: 3/29/17  
PAGE: 9 OF 11

2146

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience											
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: 963193											
CITY: Costa Mesa		SAMPLER(S): (PRINT) Tanya Nelson											
STATE: CA		PROJECT CONTACT: Colleen Canfield											
E-MAIL: ccanfield@haleyaldrich.com		HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0											
ZIF: 92626		PROJECT CONTACT: Colleen Canfield											
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD													
GLOBAL ID:		LOG CODE:											
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):													
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Requested Analyses
81	AVOC343604-005-01		3/29/17	0831	SO	1	X			X			
82	AVOC343604-005-02		1	0831						X			
83	AVOC343604-005-01		1	0836						X			
84	UTAH3323-01-005-01		1	0850						X			
85	UTAH3323-01-025-01		1	0856						X			
86	UTAH3323-02-005-01		1	0902						X			
87	UTAH3323-02-025-01		1	0906						X			
88	UTAH3323-03-005-01		1	0911						X			
89	UTAH3323-03-025-01		1	0914						X			
90	UTAH3323-04-005-01		1	0922						X			
Relinquished by: (Signature) <i>Chitra</i>		Received by: (Signature/Affiliation) Avy ECI		Date: 3/29/17		Time: 1110							
Relinquished by: (Signature) <i>AV</i>		Received by: (Signature/Affiliation) <i>AVY</i>		Date: 3/29/17		Time: 1220							
Relinquished by: (Signature)		Received by: (Signature/Affiliation)		Date:		Time:							

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.







Calscience

WORK ORDER NUMBER: 17-03- 2146

**SAMPLE ANOMALY REPORT**

DATE: 03 / 29 / 2017

SAMPLES, CONTAINERS, AND LABELS:	Comments																																																		
<input type="checkbox"/> Sample(s) NOT RECEIVED but listed on COC <input type="checkbox"/> Sample(s) received but NOT LISTED on COC <input type="checkbox"/> Holding time expired (list client or ECI sample ID and analysis) <input type="checkbox"/> Insufficient sample amount for requested analysis (list analysis) <input type="checkbox"/> Improper container(s) used (list analysis) <input type="checkbox"/> Improper preservative used (list analysis) <input type="checkbox"/> No preservative noted on COC or label (list analysis and notify lab) <input type="checkbox"/> Sample container(s) not labeled <input type="checkbox"/> Client sample label(s) illegible (list container type and analysis) <input checked="" type="checkbox"/> Client sample label(s) do not match COC (comment) <ul style="list-style-type: none"> <li><input type="checkbox"/> Project information</li> <li><input checked="" type="checkbox"/> Client sample ID                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Sampling date and/or time</li> <li><input type="checkbox"/> Number of container(s)</li> <li><input type="checkbox"/> Requested analysis</li> </ul> </li> <li><input type="checkbox"/> Sample container(s) compromised (comment)                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Broken</li> <li><input type="checkbox"/> Water present in sample container</li> </ul> </li> <li><input type="checkbox"/> Air sample container(s) compromised (comment)                         <ul style="list-style-type: none"> <li><input type="checkbox"/> Flat</li> <li><input type="checkbox"/> Very low in volume</li> <li><input type="checkbox"/> Leaking (not transferred; duplicate bag submitted)</li> <li><input type="checkbox"/> Leaking (transferred into ECI Tedlar™ bags*)</li> <li><input type="checkbox"/> Leaking (transferred into client's Tedlar™ bags*)</li> </ul> </li> </ul> <p><small>* Transferred at client's request.</small></p>	<div style="border: 1px solid red; padding: 5px; margin-bottom: 10px;">                     Revised COC received from Matt Raitel (H&amp;A) on 03/30/17 at 14:08pm. - Virendra (ECI)                 </div> <p>Labeled as: <span style="color: red;">025</span></p> <p>(-25) Cher0803-02-005-01</p> <p>(-04) Peac 3371-03-005-01</p> <p>(-05) Peac 3371-03-025-01</p> <p>date and time <span style="color: red;">02</span> matched</p>																																																		
<p><b>MISCELLANEOUS:</b> (Describe)</p> <hr/>	<p>Comments</p> <hr/>																																																		
<p><b>HEADSPACE:</b></p> <p>(Containers with bubble &gt; 6 mm or ¼ Inch for volatile organic or dissolved gas analysis)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**																									<p>(Containers with bubble for other analysis)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>ECI Sample ID</th> <th>ECI Container ID</th> <th>Total Number**</th> <th>Requested Analysis</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis																
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ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis																																																
<p>Comments: _____</p> <hr/>	<p>Reported by: <u>1110</u></p> <p>Reviewed by: <u>1077/856</u></p>																																																		
<p><small>** Record the total number of containers (i.e., vials or bottles) for the affected sample.</small></p>																																																			

Return to Contents

WO # / LAB USE ONLY  
**17-03-2146**  
 DATE: 3/28/17 PAGE: 1 OF 17

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
 Colleen Cantfield

**REQUESTED ANALYSES**

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccantfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD

GLOBAL ID:  
 Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
			DATE	TIME								
1	EB-032817		3/28/17	1620	H <sub>2</sub> O	2	1	1		X	X	X
2	Kent3433-01-005-01			0801	SO	1	X					X
3	Kent3433-01-025-01			0805					X			X
4	Kent3433-02-005-01			0812					X			X
5	Kent3433-02-025-01			0816					X			X
6	Kent3433-03-005-01			0820					X			X
7	Kent3433-03-025-01			0823					X			X
8	Kent3433-04-005-01			0831					X			X
9	Kent3433-04-025-01			0837					X			X
10	Cher0871-01-005-01			0854					X			X

Received by: (Signature/Affiliation) *AW* E-CA Date: 3/29/17 Time: 110

Relinquished by: (Signature) *AW* Date: 3/29/17 Time: 1220

Relinquished by: (Signature) *AW* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 2 OF 1

LABORATORY CLIENT: **Haley & Aldrich, Inc.**

ADDRESS: **3187 Red Hill Ave., Suite 155**

CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**

TEL: **714-371-1802** E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Flush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF

H&A Standard EDD

GLOBAL ID: \_\_\_\_\_

Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

Blanket Service Agreement No.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 Sampler(s): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0

PROJECT CONTACT: Colleen Canfield

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Requested Analytes
			DATE	TIME									
11	Cher0871-01-005-02		3/28/17	0854	SO	1	X			X			Hold
12	Cher0871-01-025-01			0859						X			
13	Cher0871-02-005-01			0907						X			
14	Cher0871-02-005-02			0907						X			
15	Cher0871-02-025-01			0913						X			
16	Cher0871-03-005-01			0919						X			
17	Cher0871-03-005-02			0919						X			
18	Cher0871-03-025-01			0924						X			
19	Cher0871-04-005-01			0938						X			
20	Cher0871-04-005-02			0938						X			

Requested Analytes

Received by: (Signature/Affiliation) *AY* **EC**

Received by: (Signature/Affiliation) *AY*

Received by: (Signature/Affiliation) *AY*

Date: 3/29/17 Time: 1100

Date: 3/29/17 Time: 1220

Date: \_\_\_\_\_ Time: \_\_\_\_\_





Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17  
PAGE: 3 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: scanfield@haleyaldrich.com				
CITY: Costa Mesa		LOG CODE:				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):						
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF		GLOBAL ID:				
<input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):				
Special Instructions: Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
21	Cher087104-025-01		3/28/17	0942	SO	1
22	Cher0803-01-005-01			1012		
23	Cher0803-01-025-01			1010		
24	Cher0803-02-005-01			1025		
25	Cher0803-02-025-01			1030		
26	Cher0803-03-005-01			1037		
27	Cher0803-03-025-01			1041		
28	Cher0803-04-005-01			1050		
29	Cher0803-04-025-01			1054		
30	Flor3415-01-005-01			1114		

Relinquished by: (Signature)	<i>[Signature]</i>	Received by: (Signature/Affiliation)	AY	Date: 3/29/17	Time: 1110
Relinquished by: (Signature)	<i>[Signature]</i>	Received by: (Signature/Affiliation)	ECI	Date: 3/29/17	Time: 1220
Relinquished by: (Signature)	<i>[Signature]</i>	Received by: (Signature/Affiliation)		Date:	Time:

REQUESTED ANALYSES										
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold				
X		X	X		X	X				
		X	X		X	X				
		X	X		X	X				
		X	X		X	X				
		X	X		X	X				

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-19-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

DATE: 3/28/17

PAGE: 4 OF 8

WO # / LAB USE ONLY  
2146

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
Quote: 963193

SAMPLER(S): (PRINT)  
Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa

STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	HOLD
			DATE	TIME									
31	Flor3415-01-025-01		3/28/17	11:19	SO	1	X						
32	Flor3415-02-005-01			11:22				X					
33	Flor3415-02-025-01			11:26				X					
34	Flor3415-03-005-01			11:30				X					
35	Flor3415-03-025-01			11:34				X					
36	Flor3415-04-005-01			11:40				X					
37	Flor3415-04-025-01			11:46				X					
38	Flor3475-01-005-01			11:56				X					
39	Flor3475-01-025-01			12:04				X					
40	Flor3475-02-005-01			12:10				X					

Requested Analyses

Relinquished by: (Signature) *[Signature]* Date: 3/29/17 Time: 11:10

Relinquished by: (Signature) *[Signature]* Date: 3/29/17 Time: 12:20

Relinquished by: (Signature) *[Signature]* Date: Date: Time:





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 6 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:

2015-18-EurofinsCalscience  
Quote: 963193

SAMPLER(S): (PRINT)

Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE:

Geotracker EDF

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raihel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
S1	Rea33917-03-025-01		3/28/17	1407	SO	1
S2	Rea33917-04-005-01			1410		
S3	Rea33917-04-005-01			1413		
S4	Rea33917-01-005-01			1425		
S5	Rea33912-01-025-01			1428		
S6	Rea33912-02-005-01			1434		
S7	Rea33912-02-025-01			1436		
S8	Rea33912-03-005-01			1440		
S9	Rea33912-03-025-01			1443		
S60	Rea33912-04-005-01			1447		

### REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		X
			X		X
			X		X
			X		X
			X		X
			X		X

Received by: (Signature/Affiliation)

Date: 3/29/17 Time: 1110

Received by: (Signature/Affiliation)

Date: 3/29/17 Time: 1220

Received by: (Signature/Affiliation)



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/28/17

PAGE: 7 OF 11

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:

Colleen Cantfield

BLANKET SERVICE AGREEMENT NO.:

2015-18-EurofinsCalscience  
Quote: 963193

SAMPLER(S): (PRINT)

Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccantfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
EDD

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
61	Reac3392-04-005-01		3/28/17	1451	SO	1
62	Reac3371-01-005-01			1507		1
63	Reac3371-01-025-01			1511		1
64	Reac3371-02-005-01			1516		1
65	Reac3371-02-025-01			1520		1
66	Reac3371-03-005-01			1524		1
67	Reac3371-03-025-01			1527		1
68	Reac3371-04-005-01			1533		1
69	Reac3371-04-025-01			1536		1
70	LineD1687-02-005-01			1606		1

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		X
		X	X		X
		X	X		X
		X	X		X
		X	X		X
		X	X		X
		X	X		X
		X	X		X
		X	X		X

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *Aly ECF* Date: 3/29/17 Time: 1110

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1220

Relinquished by: (Signature) *[Signature]* Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:





Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/29/17

PAGE: 9 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience											
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: 963193											
CITY: Costa Mesa	STATE: CA	PROJECT CONTACT: Colleen Canfield	SAMPLER(S): (PRINT) Tanya Nelson										
TEL: 714-371-1802	E-MAIL: ccanfield@haleyaldrich.com	HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0											
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):		REQUESTED ANALYSES											
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD													
<input type="checkbox"/> Geotracker EDF													
<input checked="" type="checkbox"/> H&A Standard EDD													
Special Instructions: Sample Archiving requirements (if required to be held greater than 30 days):													
Pricing provided on Eurofins Quote 963193													
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
81	Avcc23604-005-01		3/29/17	0831	SO	1	X			X			
82	Avcc343604-005-02			0831						X			
83	Avcc343604-025-01			0836						X			
84	UtaH3823-01-005-01			0850						X			
85	UtaH3823-01-025-01			0856						X			
86	UtaH3823-02-005-01			0902						X			
87	UtaH3823-02-025-01			0906						X			
88	UtaH3823-03-005-01			0911						X			
89	UtaH3823-03-025-01			0914						X			
90	UtaH3823-04-005-01			0922						X			
Relinquished by: (Signature) <i>Chae Lee</i>		Received by: (Signature/Affiliation) <i>Avy ECI</i>		Date: 3/29/17	Time: 1110								
Relinquished by: (Signature) <i>Avy</i>		Received by: (Signature/Affiliation)		Date: 3/29/17	Time: 1220								
Relinquished by: (Signature)		Received by: (Signature/Affiliation)		Date:	Time:								



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HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/29/17

PAGE: 10 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF GLOBAL ID: LOG CODE:  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 EDD

REQUESTED ANALYSES

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
91	Utah3315-01-005-01		3/29/17	0927	1
92	Utah3315-01-005-01			0940	
93	Utah3315-01-005-01			0943	
94	Utah3315-02-005-01			0950	
95	Utah3315-02-025-01			0954	
96	Utah3315-03-005-01			1002	
97	Utah3315-03-025-01			1006	
98	Utah3315-04-005-01			1011	
99	Utah3315-04-025-01			1015	
100	Utah3315-01-005-01			1035	

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		Hold
			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		

Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*

Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1110  
 Received by: (Signature/Affiliation) *[Signature]* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2146

DATE: 3/29/17

PAGE: 11 OF 11

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: gcanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
101	Utah3348-01-025-01		3/29/17	1038	SO	1
102	Utah3348-02-005-01			1043		
103	Utah3348-02-025-01			1047		
104	Utah3348-03-005-01			1051		
105	Utah3348-03-025-01			1055		
106	Utah3348-04-005-01			1102		
107	Utah3348-04-025-01			1106		

REQUESTED ANALYSES						
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X			X		X	
			X		X	
			X		X	
			X		X	

Relinquished by: (Signature) *Colleen Canfield* Date: 3/29/17 Time: 1100  
 Received by: (Signature/Affiliation) *AY* ECF  
 Relinquished by: (Signature) *AY* Date: 3/29/17 Time: 1220  
 Received by: (Signature/Affiliation) *AY*  
 Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: (Signature/Affiliation) \_\_\_\_\_

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: H & A

DATE: 03/29/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 678

CUSTODY SEAL:

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 678

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 1110

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....  Yes  No  N/A

COC document(s) received complete .....  Yes  No  N/A

Sampling date  Sampling time  Matrix  Number of containers

No analysis requested  Not relinquished  No relinquished date  No relinquished time

Sampler's name indicated on COC .....  Yes  No  N/A

Sample container label(s) consistent with COC .....  Yes  No  N/A

Sample container(s) intact and in good condition .....  Yes  No  N/A

Proper containers for analyses requested .....  Yes  No  N/A

Sufficient volume/mass for analyses requested .....  Yes  No  N/A

Samples received within holding time .....  Yes  No  N/A

Aqueous samples for certain analyses received within 15-minute holding time

pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....  Yes  No  N/A

Proper preservation chemical(s) noted on COC and/or sample container .....  Yes  No  N/A

Unpreserved aqueous sample(s) received for certain analyses

Volatile Organics  Total Metals  Dissolved Metals

Container(s) for certain analysis free of headspace .....  Yes  No  N/A

Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500)

Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation .....  Yes  No  N/A

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB

125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AG<sub>J</sub>  500AG<sub>J</sub><sub>s</sub>

500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>,

Labeled/Checked by: 1110

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH

Reviewed by: 1017 836

\* Sampling date per label is 3/29/17

**SAMPLE RECEIPT CHECKLIST**

COOLER 2 OF 2

CLIENT: H & A

DATE: 03 / 29 / 2017

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.8 °C (w/ CF): 3.8 °C;  Blank  Sample  
 Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)  
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter

Checked by: 678

**CUSTODY SEAL:**

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 678  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1110

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  
 125PB<sub>z<sub>na</sub></sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AGJ  500AGJ<sub>s</sub>  
 500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

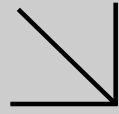
**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag  
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1110  
 s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 107/876

Return to Contents



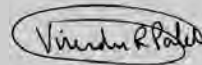

**WORK ORDER NUMBER: 17-03-2252**
*The difference is service*


AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**
**Client:** Haley & Aldrich, Inc.

**Client Project Name:** UC Riverside North District / 128685-006  
2.0

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453



 Approved for release on 04/11/2017 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-03-2252

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/30/17. They were assigned to Work Order 17-03-2252.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/30/17 12:55
	Number of Containers: 101

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Avoc3477-01-005-01	17-03-2252-1	03/29/17 11:30	1	Solid
Avoc3477-01-025-01	17-03-2252-2	03/29/17 11:34	1	Solid
Avoc3477-02-005-01	17-03-2252-3	03/29/17 11:41	1	Solid
Avoc3477-02-025-01	17-03-2252-4	03/29/17 11:46	1	Solid
Avoc3477-03-005-01	17-03-2252-5	03/29/17 11:54	1	Solid
Avoc3477-03-025-01	17-03-2252-6	03/29/17 11:59	1	Solid
Avoc3477-04-005-01	17-03-2252-7	03/29/17 12:07	1	Solid
Avoc3477-04-025-01	17-03-2252-8	03/29/17 12:10	1	Solid
Lind0741-01-005-01	17-03-2252-9	03/29/17 12:17	1	Solid
Lind0741-01-025-01	17-03-2252-10	03/29/17 12:20	1	Solid
Lind0741-02-005-01	17-03-2252-11	03/29/17 12:23	1	Solid
Lind0741-02-025-01	17-03-2252-12	03/29/17 12:27	1	Solid
Lind0741-03-005-01	17-03-2252-13	03/29/17 12:31	1	Solid
Lind0741-03-025-01	17-03-2252-14	03/29/17 12:34	1	Solid
Lind0741-04-005-01	17-03-2252-15	03/29/17 12:39	1	Solid
Lind0741-04-025-01	17-03-2252-16	03/29/17 12:41	1	Solid
Utah3384-01-005-01	17-03-2252-17	03/29/17 13:52	1	Solid
Utah3384-01-005-02	17-03-2252-18	03/29/17 13:52	1	Solid
Utah3384-01-025-01	17-03-2252-19	03/29/17 13:55	1	Solid
Utah3384-02-005-01	17-03-2252-20	03/29/17 14:02	1	Solid
Utah3384-02-005-02	17-03-2252-21	03/29/17 14:02	1	Solid
Utah3384-02-025-01	17-03-2252-22	03/29/17 14:10	1	Solid
Utah3384-03-005-01	17-03-2252-23	03/29/17 14:19	1	Solid
Utah3384-03-005-02	17-03-2252-24	03/29/17 14:19	1	Solid
Utah3384-03-025-01	17-03-2252-25	03/29/17 14:23	1	Solid
Utah3384-04-005-01	17-03-2252-26	03/29/17 14:29	1	Solid
Utah3384-04-005-02	17-03-2252-27	03/29/17 14:29	1	Solid
Utah3384-04-025-01	17-03-2252-28	03/29/17 14:33	1	Solid
Plum0850-01-005-01	17-03-2252-29	03/29/17 14:41	1	Solid
Plum0850-01-025-01	17-03-2252-30	03/29/17 14:46	1	Solid
Plum0850-02-005-01	17-03-2252-31	03/29/17 15:01	1	Solid
Plum0850-02-025-01	17-03-2252-32	03/29/17 15:06	1	Solid
Plum0850-03-005-01	17-03-2252-33	03/29/17 15:11	1	Solid
Plum0850-03-025-01	17-03-2252-34	03/29/17 15:16	1	Solid
Plum0850-04-005-01	17-03-2252-35	03/29/17 15:20	1	Solid
Plum0850-04-025-01	17-03-2252-36	03/29/17 15:23	1	Solid
Peac0880-01-005-01	17-03-2252-37	03/29/17 15:31	1	Solid
Peac0880-01-025-01	17-03-2252-38	03/29/17 15:34	1	Solid
Peac0880-02-005-01	17-03-2252-39	03/29/17 15:40	1	Solid
Peac0880-02-025-01	17-03-2252-40	03/29/17 15:46	1	Solid
Peac0880-03-005-01	17-03-2252-41	03/29/17 15:51	1	Solid
Peac0880-03-025-01	17-03-2252-42	03/29/17 15:56	1	Solid



## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/30/17 12:55
	Number of Containers: 101

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Peac0880-04-005-01	17-03-2252-43	03/29/17 16:00	1	Solid
Peac0880-04-025-01	17-03-2252-44	03/29/17 16:03	1	Solid
EB-032917	17-03-2252-45	03/29/17 16:15	2	Aqueous
Blai0890-01-005-01	17-03-2252-46	03/30/17 08:00	1	Solid
Blai0890-01-005-02	17-03-2252-47	03/30/17 08:00	1	Solid
Blai0890-01-025-01	17-03-2252-48	03/30/17 08:03	1	Solid
Blai0890-02-005-01	17-03-2252-49	03/30/17 08:16	1	Solid
Blai0890-02-005-02	17-03-2252-50	03/30/17 08:16	1	Solid
Blai0890-02-025-01	17-03-2252-51	03/30/17 08:19	1	Solid
Blai0890-03-005-01	17-03-2252-52	03/30/17 08:25	1	Solid
Blai0890-03-005-02	17-03-2252-53	03/30/17 08:25	1	Solid
Blai0890-03-025-01	17-03-2252-54	03/30/17 08:29	1	Solid
Blai0890-04-005-01	17-03-2252-55	03/30/17 08:35	1	Solid
Blai0890-04-005-02	17-03-2252-56	03/30/17 08:35	1	Solid
Blai0890-04-025-01	17-03-2252-57	03/30/17 08:39	1	Solid
BG-01	17-03-2252-58	03/30/17 08:50	1	Solid
Blai0828-01-005-01	17-03-2252-59	03/30/17 09:02	1	Solid
Blai0828-01-025-01	17-03-2252-60	03/30/17 09:07	1	Solid
Blai0828-02-005-01	17-03-2252-61	03/30/17 09:11	1	Solid
Blai0828-02-025-01	17-03-2252-62	03/30/17 09:18	1	Solid
Blai0828-03-005-01	17-03-2252-63	03/30/17 09:23	1	Solid
Blai0828-03-025-01	17-03-2252-64	03/30/17 09:27	1	Solid
Blai0828-04-005-01	17-03-2252-65	03/30/17 09:33	1	Solid
Blai0828-04-025-01	17-03-2252-66	03/30/17 09:37	1	Solid
Grap0828-01-005-01	17-03-2252-67	03/30/17 09:47	1	Solid
Grap0828-01-025-01	17-03-2252-68	03/30/17 09:53	1	Solid
Grap0828-02-005-01	17-03-2252-69	03/30/17 09:59	1	Solid
Grap0828-02-025-01	17-03-2252-70	03/30/17 10:02	1	Solid
Grap0828-03-005-01	17-03-2252-71	03/30/17 10:10	1	Solid
Grap0828-03-025-01	17-03-2252-72	03/30/17 10:15	1	Solid
Grap0828-04-005-01	17-03-2252-73	03/30/17 10:19	1	Solid
Grap0828-04-025-01	17-03-2252-74	03/30/17 10:22	1	Solid
Grap0766-01-005-01	17-03-2252-75	03/30/17 10:38	1	Solid
Grap0766-01-025-01	17-03-2252-76	03/30/17 10:41	1	Solid
Grap0766-02-005-01	17-03-2252-77	03/30/17 10:48	1	Solid
Grap0766-02-025-01	17-03-2252-78	03/30/17 10:51	1	Solid
Grap0766-03-005-01	17-03-2252-79	03/30/17 10:55	1	Solid
Grap0766-03-025-01	17-03-2252-80	03/30/17 10:59	1	Solid
Composite-41	17-03-2252-81	03/29/17 00:00	1	Solid
Composite-42	17-03-2252-82	03/29/17 00:00	1	Solid
Composite-43	17-03-2252-83	03/29/17 00:00	1	Solid
Composite-44	17-03-2252-84	03/29/17 00:00	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/30/17 12:55
	Number of Containers: 101

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Composite-45	17-03-2252-85	03/29/17 00:00	1	Solid
Composite-45-Dup	17-03-2252-86	03/29/17 00:00	1	Solid
Composite-46	17-03-2252-87	03/29/17 00:00	1	Solid
Composite-47	17-03-2252-88	03/29/17 00:00	1	Solid
Composite-48	17-03-2252-89	03/29/17 00:00	1	Solid
Composite-49	17-03-2252-90	03/29/17 00:00	1	Solid
Composite-50	17-03-2252-91	03/29/17 00:00	1	Solid
Composite-51	17-03-2252-92	03/30/17 00:00	1	Solid
Composite-51-Dup	17-03-2252-93	03/30/17 00:00	1	Solid
Composite-52	17-03-2252-94	03/30/17 00:00	1	Solid
Composite-53	17-03-2252-95	03/30/17 00:00	1	Solid
Composite-54	17-03-2252-96	03/30/17 00:00	1	Solid
Composite-55	17-03-2252-97	03/30/17 00:00	1	Solid
Composite-56	17-03-2252-98	03/30/17 00:00	1	Solid
Composite-57	17-03-2252-99	03/30/17 00:00	1	Solid
Composite-58	17-03-2252-100	03/30/17 00:00	1	Solid



## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
Project Name: UC Riverside North District / 128685-006 2.0  
Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Avoc3477-01-005-01 (17-03-2252-1) Lead	68.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Avoc3477-02-005-01 (17-03-2252-3) Lead	53.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Avoc3477-03-005-01 (17-03-2252-5) Lead	37.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Avoc3477-04-005-01 (17-03-2252-7) Lead	82.9		0.476	mg/kg	EPA 6010B	EPA 3050B
Lind0741-01-005-01 (17-03-2252-9) Arsenic	3.31		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	39.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Lind0741-02-005-01 (17-03-2252-11) Lead	45.4		0.481	mg/kg	EPA 6010B	EPA 3050B
Lind0741-03-005-01 (17-03-2252-13) Lead	44.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Lind0741-04-005-01 (17-03-2252-15) Lead	105		0.490	mg/kg	EPA 6010B	EPA 3050B
Utah3384-01-005-01 (17-03-2252-17) Arsenic	2.99		0.721	mg/kg	EPA 6010B	EPA 3050B
Lead	54.6		0.481	mg/kg	EPA 6010B	EPA 3050B
Utah3384-02-005-01 (17-03-2252-20) Lead	133		0.498	mg/kg	EPA 6010B	EPA 3050B
Utah3384-03-005-01 (17-03-2252-23) Lead	82.3		0.478	mg/kg	EPA 6010B	EPA 3050B
Utah3384-04-005-01 (17-03-2252-26) Lead	64.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Plum0850-01-005-01 (17-03-2252-29) Arsenic	5.53		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	111		0.493	mg/kg	EPA 6010B	EPA 3050B
Plum0850-02-005-01 (17-03-2252-31) Lead	94.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Plum0850-03-005-01 (17-03-2252-33) Lead	72.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Plum0850-04-005-01 (17-03-2252-35) Lead	51.6		0.493	mg/kg	EPA 6010B	EPA 3050B
Peac0880-01-005-01 (17-03-2252-37) Lead	66.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Peac0880-02-005-01 (17-03-2252-39) Lead	15.3		0.485	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Peac0880-03-005-01 (17-03-2252-41)						
Lead	333		0.476	mg/kg	EPA 6010B	EPA 3050B
Peac0880-04-005-01 (17-03-2252-43)						
Lead	110		0.500	mg/kg	EPA 6010B	EPA 3050B
Blai0890-01-005-01 (17-03-2252-46)						
Arsenic	2.78		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	434		0.493	mg/kg	EPA 6010B	EPA 3050B
Blai0890-02-005-01 (17-03-2252-49)						
Lead	90.4		0.485	mg/kg	EPA 6010B	EPA 3050B
Blai0890-03-005-01 (17-03-2252-52)						
Lead	63.3		0.488	mg/kg	EPA 6010B	EPA 3050B
Blai0890-04-005-01 (17-03-2252-55)						
Lead	107		0.488	mg/kg	EPA 6010B	EPA 3050B
Blai0828-01-005-01 (17-03-2252-59)						
Arsenic	1.85		0.754	mg/kg	EPA 6010B	EPA 3050B
Lead	70.8		0.503	mg/kg	EPA 6010B	EPA 3050B
Blai0828-02-005-01 (17-03-2252-61)						
Lead	68.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Blai0828-03-005-01 (17-03-2252-63)						
Lead	11.5		0.495	mg/kg	EPA 6010B	EPA 3050B
Blai0828-04-005-01 (17-03-2252-65)						
Lead	60.6		0.503	mg/kg	EPA 6010B	EPA 3050B
Grap0828-01-005-01 (17-03-2252-67)						
Arsenic	3.95		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	51.3		0.493	mg/kg	EPA 6010B	EPA 3050B
Grap0828-02-005-01 (17-03-2252-69)						
Lead	98.3		0.485	mg/kg	EPA 6010B	EPA 3050B
Grap0828-03-005-01 (17-03-2252-71)						
Lead	80.0		0.493	mg/kg	EPA 6010B	EPA 3050B
Grap0828-04-005-01 (17-03-2252-73)						
Lead	57.5		0.476	mg/kg	EPA 6010B	EPA 3050B
Grap0766-01-005-01 (17-03-2252-75)						
Lead	52.8		0.488	mg/kg	EPA 6010B	EPA 3050B
Grap0766-02-005-01 (17-03-2252-77)						
Lead	121		0.481	mg/kg	EPA 6010B	EPA 3050B
Grap0766-03-005-01 (17-03-2252-79)						
Lead	49.5		0.483	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/30/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-41 (17-03-2252-81)						
Chlordane	210		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	37		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	100		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	51		25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.5	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-42 (17-03-2252-82)						
4,4'-DDE	11		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.1	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-43 (17-03-2252-83)						
Chlordane	500		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	7.4		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	180		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	11		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.9	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-44 (17-03-2252-84)						
Chlordane	150		49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	11		4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	48		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	14		4.9	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	13		9.9	ug/kg	EPA 8081A	EPA 3545
Composite-45 (17-03-2252-85)						
Chlordane	92		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	5.0		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	37		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	13		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-45-Dup (17-03-2252-86)						
Chlordane	110		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	7.5		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	37		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	13		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-47 (17-03-2252-88)						
Chlordane	650		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	17		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	110		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	19		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	27		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	12		10	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

<b>Client:</b> Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	<b>Work Order:</b> 17-03-2252 <b>Project Name:</b> UC Riverside North District / 128685-006 2.0 <b>Received:</b> 03/30/17
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Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Composite-49 (17-03-2252-90)						
Chlordane	340		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	5.8		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	12		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	62		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	3.7	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-50 (17-03-2252-91)						
Chlordane	42	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	5.0		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	11		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-51 (17-03-2252-92)						
Chlordane	510		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	25		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	38		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	30		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	15		10	ug/kg	EPA 8081A	EPA 3545
Composite-51-Dup (17-03-2252-93)						
Chlordane	670		250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	14		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	32		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	17		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.1		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	20		10	ug/kg	EPA 8081A	EPA 3545
Composite-52 (17-03-2252-94)						
Chlordane	30	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	4.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-53 (17-03-2252-95)						
Chlordane	130		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	12		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	49		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.7		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.8	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-54 (17-03-2252-96)						
Chlordane	46	J	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	9.4		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	29		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.5	J	2.2*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
Project Name: UC Riverside North District / 128685-006 2.0  
Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Composite-55 (17-03-2252-97)						
Chlordane	240		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	22		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	61		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.6		5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	46		25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.8	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-56 (17-03-2252-98)						
Chlordane	74		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	7.1		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	25		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.7	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	15		5.0	ug/kg	EPA 8081A	EPA 3545
Composite-57 (17-03-2252-99)						
Chlordane	610		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	55		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	300		50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	160		50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.3		5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	2.2	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	9.2	J	3.7*	ug/kg	EPA 8081A	EPA 3545
Composite-58 (17-03-2252-100)						
4,4'-DDE	15		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	9.1		5.0	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-01-005-01	17-03-2252-1-A	03/29/17 11:30	Solid	ICP 7300	04/04/17	04/05/17 12:47	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		68.1		0.505		1.01	
Avoc3477-02-005-01	17-03-2252-3-A	03/29/17 11:41	Solid	ICP 7300	04/04/17	04/05/17 12:48	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		53.7		0.493		0.985	
Avoc3477-03-005-01	17-03-2252-5-A	03/29/17 11:54	Solid	ICP 7300	04/04/17	04/05/17 12:49	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		37.7		0.478		0.957	
Avoc3477-04-005-01	17-03-2252-7-A	03/29/17 12:07	Solid	ICP 7300	04/04/17	04/05/17 12:51	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		82.9		0.476		0.952	
Lind0741-01-005-01	17-03-2252-9-A	03/29/17 12:17	Solid	ICP 7300	04/04/17	04/05/17 12:52	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.31		0.746		0.995	
Lead		39.1		0.498		0.995	
Lind0741-02-005-01	17-03-2252-11-A	03/29/17 12:23	Solid	ICP 7300	04/04/17	04/05/17 12:53	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.4		0.481		0.962	
Lind0741-03-005-01	17-03-2252-13-A	03/29/17 12:31	Solid	ICP 7300	04/04/17	04/05/17 12:54	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		44.7		0.478		0.957	
Lind0741-04-005-01	17-03-2252-15-A	03/29/17 12:39	Solid	ICP 7300	04/04/17	04/05/17 12:55	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		105		0.490		0.980	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-01-005-01	17-03-2252-17-A	03/29/17 13:52	Solid	ICP 7300	04/04/17	04/05/17 12:55	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.99		0.721		0.962	
Lead		54.6		0.481		0.962	
Utah3384-02-005-01	17-03-2252-20-A	03/29/17 14:02	Solid	ICP 7300	04/04/17	04/05/17 12:56	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		133		0.498		0.995	
Utah3384-03-005-01	17-03-2252-23-A	03/29/17 14:19	Solid	ICP 7300	04/04/17	04/05/17 12:57	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		82.3		0.478		0.957	
Utah3384-04-005-01	17-03-2252-26-A	03/29/17 14:29	Solid	ICP 7300	04/04/17	04/05/17 12:58	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		64.5		0.490		0.980	
Plum0850-01-005-01	17-03-2252-29-A	03/29/17 14:41	Solid	ICP 7300	04/04/17	04/05/17 12:59	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		5.53		0.739		0.985	
Lead		111		0.493		0.985	
Plum0850-02-005-01	17-03-2252-31-A	03/29/17 15:01	Solid	ICP 7300	04/04/17	04/05/17 13:01	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		94.2		0.503		1.01	
Plum0850-03-005-01	17-03-2252-33-A	03/29/17 15:11	Solid	ICP 7300	04/04/17	04/05/17 13:02	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		72.0		0.500		1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Plum0850-04-005-01</b>	<b>17-03-2252-35-A</b>	<b>03/29/17 15:20</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:03</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		51.6		0.493		0.985	
<b>Peac0880-01-005-01</b>	<b>17-03-2252-37-A</b>	<b>03/29/17 15:31</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:05</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		66.0		0.495		0.990	
<b>Peac0880-02-005-01</b>	<b>17-03-2252-39-A</b>	<b>03/29/17 15:40</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:05</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		15.3		0.485		0.971	
<b>Peac0880-03-005-01</b>	<b>17-03-2252-41-A</b>	<b>03/29/17 15:51</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:06</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		333		0.476		0.952	
<b>Peac0880-04-005-01</b>	<b>17-03-2252-43-A</b>	<b>03/29/17 16:00</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:07</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		110		0.500		1.00	
<b>Blai0890-01-005-01</b>	<b>17-03-2252-46-A</b>	<b>03/30/17 08:00</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:08</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		2.78		0.739		0.985	
Lead		434		0.493		0.985	
<b>Blai0890-02-005-01</b>	<b>17-03-2252-49-A</b>	<b>03/30/17 08:16</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:08</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		90.4		0.485		0.971	
<b>Blai0890-03-005-01</b>	<b>17-03-2252-52-A</b>	<b>03/30/17 08:25</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:09</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		63.3		0.488		0.976	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0890-04-005-01</b>	<b>17-03-2252-55-A</b>	<b>03/30/17 08:35</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:12</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		107		0.488		0.976	
<b>Blai0828-01-005-01</b>	<b>17-03-2252-59-A</b>	<b>03/30/17 09:02</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:13</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		1.85		0.754		1.01	
Lead		70.8		0.503		1.01	
<b>Blai0828-02-005-01</b>	<b>17-03-2252-61-A</b>	<b>03/30/17 09:11</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:14</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		68.4		0.505		1.01	
<b>Blai0828-03-005-01</b>	<b>17-03-2252-63-A</b>	<b>03/30/17 09:23</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:14</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		11.5		0.495		0.990	
<b>Blai0828-04-005-01</b>	<b>17-03-2252-65-A</b>	<b>03/30/17 09:33</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:15</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		60.6		0.503		1.01	
<b>Grap0828-01-005-01</b>	<b>17-03-2252-67-A</b>	<b>03/30/17 09:47</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:16</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.95		0.739		0.985	
Lead		51.3		0.493		0.985	
<b>Grap0828-02-005-01</b>	<b>17-03-2252-69-A</b>	<b>03/30/17 09:59</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:17</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		98.3		0.485		0.971	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0828-03-005-01</b>	<b>17-03-2252-71-A</b>	<b>03/30/17 10:10</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:18</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		80.0		0.493		0.985	
<b>Grap0828-04-005-01</b>	<b>17-03-2252-73-A</b>	<b>03/30/17 10:19</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:19</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		57.5		0.476		0.952	
<b>Grap0766-01-005-01</b>	<b>17-03-2252-75-A</b>	<b>03/30/17 10:38</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:19</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		52.8		0.488		0.976	
<b>Grap0766-02-005-01</b>	<b>17-03-2252-77-A</b>	<b>03/30/17 10:48</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:22</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		121		0.481		0.962	
<b>Grap0766-03-005-01</b>	<b>17-03-2252-79-A</b>	<b>03/30/17 10:55</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:23</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		49.5		0.483		0.966	
<b>Method Blank</b>	<b>097-01-002-24571</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:23</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.728		0.971	
Lead		ND		0.485		0.971	
<b>Method Blank</b>	<b>097-01-002-24572</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:25</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B  
 Units: mg/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032917	17-03-2252-45-A	03/29/17 16:15	Aqueous	ICP 7300	04/03/17	04/03/17 13:07	170331LA7

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-003-16392	N/A	Aqueous	ICP 7300	03/31/17	04/01/17 13:05	170331LA7

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-41</b>	<b>17-03-2252-81-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/05/17 14:34</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	210	50	26	1.00	
4,4'-DDD	37	5.0	2.3	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	2.5	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

Composite-41	17-03-2252-81-A	03/29/17 00:00	Solid	GC 41	04/04/17	04/07/17 07:02	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	100	25	11	5.00	
4,4'-DDT	51	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-42</b>	<b>17-03-2252-82-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/05/17 14:49</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	11	5.0	2.2	1.00	
4,4'-DDT	3.1	5.0	2.2	1.00	J
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	86	24-168	
2,4,5,6-Tetrachloro-m-Xylene	53	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-43</b>	<b>17-03-2252-83-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 10:48</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	500	50	26	1.00	
4,4'-DDD	7.4	5.0	2.4	1.00	
4,4'-DDT	11	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	5.9	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

Composite-43	17-03-2252-83-A	03/29/17 00:00	Solid	GC 41	04/04/17	04/07/17 07:17	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	180	50	22	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	78	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-44</b>	<b>17-03-2252-84-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 11:03</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	
Alpha-BHC	ND	9.9	3.6	1.00	
Beta-BHC	ND	4.9	2.4	1.00	
Chlordane	150	49	26	1.00	
4,4'-DDD	11	4.9	2.3	1.00	
4,4'-DDT	14	4.9	2.2	1.00	
Delta-BHC	ND	9.9	4.3	1.00	
Dieldrin	ND	4.9	2.2	1.00	
Endosulfan I	ND	4.9	2.0	1.00	
Endosulfan II	ND	4.9	2.3	1.00	
Endosulfan Sulfate	ND	4.9	2.6	1.00	
Endrin	ND	4.9	2.3	1.00	
Endrin Aldehyde	ND	4.9	3.0	1.00	
Endrin Ketone	ND	4.9	2.5	1.00	
Gamma-BHC	ND	4.9	2.2	1.00	
Heptachlor	ND	4.9	2.1	1.00	
Heptachlor Epoxide	13	9.9	3.6	1.00	
Methoxychlor	ND	4.9	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

Composite-44	17-03-2252-84-A	03/29/17 00:00	Solid	GC 41	04/04/17	04/07/17 07:32	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	48	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-45</b>	<b>17-03-2252-85-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 11:18</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	92	50	26	1.00	
4,4'-DDD	5.0	5.0	2.4	1.00	
4,4'-DDE	37	5.0	2.2	1.00	
4,4'-DDT	13	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-45-Dup</b>	<b>17-03-2252-86-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 11:33</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	110	50	26	1.00	
4,4'-DDD	7.5	5.0	2.4	1.00	
4,4'-DDE	37	5.0	2.2	1.00	
4,4'-DDT	13	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-46</b>	<b>17-03-2252-87-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 11:48</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	56	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-47</b>	<b>17-03-2252-88-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 12:03</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
4,4'-DDD	17	5.0	2.4	1.00	
4,4'-DDT	19	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	27	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	12	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

Composite-47	17-03-2252-88-A	03/29/17 00:00	Solid	GC 41	04/04/17	04/07/17 07:47	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	650	250	130	5.00	
4,4'-DDE	110	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-48</b>	<b>17-03-2252-89-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 12:18</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	91	24-168			
2,4,5,6-Tetrachloro-m-Xylene	58	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-49</b>	<b>17-03-2252-90-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 12:33</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	340	50	26	1.00	
4,4'-DDD	5.8	5.0	2.4	1.00	
4,4'-DDE	32	5.0	2.2	1.00	
4,4'-DDT	12	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	3.7	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

Composite-49	17-03-2252-90-A	03/29/17 00:00	Solid	GC 41	04/04/17	04/07/17 14:40	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Dieldrin	62	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-50</b>	<b>17-03-2252-91-A</b>	<b>03/29/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 12:48</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	42	50	26	1.00	J
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	5.0	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	11	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	94	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-51</b>	<b>17-03-2252-92-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 13:03</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	510	50	26	1.00	
4,4'-DDD	25	5.0	2.4	1.00	
4,4'-DDE	38	5.0	2.2	1.00	
4,4'-DDT	30	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	2.2	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	15	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	132	24-168			
2,4,5,6-Tetrachloro-m-Xylene	73	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-51-Dup</b>	<b>17-03-2252-93-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 13:18</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	670	250	130	5.00	
4,4'-DDD	14	5.0	2.4	1.00	
4,4'-DDE	32	5.0	2.2	1.00	
4,4'-DDT	17	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	5.1	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	20	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	138	24-168			
2,4,5,6-Tetrachloro-m-Xylene	74	25-145			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite-52	17-03-2252-94-A	03/30/17 00:00	Solid	GC 41	04/04/17	04/06/17 13:33	170404L11

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	30	50	26	1.00	J
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	4.2	5.0	2.2	1.00	J
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-53</b>	<b>17-03-2252-95-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 13:48</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	130	50	26	1.00	
4,4'-DDD	12	5.0	2.4	1.00	
4,4'-DDT	6.7	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	2.8	5.0	2.2	1.00	J
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

Composite-53	17-03-2252-95-A	03/30/17 00:00	Solid	GC 41	04/04/17	04/07/17 08:17	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	49	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-54</b>	<b>17-03-2252-96-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 14:03</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	46	50	26	1.00	J
4,4'-DDD	9.4	5.0	2.4	1.00	
4,4'-DDE	29	5.0	2.2	1.00	
4,4'-DDT	3.5	5.0	2.2	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-55</b>	<b>17-03-2252-97-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 14:19</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	240	50	26	1.00	
4,4'-DDD	22	5.0	2.4	1.00	
4,4'-DDT	8.6	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	5.8	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

Composite-55	17-03-2252-97-A	03/30/17 00:00	Solid	GC 41	04/04/17	04/07/17 08:32	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	61	25	11	5.00	
Dieldrin	46	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-56</b>	<b>17-03-2252-98-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 14:34</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	74	50	26	1.00	
4,4'-DDD	7.1	5.0	2.4	1.00	
4,4'-DDE	25	5.0	2.2	1.00	
4,4'-DDT	2.7	5.0	2.2	1.00	J
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	15	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-57</b>	<b>17-03-2252-99-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 15:51</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	610	50	26	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	5.3	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	2.2	5.0	2.2	1.00	J
Heptachlor Epoxide	9.2	10	3.7	1.00	J
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

Composite-57	17-03-2252-99-A	03/30/17 00:00	Solid	GC 41	04/04/17	04/07/17 09:02	170404L11
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Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDD	55	50	24	10.0	
4,4'-DDE	300	50	22	10.0	
4,4'-DDT	160	50	22	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-58</b>	<b>17-03-2252-100-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 16:05</b>	<b>170404L11</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	15	5.0	2.2	1.00	
4,4'-DDT	9.1	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2652	N/A	Solid	GC 41	04/04/17	04/05/17 13:49	170404L11

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-032917	17-03-2252-45-B	03/29/17 16:15	Aqueous	GC 44	03/31/17	04/04/17 12:25	170331L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.095	0.027	1.00	
Gamma-BHC	ND	0.095	0.029	1.00	
Beta-BHC	ND	0.095	0.029	1.00	
Heptachlor	ND	0.095	0.025	1.00	
Delta-BHC	ND	0.095	0.027	1.00	
Aldrin	ND	0.095	0.025	1.00	
Heptachlor Epoxide	ND	0.095	0.024	1.00	
Endosulfan I	ND	0.095	0.026	1.00	
Dieldrin	ND	0.095	0.027	1.00	
4,4'-DDE	ND	0.095	0.025	1.00	
Endrin	ND	0.095	0.029	1.00	
Endrin Aldehyde	ND	0.095	0.025	1.00	
4,4'-DDD	ND	0.095	0.026	1.00	
Endosulfan II	ND	0.095	0.026	1.00	
4,4'-DDT	ND	0.095	0.025	1.00	
Endosulfan Sulfate	ND	0.095	0.028	1.00	
Methoxychlor	ND	0.095	0.024	1.00	
Chlordane	ND	0.95	0.31	1.00	
Toxaphene	ND	1.9	0.56	1.00	
Endrin Ketone	ND	0.095	0.023	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	50	50-135	
2,4,5,6-Tetrachloro-m-Xylene	102	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-529-948	N/A	Aqueous	GC 44	03/31/17	04/04/17 11:00	170331L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1.00	
Gamma-BHC	ND	0.10	0.030	1.00	
Beta-BHC	ND	0.10	0.030	1.00	
Heptachlor	ND	0.10	0.026	1.00	
Delta-BHC	ND	0.10	0.029	1.00	
Aldrin	ND	0.10	0.027	1.00	
Heptachlor Epoxide	ND	0.10	0.025	1.00	
Endosulfan I	ND	0.10	0.028	1.00	
Dieldrin	ND	0.10	0.029	1.00	
4,4'-DDE	ND	0.10	0.027	1.00	
Endrin	ND	0.10	0.031	1.00	
Endrin Aldehyde	ND	0.10	0.026	1.00	
4,4'-DDD	ND	0.10	0.027	1.00	
Endosulfan II	ND	0.10	0.027	1.00	
4,4'-DDT	ND	0.10	0.027	1.00	
Endosulfan Sulfate	ND	0.10	0.029	1.00	
Methoxychlor	ND	0.10	0.025	1.00	
Chlordane	ND	1.0	0.33	1.00	
Toxaphene	ND	2.0	0.59	1.00	
Endrin Ketone	ND	0.10	0.024	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	50	50-135	
2,4,5,6-Tetrachloro-m-Xylene	100	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Avoc3477-01-005-01	Sample	Solid	ICP 7300	04/04/17	04/05/17 12:47	170404S05
Avoc3477-01-005-01	Matrix Spike	Solid	ICP 7300	04/04/17	04/05/17 12:44	170404S05
Avoc3477-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/04/17	04/05/17 12:45	170404S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	12.62	25.00	42.05	118	38.74	104	75-125	8	0-20	
Lead	68.11	25.00	92.59	98	101.9	135	75-125	10	0-20	3

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Blai0890-01-005-01	Sample	Solid	ICP 7300	04/04/17	04/05/17 13:08	170404S06
Blai0890-01-005-01	Matrix Spike	Solid	ICP 7300	04/04/17	04/05/17 12:46	170404S06
Blai0890-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/04/17	04/05/17 12:46	170404S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.777	25.00	29.16	106	30.95	113	75-125	6	0-20	
Lead	433.6	25.00	273.8	4X	301.2	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2286-2	Sample	Aqueous	ICP 7300	03/31/17	04/01/17 13:12	170331SA7
17-03-2286-2	Matrix Spike	Aqueous	ICP 7300	03/31/17	04/01/17 13:13	170331SA7
17-03-2286-2	Matrix Spike Duplicate	Aqueous	ICP 7300	03/31/17	04/01/17 13:14	170331SA7

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.5000	0.5499	110	0.5369	107	80-140	2	0-11	
Lead	ND	0.5000	0.5213	104	0.5124	102	84-120	2	0-7	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
<b>Composite-53</b>	<b>Sample</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 13:48</b>	<b>170404S11</b>
<b>Composite-53</b>	<b>Matrix Spike</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/05/17 14:04</b>	<b>170404S11</b>
<b>Composite-53</b>	<b>Matrix Spike Duplicate</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/05/17 14:19</b>	<b>170404S11</b>

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	22.04	88	20.08	80	50-135	9	0-25	
Alpha-BHC	ND	25.00	22.18	89	20.40	82	50-135	8	0-25	
Beta-BHC	ND	25.00	21.39	86	21.00	84	50-135	2	0-25	
4,4'-DDD	11.78	25.00	43.84	128	42.38	122	50-135	3	0-25	
4,4'-DDE	48.72	25.00	62.61	56	56.09	29	50-135	11	0-25	3
4,4'-DDT	6.704	25.00	31.59	100	26.86	81	50-135	16	0-25	
Delta-BHC	ND	25.00	22.66	91	21.39	86	50-135	6	0-25	
Dieldrin	ND	25.00	26.32	105	24.70	99	50-135	6	0-25	
Endosulfan I	ND	25.00	24.64	99	22.95	92	50-135	7	0-25	
Endosulfan II	ND	25.00	26.86	107	26.12	104	50-135	3	0-25	
Endosulfan Sulfate	ND	25.00	26.04	104	25.17	101	50-135	3	0-25	
Endrin	ND	25.00	26.56	106	25.23	101	50-135	5	0-25	
Endrin Aldehyde	ND	25.00	25.24	101	23.76	95	50-135	6	0-25	
Gamma-BHC	ND	25.00	22.42	90	20.56	82	50-135	9	0-25	
Heptachlor	ND	25.00	22.13	89	20.10	80	50-135	10	0-25	
Heptachlor Epoxide	ND	25.00	24.01	96	21.99	88	50-135	9	0-25	
Methoxychlor	ND	25.00	20.35	81	18.87	75	50-135	8	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24571</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:24</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.46	90	80-120	
Lead		25.00	24.01	96	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24572</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:26</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	23.15	93	80-120	
Lead		25.00	24.28	97	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-003-16392</b>	<b>LCS</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>03/31/17</b>	<b>04/01/17 13:06</b>	<b>170331LA7</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		0.5000	0.4779	96	80-120	
Lead		0.5000	0.5174	103	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2652</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/06/17 17:35</b>	<b>170404L11</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	20.85	83	50-135	36-149	
Alpha-BHC		25.00	22.16	89	50-135	36-149	
Beta-BHC		25.00	20.40	82	50-135	36-149	
4,4'-DDD		25.00	21.41	86	50-135	36-149	
4,4'-DDE		25.00	22.24	89	50-135	36-149	
4,4'-DDT		25.00	23.72	95	50-135	36-149	
Delta-BHC		25.00	22.25	89	50-135	36-149	
Dieldrin		25.00	22.72	91	50-135	36-149	
Endosulfan I		25.00	23.17	93	50-135	36-149	
Endosulfan II		25.00	23.58	94	50-135	36-149	
Endosulfan Sulfate		25.00	22.10	88	50-135	36-149	
Endrin		25.00	22.92	92	50-135	36-149	
Endrin Aldehyde		25.00	22.27	89	50-135	36-149	
Gamma-BHC		25.00	22.01	88	50-135	36-149	
Heptachlor		25.00	23.01	92	50-135	36-149	
Heptachlor Epoxide		25.00	22.06	88	50-135	36-149	
Methoxychlor		25.00	22.12	88	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3510C  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-529-948	LCS	Aqueous	GC 44	03/31/17	04/03/17 15:07	170331L09				
099-12-529-948	LCSD	Aqueous	GC 44	03/31/17	04/03/17 15:21	170331L09				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.4550	91	0.5095	102	50-135	36-149	11	0-25	
Gamma-BHC	0.5000	0.4572	91	0.5157	103	50-135	36-149	12	0-25	
Beta-BHC	0.5000	0.4321	86	0.4844	97	50-135	36-149	11	0-25	
Heptachlor	0.5000	0.4646	93	0.5267	105	50-135	36-149	13	0-25	
Delta-BHC	0.5000	0.4649	93	0.5167	103	50-135	36-149	11	0-25	
Aldrin	0.5000	0.4468	89	0.5037	101	50-135	36-149	12	0-25	
Heptachlor Epoxide	0.5000	0.4495	90	0.4972	99	50-135	36-149	10	0-25	
Endosulfan I	0.5000	0.4804	96	0.5295	106	50-135	36-149	10	0-25	
Dieldrin	0.5000	0.4737	95	0.5198	104	50-135	36-149	9	0-25	
4,4'-DDE	0.5000	0.4756	95	0.5204	104	50-135	36-149	9	0-25	
Endrin	0.5000	0.4953	99	0.5399	108	50-135	36-149	9	0-25	
Endrin Aldehyde	0.5000	0.4673	93	0.5054	101	50-135	36-149	8	0-25	
4,4'-DDD	0.5000	0.4728	95	0.5140	103	50-135	36-149	8	0-25	
Endosulfan II	0.5000	0.4820	96	0.5244	105	50-135	36-149	8	0-25	
4,4'-DDT	0.5000	0.4914	98	0.5325	106	50-135	36-149	8	0-25	
Endosulfan Sulfate	0.5000	0.4572	91	0.4957	99	50-135	36-149	8	0-25	
Methoxychlor	0.5000	0.4728	95	0.5032	101	50-135	36-149	6	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 17-03-2252

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3010A Total	935	ICP 7300	1
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3510C	669	GC 44	1

## Glossary of Terms and Qualifiers

Work Order: 17-03-2252

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.





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Revised COC received from Matt Raithel (H&A) on 03/31/17 at 16:27pm.  
- Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY WORD**

WO # / LAB USE ONLY

**17-03-2252**

DATE: 3/29/17

PAGE: 1 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa TEL: 714-371-1802 E-MAIL: gcanfield@haleyaldrich.com ZIP: 92626 STATE: CA		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson												
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		REQUESTED ANALYSES												
SPECIAL INSTRUCTIONS: See attached table for Pricing provided on Eurofins Quote 963193 Compositing instructions for OCP Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110 8081		Turnaround Time (Rush surcharges may apply to any TAT not 'STANDARD'): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days): LOG CODE:												
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	UNPRESERVED	PRESERVED	FIELD FILTERED	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	DATE	TIME
1	AV03477-01-005-01		3/29/17	1130	SO	1	X			X			3/30/17	1640
2	AV03477-01-025-01			1134						X			3/30/17	1255
3	AV03477-02-005-01			1141						X				
4	AV03477-02-025-01			1146						X				
5	AV03477-03-005-01			1154						X				
6	AV03477-03-025-01			1159						X				
7	AV03477-04-005-01			1207						X				
8	AV03477-04-025-01			1210						X				
9	LIND0741-01-005-01			1217						X	X			
10	LIND0741-01-025-01			1220						X	X			
Received by: (Signature/Affiliation) <i>Any ECP</i> Received by: (Signature/Affiliation) <i>g</i> Received by: (Signature/Affiliation)													DATE	TIME

Revised COC received from Matt Raithel (H&A) on 03/31/17 at 16:27pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY  
 17-03-2252  
 DATE: 3/29/17  
 PAGE: 2 OF 8

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**eu ofins** | Calscience

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3167 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-Eurofins Calscience Quote: 963193  
 PROJECT CONTACT: Colleen Camfield Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Camfield  
**REQUESTED ANALYSES**

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES														
			DATE	TIME			Unpreserved	Preserved	Field Filled	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)									
	11 Lind0741-02-005-01		3/29/17	1223	SD	1	X														
	12 Lind0741-02-025-01			1227						X											
	13 Lind0741-03-005-01			1231						X											
	14 Lind0741-03-025-01			1234						X											
	15 Lind0741-04-005-01			1239						X											
	16 Lind0741-04-025-01			1241						X											
	17 Hal0384-01-005-01			1352						X											
	18 Hal0384-01-005-02			1352						X											
	19 Hal0384-01-025-01			1355						X											
	20 Hal0384-02-005-01			1402						X											

Received by: (Signature/Affiliation) Aly ECI Date: 3/30/17 Time: 1140  
 Received by: (Signature/Affiliation) Aly ECI Date: 3/30/17 Time: 1205  
 Received by: (Signature/Affiliation) Aly ECI

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





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Revised COC received from Matt Raitheal (H&A) on 03/31/17 at 16:27 pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY**

WO 77 LAB USE ONLY

DATE: 3/29/17 + 3/30/17  
 PAGE: 5 OF 8

17-03-2052

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

**REQUESTED ANALYSES**

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES											
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)						
41	Pac08880-03-005-01		3/29/17	15:51	SD	1	X											
42	Pac08880-03-025-01		↓	15:56	↓	↓												
43	Pac08880-04-005-01		↓	16:00	↓	↓												
44	Pac08880-04-025-01		↓	16:03	↓	↓												
45	EB-022917		↓	16:15	HD	2												
46	Bla0890-01-005-01		3/30/17	08:00	SO	1	X											
47	Bla0890-01-005-02		↓	08:00	↓	↓												
48	Bla0890-01-025-01		↓	08:03	↓	↓												
49	Bla0890-02-005-01		↓	08:16	↓	↓												
50	Bla0890-02-005-02		↓	08:16	↓	↓												

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD  
 Sample Archiving requirements (if required to be held greater than 30 days):

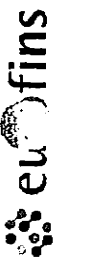
Reinquired by: (Signature) [Signature]  
 Date: 3/30/17 Time: 12:40  
 Received by: (Signature/Affiliation) AY ECI  
 Date: 3/30/17 Time: 12:55  
 Reinquired by: (Signature) [Signature]  
 Date: 3/30/17 Time: 12:55  
 Received by: (Signature/Affiliation) [Signature]  
 Date: 3/30/17 Time: 12:55

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





Revised COC received from Matt Rathel (H&A) on 03/31/17 at 16:27pm.  
- Virendra (ECI)



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<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson											
PROJECT CONTACT: Colleen Canfield		UC Riverside North District / 128685-006 2.0 PROJECT NO.: 17-03-2252											
DATE: 3/30/17 PAGE: 7 OF 8		HALEY & ALDRICH CHAIN OF CUSTODY REPORT											
REQUESTED ANALYSES													
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD	GLOBAL ID: Sample Archiving requirements (if required to be held greater than 30 days):	Turnaround Time (rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> STANDARD	LOG CODE:										
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	
61	Blai:0828-02-005-01		3/30/17	0911	SO	1	X			X			
62	Blai:0828-02-025-01			0918						X			
63	Blai:0828-03-005-01			0923						X			
64	Blai:0828-03-025-01			0927						X			
65	Blai:0828-04-005-01			0933						X			
66	Blai:0828-04-025-01			0937						X			
67	Grap:0828-01-005-01			0947						X	X		
68	Grap:0828-01-015-01			0953						X			
69	Grap:0828-02-005-01			0959						X			
70	Grap:0828-02-005-01			1002						X			
Requisitioned by: (Signature) 							Received by: (Signature/Affiliation) Aly ECI						
Requisitioned by: (Signature) 							Received by: (Signature/Affiliation) ECI						
Requisitioned by: (Signature) 							Received by: (Signature/Affiliation) ECI						
Date: 3/30/17 Time: 1140							Date: 3/30/17 Time: 1255						

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Services Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received  
from Matt Raithe (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

**Sample Composite Table**

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Compositied
Composite-41 - 81	X	Avoc3477-01-005-01 - 1 Avoc3477-02-005-01 - 3 Avoc3477-03-005-01 - 5 Avoc3477-04-005-01 - 7
Composite-42 - 82	X	Avoc3477-01-025-01 - 2 Avoc3477-02-025-01 - 4 Avoc3477-03-025-01 - 6 Avoc3477-04-025-01 - 8
Composite-43 - 83	X	Lind0741-01-005-01 - 9 Lind0741-02-005-01 - 11 Lind0741-03-005-01 - 13 Lind0741-04-005-01 - 15
Composite-44 - 84	X	Lind0741-01-025-01 - 10 Lind0741-02-025-01 - 12 Lind0741-03-025-01 - 14 Lind0741-04-025-01 - 16
Composite-45 - 85	X	Utah3384-01-005-01 - 17 Utah3384-02-005-01 - 20 Utah3384-03-005-01 - 23 Utah3384-04-005-01 - 26
Composite-45-Dup - 86	X	Utah3384-01-005-02 - 18 Utah3384-02-005-02 - 21 Utah3384-03-005-02 - 24 Utah3384-04-005-02 - 27
Composite-46 - 87	X	Utah3384-01-025-01 - 19 Utah3384-02-025-01 - 22 Utah3384-03-025-01 - 25 Utah3384-04-025-01 - 28
Composite-47 - 88	X	Plum0850-01-005-01 - 29 Plum0850-02-005-01 - 31 Plum0850-03-005-01 - 33 Plum0850-04-005-01 - 35

Revised COC received  
from Matt Raithel (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-48  - 89	X	Plum0850-01-025-01 - 30 Plum0850-02-025-01 - 32 Plum0850-03-025-01 - 34 Plum0850-04-025-01 - 36
Composite-49  - 90	X	Peac0880-01-005-01 - 37 Peac0880-02-005-01 - 39 Peac0880-03-005-01 - 41 Peac0880-04-005-01 - 43
Composite-50  - 91	X	Peac0880-01-025-01 - 38 Peac0880-02-025-01 - 40 Peac0880-03-025-01 - 42 Peac0880-04-025-01 - 44
Composite-51  - 92	X	Blai0890-01-005-01 - 46 Blai0890-02-005-01 - 49 Blai0890-03-005-01 - 52 Blai0890-04-005-01 - 55
Composite-51-Dup  - 93	X	Blai0890-01-005-02 - <del>50</del> 47 Blai0890-02-005-02 - 50 Blai0890-03-005-02 - 53 Blai0890-04-005-02 - 56
Composite-52  - 94	X	Blai0890-01-025-01 - 48 Blai0890-02-025-01 - 51 Blai0890-03-025-01 - 54 Blai0890-04-025-01 - 57
Composite-53  - 95	X	Blai0828-01-005-01 - 59 Blai0828-02-005-01 - 61 Blai0828-03-005-01 - 63 Blai0828-04-005-01 - 65
Composite-54  - 96	X	Blai0828-01-025-01 - 60 Blai0828-02-025-01 - 62 Blai0828-03-025-01 - 64 Blai0828-04-025-01 - 66



Revised COC received  
from Matt Raithel (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

**Sample Composite Table**

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-55  - 97	X	Grap0828-01-005-01 -67 Grap0828-02-005-01 -69 Grap0828-03-005-01 -71 Grap0828-04-005-01 -73
Composite-56  - 98	X	Grap0828-01-025-01 -68 Grap0828-02-025-01 -70 Grap0828-03-025-01 -72 Grap0828-04-025-01 -74
Composite-57  - 99	X	Grap0766-01-005-01 -75 Grap0766-02-005-01 -77 Grap0766-03-005-01 -79
Composite-58  - 100	X	Grap0766-01-025-01 -76 Grap0766-02-025-01 -78 Grap0766-03-025-01 -80



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HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2252

DATE: 3/29/17

PAGE: 1 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:

Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:

2015-18-Eurofins Calscience  
Quote: 963193

SAMPLER(S): (PRINT)

Tanya Nelson

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
EDD

Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	A1003477-01-005-01		3/29/17	1130	SO	1
2	A1003477-01-025-01			1134		
3	A1003477-02-005-01			1141		
4	A1003477-02-025-01			1146		
5	A1003477-03-005-01			1154		
6	A1003477-03-025-01			1159		
7	A1003477-04-005-01			1207		
8	A1003477-04-025-01			1210		
9	L100741-01-005-01			1217		
10	L100741-01-025-01			1220		

Relinquished by: (Signature)

*Cheryl...*

Relinquished by: (Signature)

*ALY ECR*

Relinquished by: (Signature)

REQUESTED ANALYSES

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
		X	X			
			X			X
			X			X
			X			X
			X			X
			X			X

Received by: (Signature/Affiliation)

*ALY ECR*

Received by: (Signature/Affiliation)

*EE*

Received by: (Signature/Affiliation)

Date: 3/30/17 Time: 1140

Date: 3/30/17 Time: 1255

Date: Time:





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/29/17  
PAGE: 3 OF 8

17-03-2252

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:

Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:

2015-18-Eurofins Calscience  
Quote: 963193

SAMPLER(S): (PRINT)

Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.  
ADDRESS: 3187 Red Hill Ave., Suite 155  
CITY: Costa Mesa STATE: CA ZIP: 92626  
TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
EDD \_\_\_\_\_

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raitheal of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
21	UHA3384-02-005-02		3/29/17	1402	SD	1
22	UHA3384-02-005-01			1410		
23	UHA3384-03-005-01			1419		
24	UHA3384-03-005-02			1419		
25	UHA3384-03-005-01			1423		
26	UHA3384-04-005-01			1429		
27	UHA3384-04-005-02			1429		
28	UHA3384-04-005-01			1433		
29	UHA0350-01-005-01			1441		
30	UHA0350-01-025-01			1446		

Relinquished by: (Signature) [Signature]  
Relinquished by: (Signature) [Signature]  
Relinquished by: (Signature) [Signature]

Received by: (Signature/Affiliation) Aug ECP  
Received by: (Signature/Affiliation) [Signature]  
Received by: (Signature/Affiliation) [Signature]

### REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X
			X	X	X

Date: 3/30/17 Time: 1140  
Date: 3/30/17 Time: 1255  
Date: \_\_\_\_\_ Time: \_\_\_\_\_





Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2252

DATE: 3/29/17

PAGE: 4 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:

2015-18-Eurofins Calscience  
Quote: 963193

SAMPLER(S): (PRINT)

PROJECT CONTACT:

Colleen Canfield

Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.  
ADDRESS: 3187 Red Hill Ave., Suite 155  
CITY: Costa Mesa STATE: CA ZIP: 92626  
TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE:

Geotracker EDF

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
31	Plum0850-02-005-01		3/29/17	1501	SO	1
32	Plum0850-02-025-01			1506		
33	Plum0850-03-005-01			1511		
34	Plum0850-03-025-01			1516		
35	Plum0850-04-005-01			1520		
36	Plum0850-04-025-01			1523		
37	Pea0880-01-005-01			1521		
38	Pea0880-01-025-01			1504		
39	Pea0880-02-005-01			1540		
40	Pea0880-02-025-01			1546		

Relinquished by: (Signature)

*Colleen Canfield*

Relinquished by: (Signature)

*AY*

Relinquished by: (Signature)

### REQUESTED ANALYSES

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X		X	X			
			X		X	
			X		X	
			X			
			X		X	
			X			
			X			

Received by: (Signature/Affiliation)

*AY ECP*

Received by: (Signature/Affiliation)

*AY ECP*

Received by: (Signature/Affiliation)

Date: 3/30/17

Time: 1140

Date: 3/30/17

Time: 1255

Date:



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY

WO # / LAB USE ONLY

DATE: 3/29/17 + 3/30/17  
PAGE: 5 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193				
ADDRESS: 3187 Red Hill Ave., Suite 155		PROJECT NO.: UC Riverside North District / 128685-006 2.0				
CITY: Costa Mesa		PROJECT CONTACT: Colleen Canfield				
STATE: CA		ZIP: 92626				
TEL: 714-371-1802		E-MAIL: ccanfield@haleyaldrich.com				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):						
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
GLOBAL ID:		LOG CODE:				
<input type="checkbox"/> Geotracker EDF		Sample Archiving requirements (if required to be held greater than 30 days):				
<input checked="" type="checkbox"/> H&A Standard EDD						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
41	Blai0880-03-005-01		3/29/17	1551	SO	1
42	Blai0880-03-025-01		↓	1556	↓	↓
43	Blai0880-04-005-01		↓	1600	↓	↓
44	Blai0880-04-025-01		↓	1603	↓	↓
45	EB-032917		↓	1615	H2O	2
46	Blai0890-01-005-01		3/30/17	0800	SO	1
47	Blai0890-01-005-02		↓	0800	↓	↓
48	Blai0890-01-025-01		↓	0803	↓	↓
49	Blai0890-02-005-01		↓	0816	↓	↓
50	Blai0890-02-005-02		↓	0816	↓	↓

## REQUESTED ANALYSES

Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X		X	X			
		↓	X		X	
		↓	X		X	
		↓	X	X		
		X	X			
		↓	X		X	
		↓	X		X	
		↓	X		X	

Received by: (Signature/Affiliation) Aly ECU Date: 3/30/17 Time: 1140

Received by: (Signature/Affiliation) [Signature] Date: 3/30/17 Time: 1255

Received by: (Signature/Affiliation) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) [Signature]

Relinquished by: (Signature) [Signature]

Relinquished by: (Signature) \_\_\_\_\_



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/30/17

PAGE: 6 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
CITY: Costa Mesa	TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):					
TEL: 714-371-1802	<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
GLOBAL ID:		LOG CODE:				
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
S1	Blai0890-02-025-01		3/30/17	0819	SO	1
S2	Blai0890-03-005-01			0825		
S3	Blai0890-03-005-02			0825		
S4	Blai0890-03-025-01			0829		
S5	Blai0890-04-005-01			0835		
S6	Blai0890-04-005-02			0835		
S7	Blai0890-04-025-01			0839		
S8	B6-01			0850		
S9	Blai0828-01-005-01			0902		
S0	Blai0828-01-025-01			0907		

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X			X		X	
				X	X	
			X		X	
			X		X	
				X	X	
				X	X	
			X		X	

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
<i>[Signature]</i>	Aly ECT	3/30/17	1140
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
<i>[Signature]</i>	ECT	3/30/17	1255
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
<i>[Signature]</i>			



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# HALEY & ALDRICH CHAIN OF CUSTODY

WO # / LAB USE ONLY

DATE: 3/30/17

PAGE: 7 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience			
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: <b>963193</b>			
CITY: Costa Mesa	STATE: CA	ZIP: 92626	SAMPLER(S): (PRINT) Tanya Nelson		
TEL: 714-371-1802	E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
<input type="checkbox"/> Geotracker EDF		LOG CODE:			
<input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):			
Special Instructions:					
Pricing provided on Eurofins Quote 963193					
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110					
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
61	Blai.0828-02-005-01		3/30/17	0911	50 1
62	Blai.0828-02-025-01			0918	
63	Blai.0828-03-065-01			0923	
64	Blai.0828-03-025-01			0927	
65	Blai.0828-04-005-01			0933	
66	Blai.0828-04-025-01			0937	
67	Grap.0828-01-005-01			0947	
68	Grap.0828-01-015-01			0953	
69	Grap.0828-02-005-01			0959	
70	Grap.0828-02-005-01			1002	
Relinquished by: (Signature) <i>Tanya Nelson</i>			Received by: (Signature/Affiliation) <i>AY EYF</i>		
Relinquished by: (Signature) <i>Tanya Nelson</i>			Received by: (Signature/Affiliation) <i>EYF</i>		
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)																
X			X																		
			X																		
			X																		
			X																		
			X																		
			X																		

Date: 3/30/17 Time: 1140

Date: 3/30/17 Time: 1255

Date: \_\_\_\_\_ Time: \_\_\_\_\_





**SAMPLE RECEIPT CHECKLIST**

COOLER 1 OF 1

CLIENT: H&A

DATE: 03 / 30 / 2017

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.7 °C;  Blank  Sample  
 Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)  
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter Checked by: 678

**CUSTODY SEAL:**  
 Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 678  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)

**Aqueous:**  VOA  VOAh  VOAna<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  
 125PBz<sub>na</sub>  250AGB  250CGB  250CGBs  250PB  250PBn  500AGB  500AGJ  500AGJs  
 500PB  1AGB  1AGBna<sub>2</sub>  1AGBs  1PB  1PBna  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

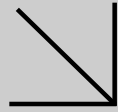
Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag  
 Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO<sub>3</sub>, **na** = NaOH, **na<sub>2</sub>** = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, **p** = H<sub>3</sub>PO<sub>4</sub>, **s** = H<sub>2</sub>SO<sub>4</sub>, **u** = ultra-pure, **x** = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, **z<sub>na</sub>** = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Labeled/Checked by: 1053  
Reviewed by: 1017

\* Sampling date per label is 3/29/17.

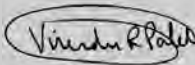


Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

**WORK ORDER NUMBER: 17-03-2252***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For****Client:** Haley & Aldrich, Inc.**Client Project Name:** UC Riverside North District / 128685-006  
2.0**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453



---

 Approved for release on 04/26/2017 by:  
 Virendra Patel  
 Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-03-2252

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/30/17. They were assigned to Work Order 17-03-2252.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/30/17 12:55
	Number of Containers: 101

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Avoc3477-01-005-01	17-03-2252-1	03/29/17 11:30	1	Solid
Avoc3477-02-005-01	17-03-2252-3	03/29/17 11:41	1	Solid
Avoc3477-03-005-01	17-03-2252-5	03/29/17 11:54	1	Solid
Avoc3477-04-005-01	17-03-2252-7	03/29/17 12:07	1	Solid
Avoc3477-04-025-01	17-03-2252-8	03/29/17 12:10	1	Solid
Lind0741-01-005-01	17-03-2252-9	03/29/17 12:17	1	Solid
Lind0741-01-025-01	17-03-2252-10	03/29/17 12:20	1	Solid
Lind0741-02-005-01	17-03-2252-11	03/29/17 12:23	1	Solid
Lind0741-02-025-01	17-03-2252-12	03/29/17 12:27	1	Solid
Lind0741-03-005-01	17-03-2252-13	03/29/17 12:31	1	Solid
Lind0741-03-025-01	17-03-2252-14	03/29/17 12:34	1	Solid
Lind0741-04-005-01	17-03-2252-15	03/29/17 12:39	1	Solid
Lind0741-04-025-01	17-03-2252-16	03/29/17 12:41	1	Solid
Utah3384-01-005-02	17-03-2252-18	03/29/17 13:52	1	Solid
Utah3384-02-005-02	17-03-2252-21	03/29/17 14:02	1	Solid
Utah3384-02-025-01	17-03-2252-22	03/29/17 14:10	1	Solid
Utah3384-03-005-02	17-03-2252-24	03/29/17 14:19	1	Solid
Utah3384-03-025-01	17-03-2252-25	03/29/17 14:23	1	Solid
Utah3384-04-005-02	17-03-2252-27	03/29/17 14:29	1	Solid
Plum0850-01-005-01	17-03-2252-29	03/29/17 14:41	1	Solid
Plum0850-01-025-01	17-03-2252-30	03/29/17 14:46	1	Solid
Plum0850-02-005-01	17-03-2252-31	03/29/17 15:01	1	Solid
Plum0850-02-025-01	17-03-2252-32	03/29/17 15:06	1	Solid
Plum0850-03-005-01	17-03-2252-33	03/29/17 15:11	1	Solid
Plum0850-04-005-01	17-03-2252-35	03/29/17 15:20	1	Solid
Peac0880-01-005-01	17-03-2252-37	03/29/17 15:31	1	Solid
Peac0880-01-025-01	17-03-2252-38	03/29/17 15:34	1	Solid
Peac0880-02-005-01	17-03-2252-39	03/29/17 15:40	1	Solid
Peac0880-02-025-01	17-03-2252-40	03/29/17 15:46	1	Solid
Peac0880-03-005-01	17-03-2252-41	03/29/17 15:51	1	Solid
Peac0880-03-025-01	17-03-2252-42	03/29/17 15:56	1	Solid
Peac0880-04-005-01	17-03-2252-43	03/29/17 16:00	1	Solid
Peac0880-04-025-01	17-03-2252-44	03/29/17 16:03	1	Solid
Blai0890-01-005-02	17-03-2252-47	03/30/17 08:00	1	Solid
Blai0890-01-025-01	17-03-2252-48	03/30/17 08:03	1	Solid
Blai0890-02-005-02	17-03-2252-50	03/30/17 08:16	1	Solid
Blai0890-02-025-01	17-03-2252-51	03/30/17 08:19	1	Solid
Blai0890-03-005-02	17-03-2252-53	03/30/17 08:25	1	Solid
Blai0890-04-005-02	17-03-2252-56	03/30/17 08:35	1	Solid
Blai0890-04-025-01	17-03-2252-57	03/30/17 08:39	1	Solid
Blai0828-01-005-01	17-03-2252-59	03/30/17 09:02	1	Solid
Blai0828-02-005-01	17-03-2252-61	03/30/17 09:11	1	Solid

## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number: 2015-18-EurofinsCalscience
	Date/Time Received: 03/30/17 12:55
	Number of Containers: 101

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Blai0828-02-025-01	17-03-2252-62	03/30/17 09:18	1	Solid
Blai0828-03-005-01	17-03-2252-63	03/30/17 09:23	1	Solid
Blai0828-04-005-01	17-03-2252-65	03/30/17 09:33	1	Solid
Grap0828-01-005-01	17-03-2252-67	03/30/17 09:47	1	Solid
Grap0828-01-025-01	17-03-2252-68	03/30/17 09:53	1	Solid
Grap0828-02-005-01	17-03-2252-69	03/30/17 09:59	1	Solid
Grap0828-02-025-01	17-03-2252-70	03/30/17 10:02	1	Solid
Grap0828-03-005-01	17-03-2252-71	03/30/17 10:10	1	Solid
Grap0828-03-025-01	17-03-2252-72	03/30/17 10:15	1	Solid
Grap0828-04-005-01	17-03-2252-73	03/30/17 10:19	1	Solid
Grap0828-04-025-01	17-03-2252-74	03/30/17 10:22	1	Solid
Grap0766-01-005-01	17-03-2252-75	03/30/17 10:38	1	Solid
Grap0766-02-005-01	17-03-2252-77	03/30/17 10:48	1	Solid
Grap0766-02-025-01	17-03-2252-78	03/30/17 10:51	1	Solid
Grap0766-03-005-01	17-03-2252-79	03/30/17 10:55	1	Solid
Grap0766-03-025-01	17-03-2252-80	03/30/17 10:59	1	Solid


  
Return to Contents



Calscience

## QC Association Summary

Work Order: 17-03-2252

Page 1 of 3

<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Avoc3477-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Avoc3477-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Avoc3477-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Avoc3477-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Avoc3477-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Avoc3477-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Avoc3477-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Avoc3477-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Avoc3477-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Avoc3477-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Avoc3477-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Lind0741-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Lind0741-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Lind0741-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-02-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Lind0741-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-03-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Lind0741-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Lind0741-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Lind0741-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Lind0741-04-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Utah3384-01-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Utah3384-02-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Utah3384-02-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Utah3384-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Utah3384-03-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Utah3384-03-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Utah3384-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Utah3384-04-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Plum0850-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Plum0850-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Plum0850-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Plum0850-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Plum0850-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05

R = Rerun





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## QC Association Summary

Work Order: 17-03-2252

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Plum0850-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Plum0850-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S08	170418L08
Plum0850-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Plum0850-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Plum0850-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Plum0850-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Plum0850-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S08	170418L08
Peac0880-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Peac0880-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Peac0880-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Peac0880-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Peac0880-03-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Peac0880-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S05	170404L05
Peac0880-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Peac0880-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Peac0880-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0890-01-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Blai0890-01-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Blai0890-01-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Blai0890-02-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0890-02-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Blai0890-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Blai0890-03-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0890-03-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Blai0890-04-005-02	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0890-04-005-02	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Blai0890-04-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Blai0828-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Blai0828-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0828-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Blai0828-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0828-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Blai0828-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Blai0828-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Blai0828-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Blai0828-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Blai0828-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Grap0828-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0828-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09

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## QC Association Summary

Work Order: 17-03-2252

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<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Grap0828-01-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Grap0828-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0828-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Grap0828-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170418S09	170418L09
Grap0828-02-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170418S09	170418L09
Grap0828-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0828-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0828-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0828-03-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0828-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0828-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0828-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0828-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0828-04-025-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0766-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0766-01-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0766-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0766-01-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0766-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0766-02-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0766-02-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03
Grap0766-02-025-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170421S05	170421L05
Grap0766-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170404S06	170404L06
Grap0766-03-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170419S03	170419L03
Grap0766-03-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170419S03	170419L03

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## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Avoc3477-01-005-01 (17-03-2252-1)						
Lead	68.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	270	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	21	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	130	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	87	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.3	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Avoc3477-02-005-01 (17-03-2252-3)						
Lead	53.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	380	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	360	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	250	ET	50	ug/kg	EPA 8081A	EPA 3545
Avoc3477-03-005-01 (17-03-2252-5)						
Lead	37.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Chlordane	35	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	28	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	23	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Avoc3477-04-005-01 (17-03-2252-7)						
Lead	82.9		0.476	mg/kg	EPA 6010B	EPA 3050B
Chlordane	110	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	6.5	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	21	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	24	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Avoc3477-04-025-01 (17-03-2252-8)						
Lead	21.5		0.485	mg/kg	EPA 6010B	EPA 3050B
Lind0741-01-005-01 (17-03-2252-9)						
Arsenic	3.31		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	39.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Chlordane	100	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	120	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	26	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	6.7	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Lind0741-02-005-01 (17-03-2252-11)						
Lead	45.4		0.481	mg/kg	EPA 6010B	EPA 3050B
Chlordane	1200	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	21	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	620	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	370	ET	250	ug/kg	EPA 8081A	EPA 3545
Dieldrin	5.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Endrin Ketone	2.6	J,ET	2.5*	ug/kg	EPA 8081A	EPA 3545
Heptachlor	6.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	37	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Lind0741-02-025-01 (17-03-2252-12)						
Chlordane	260	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	8.9	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	140	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	82	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.0	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	25	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Lind0741-03-005-01 (17-03-2252-13)						
Lead	44.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Chlordane	980	ET	500	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	110	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	1200	ET	250	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	640	ET	250	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	170	ET	99	ug/kg	EPA 8081A	EPA 3545
Lind0741-03-025-01 (17-03-2252-14)						
Chlordane	220	J,ET	130*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	380	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	190	ET	25	ug/kg	EPA 8081A	EPA 3545
Lind0741-04-005-01 (17-03-2252-15)						
Lead	105		0.490	mg/kg	EPA 6010B	EPA 3050B
Chlordane	630	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	180	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	49	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	6.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	15	ET	9.9	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Lind0741-04-025-01 (17-03-2252-16)						
Lead	41.2		0.518	mg/kg	EPA 6010B	EPA 3050B
Chlordane	480	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	130	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	22	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.9	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	12	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Utah3384-01-005-02 (17-03-2252-18)						
Chlordane	98	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	25	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	4.0	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Utah3384-02-005-02 (17-03-2252-21)						
Chlordane	300	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	120	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	81	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.9	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	32	ET	9.9	ug/kg	EPA 8081A	EPA 3545
Utah3384-02-025-01 (17-03-2252-22)						
Lead	7.35		0.521	mg/kg	EPA 6010B	EPA 3050B
Utah3384-03-005-02 (17-03-2252-24)						
4,4'-DDD	29	J,ET	23*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	110	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	69	ET	50	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	1300	ET	500	ug/kg	EPA 8081A	EPA 3545
Utah3384-03-025-01 (17-03-2252-25)						
Lead	3.54		0.493	mg/kg	EPA 6010B	EPA 3050B
Utah3384-04-005-02 (17-03-2252-27)						
Chlordane	98	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	5.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	14	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.7	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	13	ET	10	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/30/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Plum0850-01-005-01 (17-03-2252-29)						
Arsenic	5.53		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	111		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	310	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	32	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	41	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.9	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Plum0850-01-025-01 (17-03-2252-30)						
Lead	3.88		0.515	mg/kg	EPA 6010B	EPA 3050B
Plum0850-02-005-01 (17-03-2252-31)						
Lead	94.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Chlordane	530	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	400	ET	100	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	210	ET	100	ug/kg	EPA 8081A	EPA 3545
Dieldrin	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor	3.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	36	ET	10	ug/kg	EPA 8081A	EPA 3545
Plum0850-02-025-01 (17-03-2252-32)						
Lead	3.07		0.503	mg/kg	EPA 6010B	EPA 3050B
Plum0850-03-005-01 (17-03-2252-33)						
Lead	72.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	900	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	17	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	11	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	8.7	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Plum0850-04-005-01 (17-03-2252-35)						
Lead	51.6		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	32	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	3.2	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	2.5	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	13	ET	10	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

Attn: Colleen Canfield

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Peac0880-01-005-01 (17-03-2252-37)						
Lead	66.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Chlordane	57	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	6.1	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.5	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	8.5	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Peac0880-02-005-01 (17-03-2252-39)						
Lead	15.3		0.485	mg/kg	EPA 6010B	EPA 3050B
Dieldrin	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Peac0880-02-025-01 (17-03-2252-40)						
Chlordane	83	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.6	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	29	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Peac0880-03-005-01 (17-03-2252-41)						
Lead	333		0.476	mg/kg	EPA 6010B	EPA 3050B
Chlordane	920	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	110	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	59	ET	50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	180	ET	50	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	11	ET	10	ug/kg	EPA 8081A	EPA 3545
Peac0880-03-025-01 (17-03-2252-42)						
Lead	34.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	130	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.7	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	20	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	8.0	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	34	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Peac0880-04-005-01 (17-03-2252-43)						
Lead	110		0.500	mg/kg	EPA 6010B	EPA 3050B
Chlordane	180	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.8	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	15	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	10	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	18	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Peac0880-04-025-01 (17-03-2252-44)						
Lead	8.69		0.503	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Work Order: 17-03-2252  
 Project Name: UC Riverside North District / 128685-006 2.0  
 Received: 03/30/17

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Blai0890-01-005-02 (17-03-2252-47)						
4,4'-DDE	13	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	42	ET	25	ug/kg	EPA 8081A	EPA 3545
Blai0890-01-025-01 (17-03-2252-48)						
Lead	5.90		0.510	mg/kg	EPA 6010B	EPA 3050B
Blai0890-02-005-02 (17-03-2252-50)						
Chlordane	420	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	10	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	41	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.9	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Blai0890-02-025-01 (17-03-2252-51)						
Lead	8.10		0.488	mg/kg	EPA 6010B	EPA 3050B
Blai0890-03-005-02 (17-03-2252-53)						
Chlordane	120	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	42	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	56	ET	25	ug/kg	EPA 8081A	EPA 3545
Blai0890-04-005-02 (17-03-2252-56)						
Chlordane	680	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	100	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	92	ET	25	ug/kg	EPA 8081A	EPA 3545
Blai0890-04-025-01 (17-03-2252-57)						
Lead	8.33		0.500	mg/kg	EPA 6010B	EPA 3050B
Blai0828-01-005-01 (17-03-2252-59)						
Arsenic	1.85		0.754	mg/kg	EPA 6010B	EPA 3050B
Lead	70.8		0.503	mg/kg	EPA 6010B	EPA 3050B
Chlordane	79	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.5	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	9.6	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Blai0828-02-005-01 (17-03-2252-61)						
Lead	68.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Chlordane	190	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.4	J,ET	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	120	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	82	ET	50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	3.6	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Blai0828-02-025-01 (17-03-2252-62)						
Lead	13.7		0.478	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown



## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/30/17	

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Blai0828-03-005-01 (17-03-2252-63)						
Lead	11.5		0.495	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	6.2	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Blai0828-04-005-01 (17-03-2252-65)						
Lead	60.6		0.503	mg/kg	EPA 6010B	EPA 3050B
Chlordane	88	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	12	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Grap0828-01-005-01 (17-03-2252-67)						
Arsenic	3.95		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	51.3		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	120	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	15	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	9.6	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	18	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.8	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Grap0828-02-005-01 (17-03-2252-69)						
Lead	98.3		0.485	mg/kg	EPA 6010B	EPA 3050B
Chlordane	240	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	4.5	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	120	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	75	ET	25	ug/kg	EPA 8081A	EPA 3545
Dieldrin	51	ET	25	ug/kg	EPA 8081A	EPA 3545
Grap0828-02-025-01 (17-03-2252-70)						
Chlordane	47	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	28	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	16	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	9.7	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Grap0828-03-005-01 (17-03-2252-71)						
Lead	80.0		0.493	mg/kg	EPA 6010B	EPA 3050B
Chlordane	210	ET	49	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	20	ET	4.9	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	95	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	38	ET	4.9	ug/kg	EPA 8081A	EPA 3545
Dieldrin	7.1	ET	4.9	ug/kg	EPA 8081A	EPA 3545

\* MDL is shown

## Detections Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252	
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0	
Costa Mesa, CA 92626-3453	Received: 03/30/17	

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**Client SampleID**

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Grap0828-03-025-01 (17-03-2252-72)						
Chlordane	27	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	11	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Grap0828-04-005-01 (17-03-2252-73)						
Lead	57.5		0.476	mg/kg	EPA 6010B	EPA 3050B
Chlordane	120	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	3.1	J,ET	2.3*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	22	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	5.1	ET	5.0	ug/kg	EPA 8081A	EPA 3545
Dieldrin	120	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	3.8	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Grap0828-04-025-01 (17-03-2252-74)						
Chlordane	28	J,ET	26*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	5.4	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	3.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Dieldrin	40	ET	25	ug/kg	EPA 8081A	EPA 3545
Grap0766-01-005-01 (17-03-2252-75)						
Lead	52.8		0.488	mg/kg	EPA 6010B	EPA 3050B
Chlordane	240	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	35	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	700	ET	99	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	270	ET	99	ug/kg	EPA 8081A	EPA 3545
Dieldrin	2.3	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	5.6	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Grap0766-02-005-01 (17-03-2252-77)						
Lead	121		0.481	mg/kg	EPA 6010B	EPA 3050B
Chlordane	920	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	66	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	270	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	400	ET	50	ug/kg	EPA 8081A	EPA 3545
Dieldrin	4.4	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor	3.0	J,ET	2.2*	ug/kg	EPA 8081A	EPA 3545
Heptachlor Epoxide	7.7	J,ET	3.7*	ug/kg	EPA 8081A	EPA 3545
Grap0766-02-025-01 (17-03-2252-78)						
Lead	6.03		0.500	mg/kg	EPA 6010B	EPA 3050B

\* MDL is shown

## Detections Summary

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Client: Haley & Aldrich, Inc.	Work Order: 17-03-2252
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	Received: 03/30/17

Attn: Colleen Canfield

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**Client SampleID**

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
Grap0766-03-005-01 (17-03-2252-79)						
Lead	49.5		0.483	mg/kg	EPA 6010B	EPA 3050B
Chlordane	430	ET	50	ug/kg	EPA 8081A	EPA 3545
4,4'-DDD	11	ET	5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	110	ET	25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	54	ET	25	ug/kg	EPA 8081A	EPA 3545
Heptachlor	2.2	J,ET	2.1*	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-01-005-01	17-03-2252-1-A	03/29/17 11:30	Solid	ICP 7300	04/04/17	04/05/17 12:47	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		68.1		0.505		1.01	
Avoc3477-02-005-01	17-03-2252-3-A	03/29/17 11:41	Solid	ICP 7300	04/04/17	04/05/17 12:48	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		53.7		0.493		0.985	
Avoc3477-03-005-01	17-03-2252-5-A	03/29/17 11:54	Solid	ICP 7300	04/04/17	04/05/17 12:49	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		37.7		0.478		0.957	
Avoc3477-04-005-01	17-03-2252-7-A	03/29/17 12:07	Solid	ICP 7300	04/04/17	04/05/17 12:51	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		82.9		0.476		0.952	
Avoc3477-04-025-01	17-03-2252-8-A	03/29/17 12:10	Solid	ICP 7300	04/21/17	04/21/17 17:33	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		21.5		0.485		0.971	
Lind0741-01-005-01	17-03-2252-9-A	03/29/17 12:17	Solid	ICP 7300	04/04/17	04/05/17 12:52	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.31		0.746		0.995	
Lead		39.1		0.498		0.995	
Lind0741-02-005-01	17-03-2252-11-A	03/29/17 12:23	Solid	ICP 7300	04/04/17	04/05/17 12:53	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		45.4		0.481		0.962	
Lind0741-03-005-01	17-03-2252-13-A	03/29/17 12:31	Solid	ICP 7300	04/04/17	04/05/17 12:54	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		44.7		0.478		0.957	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-04-005-01	17-03-2252-15-A	03/29/17 12:39	Solid	ICP 7300	04/04/17	04/05/17 12:55	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		105		0.490		0.980	
Lind0741-04-025-01	17-03-2252-16-A	03/29/17 12:41	Solid	ICP 7300	04/21/17	04/21/17 17:34	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		41.2		0.518		1.04	
Utah3384-02-025-01	17-03-2252-22-A	03/29/17 14:10	Solid	ICP 7300	04/21/17	04/21/17 17:35	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		7.35		0.521		1.04	
Utah3384-03-025-01	17-03-2252-25-A	03/29/17 14:23	Solid	ICP 7300	04/21/17	04/21/17 17:36	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		3.54		0.493		0.985	
Plum0850-01-005-01	17-03-2252-29-A	03/29/17 14:41	Solid	ICP 7300	04/04/17	04/05/17 12:59	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		5.53		0.739		0.985	
Lead		111		0.493		0.985	
Plum0850-01-025-01	17-03-2252-30-A	03/29/17 14:46	Solid	ICP 7300	04/21/17	04/21/17 17:37	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		3.88		0.515		1.03	
Plum0850-02-005-01	17-03-2252-31-A	03/29/17 15:01	Solid	ICP 7300	04/04/17	04/05/17 13:01	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		94.2		0.503		1.01	
Plum0850-02-025-01	17-03-2252-32-A	03/29/17 15:06	Solid	ICP 7300	04/21/17	04/21/17 17:38	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		3.07		0.503		1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-03-005-01	17-03-2252-33-A	03/29/17 15:11	Solid	ICP 7300	04/04/17	04/05/17 13:02	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		72.0		0.500		1.00	
Plum0850-04-005-01	17-03-2252-35-A	03/29/17 15:20	Solid	ICP 7300	04/04/17	04/05/17 13:03	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		51.6		0.493		0.985	
Peac0880-01-005-01	17-03-2252-37-A	03/29/17 15:31	Solid	ICP 7300	04/04/17	04/05/17 13:05	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		66.0		0.495		0.990	
Peac0880-02-005-01	17-03-2252-39-A	03/29/17 15:40	Solid	ICP 7300	04/04/17	04/05/17 13:05	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		15.3		0.485		0.971	
Peac0880-03-005-01	17-03-2252-41-A	03/29/17 15:51	Solid	ICP 7300	04/04/17	04/05/17 13:06	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		333		0.476		0.952	
Peac0880-03-025-01	17-03-2252-42-A	03/29/17 15:56	Solid	ICP 7300	04/21/17	04/21/17 17:38	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		34.6		0.500		1.00	
Peac0880-04-005-01	17-03-2252-43-A	03/29/17 16:00	Solid	ICP 7300	04/04/17	04/05/17 13:07	170404L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		110		0.500		1.00	
Peac0880-04-025-01	17-03-2252-44-A	03/29/17 16:03	Solid	ICP 7300	04/21/17	04/21/17 17:39	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		8.69		0.503		1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0890-01-025-01	17-03-2252-48-A	03/30/17 08:03	Solid	ICP 7300	04/21/17	04/21/17 17:42	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		5.90		0.510		1.02	
Blai0890-02-025-01	17-03-2252-51-A	03/30/17 08:19	Solid	ICP 7300	04/21/17	04/21/17 17:43	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		8.10		0.488		0.976	
Blai0890-04-025-01	17-03-2252-57-A	03/30/17 08:39	Solid	ICP 7300	04/21/17	04/21/17 17:44	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		8.33		0.500		1.00	
Blai0828-01-005-01	17-03-2252-59-A	03/30/17 09:02	Solid	ICP 7300	04/04/17	04/05/17 13:13	170404L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		1.85		0.754		1.01	
Lead		70.8		0.503		1.01	
Blai0828-02-005-01	17-03-2252-61-A	03/30/17 09:11	Solid	ICP 7300	04/04/17	04/05/17 13:14	170404L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		68.4		0.505		1.01	
Blai0828-02-025-01	17-03-2252-62-A	03/30/17 09:18	Solid	ICP 7300	04/21/17	04/21/17 17:45	170421L05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		13.7		0.478		0.957	
Blai0828-03-005-01	17-03-2252-63-A	03/30/17 09:23	Solid	ICP 7300	04/04/17	04/05/17 13:14	170404L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		11.5		0.495		0.990	
Blai0828-04-005-01	17-03-2252-65-A	03/30/17 09:33	Solid	ICP 7300	04/04/17	04/05/17 13:15	170404L06
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		60.6		0.503		1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0828-01-005-01</b>	<b>17-03-2252-67-A</b>	<b>03/30/17 09:47</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:16</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Arsenic		3.95				0.985	
Lead		51.3				0.985	
<b>Grap0828-02-005-01</b>	<b>17-03-2252-69-A</b>	<b>03/30/17 09:59</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:17</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		98.3				0.971	
<b>Grap0828-03-005-01</b>	<b>17-03-2252-71-A</b>	<b>03/30/17 10:10</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:18</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		80.0				0.985	
<b>Grap0828-04-005-01</b>	<b>17-03-2252-73-A</b>	<b>03/30/17 10:19</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:19</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		57.5				0.952	
<b>Grap0766-01-005-01</b>	<b>17-03-2252-75-A</b>	<b>03/30/17 10:38</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:19</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		52.8				0.976	
<b>Grap0766-02-005-01</b>	<b>17-03-2252-77-A</b>	<b>03/30/17 10:48</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:22</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		121				0.962	
<b>Grap0766-02-025-01</b>	<b>17-03-2252-78-A</b>	<b>03/30/17 10:51</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:45</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		6.03				1.00	
<b>Grap0766-03-005-01</b>	<b>17-03-2252-79-A</b>	<b>03/30/17 10:55</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 13:23</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>				<u>DF</u>	<u>Qualifiers</u>
Lead		49.5				0.966	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>097-01-002-24571</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:23</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.728		0.971	
Lead		ND		0.485		0.971	
<b>Method Blank</b>	<b>097-01-002-24572</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:25</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Arsenic		ND		0.721		0.962	
Lead		ND		0.481		0.962	
<b>Method Blank</b>	<b>097-01-002-24705</b>	<b>N/A</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:22</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.485		0.971	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-01-005-01	17-03-2252-1-A	03/29/17 11:30	Solid	GC 41	04/18/17	04/19/17 08:17	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	270	50	26	1.00	ET
4,4'-DDD	21	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	5.3	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 2 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Avoc3477-01-005-01</b>	<b>17-03-2252-1-A</b>	<b>03/29/17 11:30</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 05:31</b>	<b>170418L08</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	130	25	11	5.00	ET
4,4'-DDT	87	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

Page 3 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-02-005-01	17-03-2252-3-A	03/29/17 11:41	Solid	GC 41	04/18/17	04/22/17 12:33	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	18	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	380	250	130	5.00	ET
4,4'-DDD	ND	25	12	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	ND	25	11	5.00	ET
Endosulfan I	ND	25	9.8	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	12	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	13	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 4 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-02-005-01	17-03-2252-3-A	03/29/17 11:41	Solid	GC 41	04/18/17	04/20/17 05:46	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	360	50	22	10.0	ET
4,4'-DDT	250	50	22	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-03-005-01	17-03-2252-5-A	03/29/17 11:54	Solid	GC 41	04/18/17	04/19/17 08:47	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	35	50	26	1.00	J,ET
4,4'-DDD	12	5.0	2.3	1.00	ET
4,4'-DDE	28	5.0	2.2	1.00	ET
4,4'-DDT	23	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Avoc3477-04-005-01	17-03-2252-7-A	03/29/17 12:07	Solid	GC 41	04/18/17	04/19/17 14:39	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	110	49	26	1.00	ET
4,4'-DDD	6.5	4.9	2.3	1.00	ET
4,4'-DDE	21	4.9	2.2	1.00	ET
4,4'-DDT	24	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	ND	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-01-005-01	17-03-2252-9-A	03/29/17 12:17	Solid	GC 41	04/18/17	04/19/17 09:17	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	100	50	26	1.00	ET
4,4'-DDD	15	5.0	2.3	1.00	ET
4,4'-DDT	26	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	6.7	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 8 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-01-005-01	17-03-2252-9-A	03/29/17 12:17	Solid	GC 41	04/18/17	04/20/17 06:02	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	120	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	101	24-168	
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-01-025-01	17-03-2252-10-A	03/29/17 12:20	Solid	GC 41	04/18/17	04/19/17 10:33	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	ND	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDE	ND	4.9	2.2	1.00	ET
4,4'-DDT	ND	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	ND	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-02-005-01	17-03-2252-11-A	03/29/17 12:23	Solid	GC 41	04/18/17	04/19/17 09:48	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
4,4'-DDD	21	5.0	2.3	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	5.6	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	2.6	5.0	2.5	1.00	J,ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	6.2	5.0	2.1	1.00	ET
Heptachlor Epoxide	37	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-02-005-01	17-03-2252-11-A	03/29/17 12:23	Solid	GC 41	04/18/17	04/20/17 06:32	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Chlordane	1200	500	260	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 11 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-02-005-01	17-03-2252-11-A	03/29/17 12:23	Solid	GC 41	04/18/17	04/20/17 13:33	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	620	250	110	50.0	ET
4,4'-DDT	370	250	110	50.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	95	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-02-025-01	17-03-2252-12-A	03/29/17 12:27	Solid	GC 41	04/18/17	04/19/17 10:03	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	260	50	26	1.00	ET
4,4'-DDD	8.9	5.0	2.3	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	4.0	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	25	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-02-025-01	17-03-2252-12-A	03/29/17 12:27	Solid	GC 41	04/18/17	04/20/17 06:47	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	140	25	11	5.00	ET
4,4'-DDT	82	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-03-005-01	17-03-2252-13-A	03/29/17 12:31	Solid	GC 41	04/18/17	04/19/17 15:09	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	50	22	10.0	ET
Alpha-BHC	ND	99	37	10.0	ET
Beta-BHC	ND	50	25	10.0	ET
Chlordane	980	500	260	10.0	ET
4,4'-DDD	110	50	23	10.0	ET
Delta-BHC	ND	99	44	10.0	ET
Dieldrin	ND	50	22	10.0	ET
Endosulfan I	ND	50	20	10.0	ET
Endosulfan II	ND	50	23	10.0	ET
Endosulfan Sulfate	ND	50	26	10.0	ET
Endrin	ND	50	23	10.0	ET
Endrin Aldehyde	ND	50	30	10.0	ET
Endrin Ketone	ND	50	25	10.0	ET
Gamma-BHC	ND	50	22	10.0	ET
Heptachlor	ND	50	21	10.0	ET
Heptachlor Epoxide	170	99	37	10.0	ET
Methoxychlor	ND	50	27	10.0	ET
Toxaphene	ND	990	440	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	262	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-03-005-01	17-03-2252-13-A	03/29/17 12:31	Solid	GC 41	04/18/17	04/20/17 07:47	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	1200	250	110	50.0	ET
4,4'-DDT	640	250	110	50.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	351	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-03-025-01	17-03-2252-14-A	03/29/17 12:34	Solid	GC 41	04/18/17	04/22/17 12:48	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	25	11	5.00	ET
Alpha-BHC	ND	50	18	5.00	ET
Beta-BHC	ND	25	12	5.00	ET
Chlordane	220	250	130	5.00	J,ET
4,4'-DDD	ND	25	12	5.00	ET
4,4'-DDT	190	25	11	5.00	ET
Delta-BHC	ND	50	22	5.00	ET
Dieldrin	ND	25	11	5.00	ET
Endosulfan I	ND	25	9.8	5.00	ET
Endosulfan II	ND	25	12	5.00	ET
Endosulfan Sulfate	ND	25	13	5.00	ET
Endrin	ND	25	12	5.00	ET
Endrin Aldehyde	ND	25	15	5.00	ET
Endrin Ketone	ND	25	12	5.00	ET
Gamma-BHC	ND	25	11	5.00	ET
Heptachlor	ND	25	11	5.00	ET
Heptachlor Epoxide	ND	50	18	5.00	ET
Methoxychlor	ND	25	13	5.00	ET
Toxaphene	ND	500	220	5.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-03-025-01	17-03-2252-14-A	03/29/17 12:34	Solid	GC 41	04/18/17	04/20/17 06:17	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	380	50	22	10.0	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	105	24-168			
2,4,5,6-Tetrachloro-m-Xylene	67	25-145			

## Analytical Report

Haley & Aldrich, Inc.  
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 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-04-005-01	17-03-2252-15-A	03/29/17 12:39	Solid	GC 41	04/18/17	04/19/17 10:48	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	630	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	6.2	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	15	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-04-005-01	17-03-2252-15-A	03/29/17 12:39	Solid	GC 41	04/18/17	04/20/17 07:02	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	180	25	11	5.00	ET
4,4'-DDT	49	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-04-025-01	17-03-2252-16-A	03/29/17 12:41	Solid	GC 41	04/18/17	04/19/17 11:04	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	480	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDT	22	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	2.9	4.9	2.2	1.00	J,ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	12	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Lind0741-04-025-01	17-03-2252-16-A	03/29/17 12:41	Solid	GC 41	04/18/17	04/20/17 07:17	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	130	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	80	24-168			
2,4,5,6-Tetrachloro-m-Xylene	70	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-01-005-02	17-03-2252-18-A	03/29/17 13:52	Solid	GC 41	04/18/17	04/19/17 11:19	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	98	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	22	5.0	2.2	1.00	ET
4,4'-DDT	25	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	4.0	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-02-005-02	17-03-2252-21-A	03/29/17 14:02	Solid	GC 41	04/18/17	04/19/17 11:34	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	300	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	9.9	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	32	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 24 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-02-005-02	17-03-2252-21-A	03/29/17 14:02	Solid	GC 41	04/18/17	04/20/17 07:32	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	120	25	11	5.00	ET
4,4'-DDT	81	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-03-005-02	17-03-2252-24-A	03/29/17 14:19	Solid	GC 41	04/18/17	04/19/17 15:24	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	50	22	10.0	ET
Alpha-BHC	ND	99	37	10.0	ET
Beta-BHC	ND	50	25	10.0	ET
Chlordane	ND	500	260	10.0	ET
4,4'-DDD	29	50	23	10.0	J,ET
4,4'-DDE	110	50	22	10.0	ET
4,4'-DDT	69	50	22	10.0	ET
Delta-BHC	ND	99	44	10.0	ET
Dieldrin	ND	50	22	10.0	ET
Endosulfan I	ND	50	20	10.0	ET
Endosulfan II	ND	50	23	10.0	ET
Endosulfan Sulfate	ND	50	26	10.0	ET
Endrin	ND	50	23	10.0	ET
Endrin Aldehyde	ND	50	30	10.0	ET
Endrin Ketone	ND	50	25	10.0	ET
Gamma-BHC	ND	50	22	10.0	ET
Heptachlor	ND	50	21	10.0	ET
Methoxychlor	ND	50	27	10.0	ET
Toxaphene	ND	990	440	10.0	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	336	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-03-005-02	17-03-2252-24-A	03/29/17 14:19	Solid	GC 41	04/18/17	04/20/17 08:02	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Heptachlor Epoxide	1300	500	180	50.0	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	268	24-168	1,2,7		
2,4,5,6-Tetrachloro-m-Xylene	79	25-145			

## Analytical Report

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 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3384-04-005-02	17-03-2252-27-A	03/29/17 14:29	Solid	GC 41	04/18/17	04/19/17 12:04	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	98	50	26	1.00	ET
4,4'-DDD	5.6	5.0	2.4	1.00	ET
4,4'-DDE	14	5.0	2.2	1.00	ET
4,4'-DDT	3.7	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	13	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	165	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-01-005-01	17-03-2252-29-A	03/29/17 14:41	Solid	GC 41	04/18/17	04/19/17 13:38	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	310	50	26	1.00	ET
4,4'-DDD	32	5.0	2.3	1.00	ET
4,4'-DDE	15	5.0	2.2	1.00	ET
4,4'-DDT	16	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	5.9	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-01-005-01	17-03-2252-29-A	03/29/17 14:41	Solid	GC 41	04/18/17	04/25/17 14:44	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Dieldrin	41	25	11	5.00	ET
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	93	24-168			
2,4,5,6-Tetrachloro-m-Xylene	75	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-02-005-01	17-03-2252-31-A	03/29/17 15:01	Solid	GC 41	04/18/17	04/19/17 13:53	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	530	50	26	1.00	ET
4,4'-DDD	16	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	16	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	3.3	5.0	2.2	1.00	J,ET
Heptachlor Epoxide	36	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	141	24-168	
2,4,5,6-Tetrachloro-m-Xylene	72	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-02-005-01	17-03-2252-31-A	03/29/17 15:01	Solid	GC 41	04/18/17	04/25/17 15:44	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	400	100	44	20.0	ET
4,4'-DDT	210	100	44	20.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	158	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-03-005-01	17-03-2252-33-A	03/29/17 15:11	Solid	GC 41	04/18/17	04/19/17 14:08	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	900	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	17	5.0	2.2	1.00	ET
4,4'-DDT	8.5	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	11	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	8.7	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Plum0850-04-005-01	17-03-2252-35-A	03/29/17 15:20	Solid	GC 41	04/18/17	04/19/17 14:23	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	32	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	3.2	5.0	2.2	1.00	J,ET
4,4'-DDT	2.5	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	12	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	13	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	132	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-01-005-01	17-03-2252-37-A	03/29/17 15:31	Solid	GC 41	04/18/17	04/19/17 15:54	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	57	49	26	1.00	ET
4,4'-DDD	ND	4.9	2.3	1.00	ET
4,4'-DDE	6.1	4.9	2.2	1.00	ET
4,4'-DDT	3.5	4.9	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	8.5	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-01-025-01	17-03-2252-38-A	03/29/17 15:34	Solid	GC 41	04/18/17	04/19/17 16:09	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	52	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-02-005-01	17-03-2252-39-A	03/29/17 15:40	Solid	GC 41	04/18/17	04/19/17 16:24	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.8	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	53	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-02-025-01	17-03-2252-40-A	03/29/17 15:46	Solid	GC 41	04/18/17	04/19/17 16:39	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	83	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	9.5	5.0	2.2	1.00	ET
4,4'-DDT	3.6	5.0	2.2	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	29	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	61	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-03-005-01	17-03-2252-41-A	03/29/17 15:51	Solid	GC 41	04/18/17	04/19/17 16:54	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	920	50	26	1.00	ET
4,4'-DDD	12	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	11	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-03-005-01	17-03-2252-41-A	03/29/17 15:51	Solid	GC 41	04/18/17	04/20/17 09:17	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	110	50	22	10.0	ET
4,4'-DDT	59	50	22	10.0	ET
Dieldrin	180	50	22	10.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	261	24-168	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-03-025-01	17-03-2252-42-A	03/29/17 15:56	Solid	GC 41	04/18/17	04/19/17 17:10	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	130	50	26	1.00	ET
4,4'-DDD	3.7	5.0	2.3	1.00	J,ET
4,4'-DDE	20	5.0	2.2	1.00	ET
4,4'-DDT	8.0	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	34	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	135	24-168	
2,4,5,6-Tetrachloro-m-Xylene	57	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-04-005-01	17-03-2252-43-A	03/29/17 16:00	Solid	GC 41	04/18/17	04/19/17 17:25	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	180	50	26	1.00	ET
4,4'-DDD	3.8	5.0	2.4	1.00	J,ET
4,4'-DDE	15	5.0	2.2	1.00	ET
4,4'-DDT	10	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	18	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	135	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Peac0880-04-025-01	17-03-2252-44-A	03/29/17 16:03	Solid	GC 41	04/18/17	04/20/17 09:32	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	65	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0890-01-005-02	17-03-2252-47-A	03/30/17 08:00	Solid	GC 41	04/19/17	04/21/17 06:32	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	13	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	138	24-168	
2,4,5,6-Tetrachloro-m-Xylene	84	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A  
Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0890-01-005-02</b>	<b>17-03-2252-47-A</b>	<b>03/30/17 08:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 12:33</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
- Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	42	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	107	24-168			
2,4,5,6-Tetrachloro-m-Xylene	90	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0890-02-005-02	17-03-2252-50-A	03/30/17 08:16	Solid	GC 41	04/18/17	04/20/17 10:48	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	420	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	10	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.9	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0890-02-005-02</b>	<b>17-03-2252-50-A</b>	<b>03/30/17 08:16</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 13:48</b>	<b>170418L09</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	41	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	82	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0890-03-005-02	17-03-2252-53-A	03/30/17 08:25	Solid	GC 41	04/18/17	04/20/17 11:03	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	120	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 48 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0890-03-005-02</b>	<b>17-03-2252-53-A</b>	<b>03/30/17 08:25</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 14:03</b>	<b>170418L09</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	42	25	11	5.00	ET
4,4'-DDT	56	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	98	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0890-04-005-02	17-03-2252-56-A	03/30/17 08:35	Solid	GC 41	04/18/17	04/20/17 11:18	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	680	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	140	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Blai0890-04-005-02</b>	<b>17-03-2252-56-A</b>	<b>03/30/17 08:35</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 14:18</b>	<b>170418L09</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	100	25	11	5.00	ET
4,4'-DDT	92	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	120	24-168	
2,4,5,6-Tetrachloro-m-Xylene	233	25-145	1,2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0828-01-005-01	17-03-2252-59-A	03/30/17 09:02	Solid	GC 41	04/18/17	04/20/17 11:33	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	79	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	9.5	5.0	2.2	1.00	ET
4,4'-DDT	9.6	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	133	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0828-02-005-01	17-03-2252-61-A	03/30/17 09:11	Solid	GC 41	04/18/17	04/20/17 11:48	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	190	50	26	1.00	ET
4,4'-DDD	4.4	5.0	2.4	1.00	J,ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	3.6	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0828-02-005-01	17-03-2252-61-A	03/30/17 09:11	Solid	GC 41	04/18/17	04/20/17 14:33	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	120	50	22	10.0	ET
4,4'-DDT	82	50	22	10.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	147	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0828-03-005-01	17-03-2252-63-A	03/30/17 09:23	Solid	GC 41	04/18/17	04/20/17 12:03	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	6.2	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	24-168	
2,4,5,6-Tetrachloro-m-Xylene	62	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Blai0828-04-005-01	17-03-2252-65-A	03/30/17 09:33	Solid	GC 41	04/18/17	04/20/17 12:18	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	88	50	26	1.00	ET
4,4'-DDD	12	5.0	2.4	1.00	ET
4,4'-DDE	16	5.0	2.2	1.00	ET
4,4'-DDT	12	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-01-005-01	17-03-2252-67-A	03/30/17 09:47	Solid	GC 41	04/18/17	04/20/17 12:33	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	120	49	26	1.00	ET
4,4'-DDD	15	4.9	2.3	1.00	ET
4,4'-DDE	9.6	4.9	2.2	1.00	ET
4,4'-DDT	18	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	2.8	4.9	2.2	1.00	J,ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-01-025-01	17-03-2252-68-A	03/30/17 09:53	Solid	GC 41	04/18/17	04/20/17 12:48	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	ND	50	26	1.00	ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	ND	5.0	2.2	1.00	ET
4,4'-DDT	ND	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-02-005-01	17-03-2252-69-A	03/30/17 09:59	Solid	GC 41	04/18/17	04/20/17 13:03	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	240	50	26	1.00	ET
4,4'-DDD	4.5	5.0	2.3	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0828-02-005-01</b>	<b>17-03-2252-69-A</b>	<b>03/30/17 09:59</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 14:48</b>	<b>170418L09</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	120	25	11	5.00	ET
4,4'-DDT	75	25	11	5.00	ET
Dieldrin	51	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	103	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-02-025-01	17-03-2252-70-A	03/30/17 10:02	Solid	GC 41	04/18/17	04/20/17 13:18	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	47	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	28	5.0	2.2	1.00	ET
4,4'-DDT	16	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	9.7	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	24-168	
2,4,5,6-Tetrachloro-m-Xylene	64	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-03-005-01	17-03-2252-71-A	03/30/17 10:10	Solid	GC 41	04/19/17	04/21/17 06:47	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.9	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.6	1.00	ET
Beta-BHC	ND	4.9	2.4	1.00	ET
Chlordane	210	49	26	1.00	ET
4,4'-DDD	20	4.9	2.3	1.00	ET
4,4'-DDT	38	4.9	2.2	1.00	ET
Delta-BHC	ND	9.9	4.3	1.00	ET
Dieldrin	7.1	4.9	2.2	1.00	ET
Endosulfan I	ND	4.9	2.0	1.00	ET
Endosulfan II	ND	4.9	2.3	1.00	ET
Endosulfan Sulfate	ND	4.9	2.6	1.00	ET
Endrin	ND	4.9	2.3	1.00	ET
Endrin Aldehyde	ND	4.9	3.0	1.00	ET
Endrin Ketone	ND	4.9	2.5	1.00	ET
Gamma-BHC	ND	4.9	2.2	1.00	ET
Heptachlor	ND	4.9	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.6	1.00	ET
Methoxychlor	ND	4.9	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	134	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-03-005-01	17-03-2252-71-A	03/30/17 10:10	Solid	GC 41	04/19/17	04/21/17 12:48	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	95	25	11	5.00	ET
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	106	24-168			
2,4,5,6-Tetrachloro-m-Xylene	77	25-145			

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-03-025-01	17-03-2252-72-A	03/30/17 10:15	Solid	GC 41	04/19/17	04/21/17 07:02	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	27	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.4	1.00	ET
4,4'-DDE	11	5.0	2.2	1.00	ET
4,4'-DDT	6.1	5.0	2.2	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.2	1.00	ET
Heptachlor Epoxide	ND	10	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	24-168	
2,4,5,6-Tetrachloro-m-Xylene	76	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-04-005-01	17-03-2252-73-A	03/30/17 10:19	Solid	GC 41	04/19/17	04/21/17 07:17	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	120	50	26	1.00	ET
4,4'-DDD	3.1	5.0	2.3	1.00	J,ET
4,4'-DDE	22	5.0	2.2	1.00	ET
4,4'-DDT	5.1	5.0	2.2	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	3.8	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	24-168	
2,4,5,6-Tetrachloro-m-Xylene	80	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0 Page 65 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0828-04-005-01</b>	<b>17-03-2252-73-A</b>	<b>03/30/17 10:19</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 13:03</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Dieldrin	120	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	86	25-145	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0828-04-025-01	17-03-2252-74-A	03/30/17 10:22	Solid	GC 41	04/19/17	04/21/17 07:32	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	28	50	26	1.00	J,ET
4,4'-DDD	ND	5.0	2.3	1.00	ET
4,4'-DDE	5.4	5.0	2.2	1.00	ET
4,4'-DDT	3.3	5.0	2.2	1.00	J,ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	150	24-168	
2,4,5,6-Tetrachloro-m-Xylene	91	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0828-04-025-01</b>	<b>17-03-2252-74-A</b>	<b>03/30/17 10:22</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 13:18</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Dieldrin	40	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	131	24-168	
2,4,5,6-Tetrachloro-m-Xylene	101	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-01-005-01</b>	<b>17-03-2252-75-A</b>	<b>03/30/17 10:38</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 07:47</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	240	50	26	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	2.3	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	ND	5.0	2.1	1.00	ET
Heptachlor Epoxide	5.6	9.9	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	77	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-01-005-01</b>	<b>17-03-2252-75-A</b>	<b>03/30/17 10:38</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 13:33</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	35	25	12	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	90	24-168	
2,4,5,6-Tetrachloro-m-Xylene	84	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-01-005-01</b>	<b>17-03-2252-75-A</b>	<b>03/30/17 10:38</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 13:48</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	700	99	44	20.0	ET
4,4'-DDT	270	99	43	20.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	114	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0766-02-005-01	17-03-2252-77-A	03/30/17 10:48	Solid	GC 41	04/19/17	04/21/17 08:02	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	10	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	920	50	26	1.00	ET
Delta-BHC	ND	10	4.4	1.00	ET
Dieldrin	4.4	5.0	2.2	1.00	J,ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.4	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.4	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	3.0	5.0	2.2	1.00	J,ET
Heptachlor Epoxide	7.7	10	3.7	1.00	J,ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	100	45	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc. 3187 Red Hill Avenue, Suite 155 Costa Mesa, CA 92626-3453	Date Received: 03/30/17 Work Order: 17-03-2252 Preparation: EPA 3545 Method: EPA 8081A Units: ug/kg
Project: UC Riverside North District / 128685-006 2.0	Page 70 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0766-02-005-01	17-03-2252-77-A	03/30/17 10:48	Solid	GC 41	04/19/17	04/21/17 14:04	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDD	66	50	24	10.0	ET
4,4'-DDE	270	50	22	10.0	ET
4,4'-DDT	400	50	22	10.0	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	84	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0766-03-005-01	17-03-2252-79-A	03/30/17 10:55	Solid	GC 41	04/19/17	04/21/17 08:17	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	ET
Alpha-BHC	ND	9.9	3.7	1.00	ET
Beta-BHC	ND	5.0	2.5	1.00	ET
Chlordane	430	50	26	1.00	ET
4,4'-DDD	11	5.0	2.3	1.00	ET
Delta-BHC	ND	9.9	4.4	1.00	ET
Dieldrin	ND	5.0	2.2	1.00	ET
Endosulfan I	ND	5.0	2.0	1.00	ET
Endosulfan II	ND	5.0	2.3	1.00	ET
Endosulfan Sulfate	ND	5.0	2.6	1.00	ET
Endrin	ND	5.0	2.3	1.00	ET
Endrin Aldehyde	ND	5.0	3.0	1.00	ET
Endrin Ketone	ND	5.0	2.5	1.00	ET
Gamma-BHC	ND	5.0	2.2	1.00	ET
Heptachlor	2.2	5.0	2.1	1.00	J,ET
Heptachlor Epoxide	ND	9.9	3.7	1.00	ET
Methoxychlor	ND	5.0	2.7	1.00	ET
Toxaphene	ND	99	44	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	160	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.	Date Received:	03/30/17
3187 Red Hill Avenue, Suite 155	Work Order:	17-03-2252
Costa Mesa, CA 92626-3453	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: UC Riverside North District / 128685-006 2.0		Page 72 of 75

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-03-005-01</b>	<b>17-03-2252-79-A</b>	<b>03/30/17 10:55</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 14:19</b>	<b>170419L03</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.  
 - Sample extracted outside recommended holding time.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDE	110	25	11	5.00	ET
4,4'-DDT	54	25	11	5.00	ET

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	123	24-168	
2,4,5,6-Tetrachloro-m-Xylene	93	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2666	N/A	Solid	GC 41	04/18/17	04/19/17 07:17	170418L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	81	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2667	N/A	Solid	GC 41	04/18/17	04/19/17 15:39	170418L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	70	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2670	N/A	Solid	GC 41	04/19/17	04/20/17 15:04	170419L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	102	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Avoc3477-01-005-01	Sample	Solid	ICP 7300	04/04/17	04/05/17 12:47	170404S05
Avoc3477-01-005-01	Matrix Spike	Solid	ICP 7300	04/04/17	04/05/17 12:44	170404S05
Avoc3477-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/04/17	04/05/17 12:45	170404S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	12.62	25.00	42.05	118	38.74	104	75-125	8	0-20	
Lead	68.11	25.00	92.59	98	101.9	135	75-125	10	0-20	3

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Blai0890-01-005-01	Sample	Solid	ICP 7300	04/04/17	04/05/17 13:08	170404S06
Blai0890-01-005-01	Matrix Spike	Solid	ICP 7300	04/04/17	04/05/17 12:46	170404S06
Blai0890-01-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/04/17	04/05/17 12:46	170404S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	2.777	25.00	29.16	106	30.95	113	75-125	6	0-20	
Lead	433.6	25.00	273.8	4X	301.2	4X	75-125	4X	0-20	Q

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2035-8	Sample	Solid	ICP 7300	04/21/17	04/21/17 17:24	170421S05
17-03-2035-8	Matrix Spike	Solid	ICP 7300	04/21/17	04/21/17 17:25	170421S05
17-03-2035-8	Matrix Spike Duplicate	Solid	ICP 7300	04/21/17	04/21/17 17:25	170421S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	5.507	25.00	36.72	125	33.62	112	75-125	9	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3384-02-005-02	Sample	Solid	GC 41	04/18/17	04/19/17 11:34	170418S08
Utah3384-02-005-02	Matrix Spike	Solid	GC 41	04/18/17	04/19/17 07:47	170418S08
Utah3384-02-005-02	Matrix Spike Duplicate	Solid	GC 41	04/18/17	04/19/17 08:02	170418S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	21.66	87	18.62	74	50-135	15	0-25	
Alpha-BHC	ND	25.00	19.88	80	18.22	73	50-135	9	0-25	
Beta-BHC	ND	25.00	23.90	96	18.22	73	50-135	27	0-25	4
4,4'-DDD	ND	25.00	60.70	243	56.63	227	50-135	7	0-25	3
4,4'-DDE	115.3	25.00	184.1	275	157.5	169	50-135	16	0-25	3
4,4'-DDT	80.98	25.00	114.6	135	72.35	0	50-135	45	0-25	3,4
Delta-BHC	ND	25.00	22.03	88	18.88	76	50-135	15	0-25	
Dieldrin	9.852	25.00	54.44	178	48.05	153	50-135	12	0-25	3
Endosulfan I	ND	25.00	51.95	208	44.44	178	50-135	16	0-25	3
Endosulfan II	ND	25.00	29.18	117	25.23	101	50-135	14	0-25	
Endosulfan Sulfate	ND	25.00	38.70	155	35.67	143	50-135	8	0-25	3
Endrin	ND	25.00	43.72	175	38.86	155	50-135	12	0-25	3
Endrin Aldehyde	ND	25.00	25.48	102	20.08	80	50-135	24	0-25	
Gamma-BHC	ND	25.00	21.58	86	18.82	75	50-135	14	0-25	
Heptachlor	ND	25.00	22.54	90	19.09	76	50-135	17	0-25	
Heptachlor Epoxide	31.81	25.00	85.41	214	71.96	161	50-135	17	0-25	3
Methoxychlor	ND	25.00	28.27	113	19.86	79	50-135	35	0-25	4

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RPD: Relative Percent Difference. CL: Control Limits





Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Peac0880-01-005-01	Sample	Solid	GC 41	04/18/17	04/19/17 15:54	170418S09
Peac0880-01-005-01	Matrix Spike	Solid	GC 41	04/18/17	04/20/17 08:47	170418S09
Peac0880-01-005-01	Matrix Spike Duplicate	Solid	GC 41	04/18/17	04/20/17 09:02	170418S09

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	22.02	88	21.51	86	50-135	2	0-25	
Alpha-BHC	ND	25.00	21.56	86	20.93	84	50-135	3	0-25	
Beta-BHC	ND	25.00	20.35	81	19.68	79	50-135	3	0-25	
4,4'-DDD	ND	25.00	30.56	122	32.18	129	50-135	5	0-25	
4,4'-DDE	6.127	25.00	30.01	96	29.07	92	50-135	3	0-25	
4,4'-DDT	ND	25.00	28.08	112	23.42	94	50-135	18	0-25	
Delta-BHC	ND	25.00	22.74	91	22.42	90	50-135	1	0-25	
Dieldrin	8.518	25.00	35.75	109	33.90	102	50-135	5	0-25	
Endosulfan I	ND	25.00	23.35	93	21.94	88	50-135	6	0-25	
Endosulfan II	ND	25.00	24.04	96	24.36	97	50-135	1	0-25	
Endosulfan Sulfate	ND	25.00	24.84	99	25.81	103	50-135	4	0-25	
Endrin	ND	25.00	27.00	108	26.87	107	50-135	0	0-25	
Endrin Aldehyde	ND	25.00	20.81	83	21.98	88	50-135	5	0-25	
Gamma-BHC	ND	25.00	22.74	91	22.19	89	50-135	2	0-25	
Heptachlor	ND	25.00	22.69	91	21.63	87	50-135	5	0-25	
Heptachlor Epoxide	ND	25.00	25.85	103	25.96	104	50-135	0	0-25	
Methoxychlor	ND	25.00	27.07	108	23.09	92	50-135	16	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Grap0828-03-005-01	Sample	Solid	GC 41	04/19/17	04/21/17 06:47	170419S03
Grap0828-03-005-01	Matrix Spike	Solid	GC 41	04/19/17	04/21/17 09:02	170419S03
Grap0828-03-005-01	Matrix Spike Duplicate	Solid	GC 41	04/19/17	04/21/17 09:17	170419S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.96	80	20.58	82	50-135	3	0-25	
Alpha-BHC	ND	25.00	18.67	75	19.19	77	50-135	3	0-25	
Beta-BHC	ND	25.00	20.40	82	21.38	86	50-135	5	0-25	
4,4'-DDD	19.85	25.00	62.23	170	65.29	182	50-135	5	0-25	3
4,4'-DDE	94.52	25.00	123.6	116	129.6	140	50-135	5	0-25	3
4,4'-DDT	38.49	25.00	38.34	0	41.61	13	50-135	8	0-25	3
Delta-BHC	ND	25.00	21.89	88	22.90	92	50-135	4	0-25	
Dieldrin	7.141	25.00	39.53	130	41.88	139	50-135	6	0-25	3
Endosulfan I	ND	25.00	32.74	131	35.96	144	50-135	9	0-25	3
Endosulfan II	ND	25.00	28.43	114	30.05	120	50-135	6	0-25	
Endosulfan Sulfate	ND	25.00	26.95	108	28.71	115	50-135	6	0-25	
Endrin	ND	25.00	30.80	123	32.42	130	50-135	5	0-25	
Endrin Aldehyde	ND	25.00	23.53	94	24.06	96	50-135	2	0-25	
Gamma-BHC	ND	25.00	19.35	77	19.88	80	50-135	3	0-25	
Heptachlor	ND	25.00	18.29	73	18.89	76	50-135	3	0-25	
Heptachlor Epoxide	ND	25.00	82.60	330	92.90	372	50-135	12	0-25	3
Methoxychlor	ND	25.00	14.59	58	15.87	63	50-135	8	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24571</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:24</b>	<b>170404L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	22.46	90	80-120	
Lead		25.00	24.01	96	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24572</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/04/17</b>	<b>04/05/17 12:26</b>	<b>170404L06</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		25.00	23.15	93	80-120	
Lead		25.00	24.28	97	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
Work Order: 17-03-2252  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24705</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/21/17</b>	<b>04/21/17 17:23</b>	<b>170421L05</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	26.25	105	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2666</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/19/17 07:32</b>	<b>170418L08</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	24.40	98	50-135	36-149	
Alpha-BHC		25.00	25.52	102	50-135	36-149	
Beta-BHC		25.00	24.09	96	50-135	36-149	
4,4'-DDD		25.00	25.69	103	50-135	36-149	
4,4'-DDE		25.00	25.07	100	50-135	36-149	
4,4'-DDT		25.00	27.73	111	50-135	36-149	
Delta-BHC		25.00	27.06	108	50-135	36-149	
Dieldrin		25.00	26.59	106	50-135	36-149	
Endosulfan I		25.00	27.79	111	50-135	36-149	
Endosulfan II		25.00	27.73	111	50-135	36-149	
Endosulfan Sulfate		25.00	26.54	106	50-135	36-149	
Endrin		25.00	26.75	107	50-135	36-149	
Endrin Aldehyde		25.00	25.96	104	50-135	36-149	
Gamma-BHC		25.00	25.74	103	50-135	36-149	
Heptachlor		25.00	26.27	105	50-135	36-149	
Heptachlor Epoxide		25.00	25.31	101	50-135	36-149	
Methoxychlor		25.00	25.95	104	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2667</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/18/17</b>	<b>04/20/17 05:16</b>	<b>170418L09</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	24.37	97	50-135	36-149	
Alpha-BHC		25.00	25.62	102	50-135	36-149	
Beta-BHC		25.00	24.00	96	50-135	36-149	
4,4'-DDD		25.00	25.58	102	50-135	36-149	
4,4'-DDE		25.00	25.31	101	50-135	36-149	
4,4'-DDT		25.00	26.35	105	50-135	36-149	
Delta-BHC		25.00	26.58	106	50-135	36-149	
Dieldrin		25.00	26.41	106	50-135	36-149	
Endosulfan I		25.00	27.17	109	50-135	36-149	
Endosulfan II		25.00	27.22	109	50-135	36-149	
Endosulfan Sulfate		25.00	25.82	103	50-135	36-149	
Endrin		25.00	27.15	109	50-135	36-149	
Endrin Aldehyde		25.00	25.22	101	50-135	36-149	
Gamma-BHC		25.00	25.80	103	50-135	36-149	
Heptachlor		25.00	26.39	106	50-135	36-149	
Heptachlor Epoxide		25.00	25.32	101	50-135	36-149	
Methoxychlor		25.00	24.94	100	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/30/17  
 Work Order: 17-03-2252  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2670</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/19/17</b>	<b>04/21/17 11:03</b>	<b>170419L03</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	22.33	89	50-135	36-149	
Alpha-BHC		25.00	21.85	87	50-135	36-149	
Beta-BHC		25.00	22.88	92	50-135	36-149	
4,4'-DDD		25.00	29.06	116	50-135	36-149	
4,4'-DDE		25.00	26.98	108	50-135	36-149	
4,4'-DDT		25.00	29.21	117	50-135	36-149	
Delta-BHC		25.00	25.42	102	50-135	36-149	
Dieldrin		25.00	25.31	101	50-135	36-149	
Endosulfan I		25.00	24.46	98	50-135	36-149	
Endosulfan II		25.00	28.00	112	50-135	36-149	
Endosulfan Sulfate		25.00	28.22	113	50-135	36-149	
Endrin		25.00	26.98	108	50-135	36-149	
Endrin Aldehyde		25.00	26.97	108	50-135	36-149	
Gamma-BHC		25.00	22.55	90	50-135	36-149	
Heptachlor		25.00	22.75	91	50-135	36-149	
Heptachlor Epoxide		25.00	23.23	93	50-135	36-149	
Methoxychlor		25.00	28.89	116	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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Calscience

## Sample Analysis Summary Report

Work Order: 17-03-2252

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3545	944	GC 41	1

  
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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

## Glossary of Terms and Qualifiers

Work Order: 17-03-2252

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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Revised COC received from Matt Rathel (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # /LAB USE ONLY

**17-03-2252**

DATE: 3/29/17

PAGE: 1 OF 8

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: **3187 Red Hill Ave., Suite 155**  
 CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**  
 TEL: **714-371-1802** E-MAIL: **ccanfield@haleyaldrich.com**

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-Eurofins Calscience  
 Quote: **963193**  
 SAMPLER(S): (PRINT)  
**Tanya Nelson**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
**UC Riverside North District / 128685-006 2.0**

PROJECT CONTACT:  
**Colleen Canfield**

TURNAROUND TIME (Rush surcharges may apply to any TAT not \*STANDARD\*):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions: **See attached table for Pricing provided on Eurofins Quote 963193 Compositing instructions for OCP Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110 8081**

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	AVOC3477-01-005-01		3/29/17	1130	SO	1
2	AVOC3477-01-025-01			1134		
3	AVOC3477-02-005-01			1141		
4	AVOC3477-02-025-01			1146		
5	AVOC3477-03-005-01			1154		
6	AVOC3477-03-025-01			1159		
7	AVOC3477-04-005-01			1207		
8	AVOC3477-04-025-01			1210		
9	LIND0741-01-005-01			1217		
10	LIND0741-01-025-01			1220		

Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A	Date:	Time:
	X			X	X	X		3/30/17	1140
				X	X		X	3/30/17	1255
				X	X		X		
				X	X		X		
				X	X		X		
				X	X		X		
				X	X		X		
				X	X		X		
				X	X		X		

Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Raithel (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2252

DATE: 3/29/17

PAGE: 2 OF 8

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
			DATE	TIME									
11	Lind0741-02-005-01		3/29/17	1223	SD	1	X			X			
12	Lind0741-02-025-01			1227					X				
13	Lind0741-03-005-01			1231					X				
14	Lind0741-03-025-01			1234					X				
15	Lind0741-04-005-01			1239					X				
16	Lind0741-04-025-01			1241					X				
17	Utah0384-01-005-01			1352					X				
18	Utah0384-01-005-02			1352					X				
19	Utah0384-01-025-01			1355					X				
20	Utah0384-02-005-01			1402					X				

Requested Analyses

Relinquished by: (Signature) *Chyanne* Date: 3/30/17 Time: 1240  
 Relinquished by: (Signature) *AY* Date: 3/30/17 Time: 1255  
 Relinquished by: (Signature) *AY* Date: 3/30/17 Time: 1255

Revised COC received from Matt Raihel (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

WO # / LAB USE ONLY: 17-03-2252      DATE: 3/29/17      PAGE: 3 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:  
2015-18-EurofinsCalscience  
Quote: 963193

PROJECT CONTACT:  
Colleen Cantfield

SAMPLER(S), (PRINT):  
Tanya Nelson

**REQUESTED ANALYSES**

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
21	Utah3384-02-005-02		3/29/17	1402	SD	1	X			X			
22	Utah3384-02-025-01			1410					X				
23	Utah3384-03-005-01			1419					X				
24	Utah3384-03-005-02			1419					X				
25	Utah3384-03-025-01			1423					X				
26	Utah3384-04-005-01			1429					X				
27	Utah3384-04-005-02			1429					X				
28	Utah3384-04-025-01			1433					X				
29	Utah0850-01-005-01			1441					X	X			
30	Utah0850-01-025-01			1446					X				

Relinquished by: (Signature) [Signature]      Received by: (Signature/Affiliation) Aug ECI      Date: 3/30/17      Time: 1140

Relinquished by: (Signature) [Signature]      Received by: (Signature/Affiliation) [Signature]      Date: 3/30/17      Time: 1255

Relinquished by: (Signature) [Signature]      Received by: (Signature/Affiliation) [Signature]      Date: \_\_\_\_\_      Time: \_\_\_\_\_

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY     24 HR     48 HR     72 HR     5 DAYS     STANDARD

GLOBAL ID: \_\_\_\_\_      LOG CODE: \_\_\_\_\_

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raihel of Haley & Aldrich 619-285-7110

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa      STATE: CA      ZIP: 92626  
 TEL: 714-371-1802      E-MAIL: ccantfield@haleyaldrich.com



Revised COC received from Matt Raithel (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)

**Calscience**

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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY

17-03-2252

DATE: 3/29/17

PAGE: 4 OF 8

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-Eurofins Calscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)  
 Tanya Nelson

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:  
 Colleen Canfield

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
31	Plum0850-02-005-01		3/29/17	1501	SO	1
32	Plum0850-02-025-01			1506		
33	Plum0850-03-005-01			1511		
34	Plum0850-03-025-01			1516		
35	Plum0850-04-005-01			1520		
36	Plum0850-04-025-01			1523		
37	Pea0880-01-005-01			1521		
38	Pea0880-01-025-01			1534		
39	Pea0880-02-005-01			1540		
40	Pea0880-02-025-01			1546		

Requested Analytes	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold	Date:	Time:
	X			X				3/30/17	1140
		X		X				3/30/17	1255
		X		X					
		X		X					
		X		X					
		X		X					
		X		X					
		X		X					
		X		X					
		X		X					

Received by: (Signature/Affiliation) *Ally ECI*  
 Received by: (Signature/Affiliation) *Ally ECI*  
 Received by: (Signature/Affiliation) *Ally ECI*

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Rathel (H&A) on 04/17/2017 at 13:10pm.  
- Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**  
 DATE: 3/29/17 + 3/30/17  
 PAGE: 5 OF 8

WORK/LAB USE ONLY

17-03-2052

LABORATORY CLIENT: **Haley & Aldrich, Inc.**  
 ADDRESS: **3187 Red Hill Ave., Suite 155**  
 CITY: **Costa Mesa** STATE: **CA** ZIP: **92626**  
 TEL: **714-371-1802** E-MAIL: **ccanfield@haleyaldrich.com**  
 BLANKET SERVICE AGREEMENT NO.:  
**2015-18-EurofinsCalscience**  
**Quote: 963193**  
 SALES REP: (PRINT)  
**Tanya Nelson**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
**UC Riverside North District / 128685-006 2.0**  
 PROJECT CONTACT:  
**Colleen Canfield**

Requested Analyses:  
 Organochlorine Pesticides 8081A (Soil)  
 Arsenic - 6010B (Soil)  
 Lead - 6010B (Soil)  
 Field Filtered  
 Preserved  
 Unpreserved

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	HOLD
			DATE	TIME									
	41 Pac0880-03-005-01		3/29/17	1551	50	1	X			X			
	42 Pac0880-03-025-01		↓	1556	↓	↓			X				
	43 Pac0880-04-005-01		↓	1600	↓	↓			X				
	44 Pac0880-04-025-01		↓	1603	↓	↓			X				
	45 EB-022917		↓	1615	HP	2	1	1	X	X			
	46 Pac0890-01-005-01		3/30/17	0800	50	1	X		X	X			
	47 Pac0890-01-005-02		↓	0800	↓	↓			X				
	48 Pac0890-01-025-01		↓	0803	↓	↓			X				
	49 Pac0890-02-005-01		↓	0816	↓	↓			X				
	50 Pac0890-02-005-02		↓	0816	↓	↓			X				

Relinquished by: (Signature) [Signature]  
 Relinquished by: (Signature) [Signature]  
 Relinquished by: (Signature) [Signature]  
 Received by: (Signature/Affiliation) Aly ECI  
 Received by: (Signature/Affiliation) [Signature]  
 Received by: (Signature/Affiliation) [Signature]  
 Date: 3/30/17 Time: 1140  
 Date: 3/30/17 Time: 1255  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





Revised COC received from Matt Raithe (H&A) on 04/17/2017 at 13:10pm. - Virendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WORK / LAB USE ONLY

DATE: 3/30/17

PAGE: 7 OF 8

17-03-2252

<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com		BLANKET SERVICE AGREEMENT NO.: 2015-18-Eurofins Calscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson											
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0		PROJECT CONTACT: Colleen Canfield											
<b>REQUESTED ANALYSES</b>													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	H&A
			DATE	TIME									
	61 BLa.0823-02-005-01		3/30/17	0911	SO	1	X			X			
	62 BLa.0823-02-025-01			0918						X			
	63 BLa.0823-03-065-01			0923						X			
	64 BLa.0823-03-025-01			0927						X			
	65 BLa.0823-04-005-01			0933						X			
	66 BLa.0823-04-025-01			0937						X			
	67 Grap.0823-01-005-01			0947						X			
	68 Grap.0823-01-025-01			0953						X			
	69 Grap.0823-02-005-01			0959						X			
	70 Grap.0823-02-005-01			1002						X			
Relinquished by: (Signature) <i>Chaya Nelson</i>							Received by: (Signature/Affiliation) <i>AY ECI</i>						
Relinquished by: (Signature)							Received by: (Signature/Affiliation)						
Relinquished by: (Signature)							Received by: (Signature/Affiliation)						

**Special Instructions:**  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD")  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):





## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.



**eurofins** | Calscience

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Revised COC received from Matt Raithel (H&A) on 03/31/17 at 16:27pm.  
- Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY WORD**

WO # / LAB USE ONLY

**17-03-2252**

DATE: 3/29/17

PAGE: 1 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa TEL: 714-371-1802 E-MAIL: gcanfield@haleyaldrich.com STATE: CA ZIP: 92626		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson											
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield		REQUESTED ANALYSES											
TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		LOG CODE:											
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):											
Special Instructions: See attached table for Pricing provided on Eurofins Quote 963193 Compositing instructions for OCP Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110 8081													
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	UNPRESERVED	PRESERVED	FIELD FILTERED	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
1	AV03477-01-005-01		3/29/17	1130	SO	1	X			X			
2	AV03477-01-025-01			1134						X			
3	AV03477-02-005-01			1141						X			
4	AV03477-02-025-01			1146						X			
5	AV03477-03-005-01			1154						X			
6	AV03477-03-025-01			1159						X			
7	AV03477-04-005-01			1207						X			
8	AV03477-04-025-01			1210						X			
9	LIND0741-01-005-01			1217						X	X		
10	LIND0741-01-025-01			1220						X	X		
Received by: (Signature) <i>Chaya...</i>		Received by: (Signature/Affiliation) <i>Any ECP</i>		Date: 3/30/17		Time: 1640							
Received by: (Signature) <i>g</i>		Received by: (Signature/Affiliation) <i>g</i>		Date: 3/30/17		Time: 1255							
Received by: (Signature)		Received by: (Signature/Affiliation)		Date:		Time:							

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Return to Contents

Revised COC received from Matt Raithel (H&A) on 03/31/17 at 16:27pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY RECORD**

DATE: 3/29/17  
PAGE: 2 OF 8

WO # / LAB USE ONLY  
17-03-2252

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
UC Riverside North District / 128685-006 2.0

BLANKET SERVICE AGREEMENT NO.:  
2015-18-Eurofins Calscience  
Quote #: 963193

SAMPLER(S): (PRINT)  
Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.

ADDRESS: 3187 Red Hill Ave., Suite 155

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

PROJECT CONTACT:  
Colleen Canfield

**REQUESTED ANALYSES**

Special Instructions:  
Pricing provided on Eurofins Quote 963193  
Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filled	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
			DATE	TIME									
	11 Lind0741-02-005-01		3/29/17	1223	SD	1	X			X			
	12 Lind0741-02-025-01			1227					X				
	13 Lind0741-03-005-01			1231					X				
	14 Lind0741-03-025-01			1234					X				
	15 Lind0741-04-005-01			1239					X				
	16 Lind0741-04-025-01			1241					X				
	17 Hal0384-01-005-01			1352					X				
	18 Hal0384-01-005-02			1352					X				
	19 Hal0384-01-025-01			1355					X				
	20 Hal0384-02-005-01			1402					X				

Received by: (Signature/Affiliation) Aly ECI Date: 3/30/17 Time: 1140

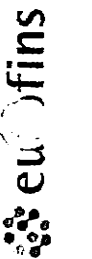
Received by: (Signature/Affiliation) Aly ECI Date: 3/30/17 Time: 1205

Received by: (Signature/Affiliation) Aly Date: \_\_\_\_\_ Time: \_\_\_\_\_

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



Revised COC received from Matt Raithel (H&A) on 03/31/17 at 16:27pm.  
- Vitendra (ECI)



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**HALEY & ALDRICH CHAIN OF CUSTODY**

WO # / LAB USE ONLY: **17-03-2252**  
 DATE: **3/29/17** OF **8**  
 PAGE: **3**

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:  
 UC Riverside North District / 128885-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 Tanya Nelson

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

BLANKET SERVICE AGREEMENT NO.:  
 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any FAT not 'STANDARD'):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF LOG CODE:  
 H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	Requested Analytes
			DATE	TIME			
21	UTAH3384-02-005-02		3/29/17	1402	SD	1	Unpreserved X Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X Hold
22	UTAH3384-02-025-01		1410			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
23	UTAH3384-03-005-01		1419			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
24	UTAH3384-03-005-02		1419			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
25	UTAH3384-03-025-01		1423			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
26	UTAH3384-04-005-01		1429			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
27	UTAH3384-04-005-02		1429			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
28	UTAH3384-04-005-01		1433			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
29	PLUM0850-01-005-01		1441			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X
30	PLUM0850-01-025-01		1446			1	Unpreserved Arsenic - 6010B (Soil) X Lead - 6010B (Soil) X Field Filled Preserved Organochlorine Pesticides 8081A (Soil) X

Requested Analytes: **Unpreserved, Arsenic - 6010B (Soil), Lead - 6010B (Soil), Field Filled, Preserved, Organochlorine Pesticides 8081A (Soil)**

Received by: (Signature/Affiliation) **AM** Date: **3/30/17** Time: **1140**  
 Received by: (Signature/Affiliation) **AM** Date: **3/30/17** Time: **1255**  
 Received by: (Signature/Affiliation) **AM** Date: **3/30/17** Time: **1255**

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.





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Revised COC received from Matt Raihel (H&A) on 03/31/17 at 16:27 pm. - Virendra (ECI)

**HALEY & ALDRICH CHAIN OF CUSTODY**

WO 77 LAB USE ONLY

DATE: 3/29/17 + 3/30/17  
 PAGE: 5 OF 8

17-03-2052

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

**REQUESTED ANALYSES**

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES										
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)					
41	Pac08880-03-005-01		3/29/17	1551	SO	1	X										
42	Pac08880-03-025-01		↓	1556	↓	↓											
43	Pac08880-04-005-01		↓	1600	↓	↓											
44	Pac08880-04-025-01		↓	1603	↓	↓											
45	EB-022917		↓	1615	HO	2											
46	Bla0890-01-005-01		3/30/17	0800	SO	1	X										
47	Bla0890-01-005-02		↓	0800	↓	↓											
48	Bla0890-01-025-01		↓	0803	↓	↓											
49	Bla0890-02-005-01		↓	0816	↓	↓											
50	Bla0890-02-005-02		↓	0816	↓	↓											

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raihel of Haley & Aldrich 619-285-7110

TURNAROUND TIME (Rush surcharges may apply to any TAT not STANDARD):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

Geotracker EDF  
 H&A Standard EDD

Sample Archiving requirements (if required to be held greater than 30 days):

GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

Signature: [Signature] Received by: (Signature/Affiliation)  
 Signature: [Signature] Received by: (Signature/Affiliation)  
 Signature: [Signature] Received by: (Signature/Affiliation)

Date: 3/30/17 Time: 1140  
 Date: 3/30/17 Time: 1255  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.







Revised COC received from Matt Rathel (H&A) on 03/31/17 at 16:27pm.  
- Virendra (ECI)



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<b>LABORATORY CLIENT:</b> Haley & Aldrich, Inc. ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT) Tanya Nelson				
PROJECT CONTACT: Colleen Canfield		UC Riverside North District / 128685-006 2.0 PROJECT NO.: 17-03-2252				
DATE: 3/30/17 PAGE: 7 OF 8		HALEY & ALDRICH CHAIN OF CUSTODY REPORT				
TURNAROUND TIME (rush surcharges may apply to any TAT not STANDARD): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF LOG CODE: <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
61	Bla:0828-02-005-01		3/30/17	0911	SO	1
62	Bla:0828-02-025-01			0918		
63	Bla:0828-03-035-01			0923		
64	Bla:0828-03-025-01			0927		
65	Bla:0828-04-005-01			0933		
66	Bla:0828-04-025-01			0937		
67	Grap:0828-01-005-01			0947		
68	Grap:0828-01-015-01			0953		
69	Grap:0828-02-005-01			0959		
70	Grap:0828-02-005-01			1002		
Requisitioned by: (Signature) <i>AY</i> Received by: (Signature/Affiliation) <i>AY ECI</i> Date: 3/30/17 Time: 1140						
Requisitioned by: (Signature) <i>AY</i> Received by: (Signature/Affiliation) <i>ECI</i> Date: 3/30/17 Time: 1255						
Requisitioned by: (Signature) Received by: (Signature/Affiliation) Date: Time:						
Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Services Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.						

Revised COC received  
from Matt Raithe (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-41 - 81	X	Avoc3477-01-005-01 - 1 Avoc3477-02-005-01 - 3 Avoc3477-03-005-01 - 5 Avoc3477-04-005-01 - 7
Composite-42 - 82	X	Avoc3477-01-025-01 - 2 Avoc3477-02-025-01 - 4 Avoc3477-03-025-01 - 6 Avoc3477-04-025-01 - 8
Composite-43 - 83	X	Lind0741-01-005-01 - 9 Lind0741-02-005-01 - 11 Lind0741-03-005-01 - 13 Lind0741-04-005-01 - 15
Composite-44 - 84	X	Lind0741-01-025-01 - 10 Lind0741-02-025-01 - 12 Lind0741-03-025-01 - 14 Lind0741-04-025-01 - 16
Composite-45 - 85	X	Utah3384-01-005-01 - 17 Utah3384-02-005-01 - 20 Utah3384-03-005-01 - 23 Utah3384-04-005-01 - 26
Composite-45-Dup - 86	X	Utah3384-01-005-02 - 18 Utah3384-02-005-02 - 21 Utah3384-03-005-02 - 24 Utah3384-04-005-02 - 27
Composite-46 - 87	X	Utah3384-01-025-01 - 19 Utah3384-02-025-01 - 22 Utah3384-03-025-01 - 25 Utah3384-04-025-01 - 28
Composite-47 - 88	X	Plum0850-01-005-01 - 29 Plum0850-02-005-01 - 31 Plum0850-03-005-01 - 33 Plum0850-04-005-01 - 35

Revised COC received  
from Matt Raithel (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-48 - 89	X	Plum0850-01-025-01 - 30 Plum0850-02-025-01 - 32 Plum0850-03-025-01 - 34 Plum0850-04-025-01 - 36
Composite-49 - 90	X	Peac0880-01-005-01 - 37 Peac0880-02-005-01 - 39 Peac0880-03-005-01 - 41 Peac0880-04-005-01 - 43
Composite-50 - 91	X	Peac0880-01-025-01 - 38 Peac0880-02-025-01 - 40 Peac0880-03-025-01 - 42 Peac0880-04-025-01 - 44
Composite-51 - 92	X	Blai0890-01-005-01 - 46 Blai0890-02-005-01 - 49 Blai0890-03-005-01 - 52 Blai0890-04-005-01 - 55
Composite-51-Dup - 93	X	Blai0890-01-005-02 - <del>50</del> 47 Blai0890-02-005-02 - 50 Blai0890-03-005-02 - 53 Blai0890-04-005-02 - 56
Composite-52 - 94	X	Blai0890-01-025-01 - 48 Blai0890-02-025-01 - 51 Blai0890-03-025-01 - 54 Blai0890-04-025-01 - 57
Composite-53 - 95	X	Blai0828-01-005-01 - 59 Blai0828-02-005-01 - 61 Blai0828-03-005-01 - 63 Blai0828-04-005-01 - 65
Composite-54 - 96	X	Blai0828-01-025-01 - 60 Blai0828-02-025-01 - 62 Blai0828-03-025-01 - 64 Blai0828-04-025-01 - 66

Revised COC received  
from Matt Raithel (H&A)  
on 03/31/17 at  
16:27pm.  
- Virendra (ECI)

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-55  - 97	X	Grap0828-01-005-01 -67 Grap0828-02-005-01 -69 Grap0828-03-005-01 -71 Grap0828-04-005-01 -73
Composite-56  - 98	X	Grap0828-01-025-01 -68 Grap0828-02-025-01 -70 Grap0828-03-025-01 -72 Grap0828-04-025-01 -74
Composite-57  - 99	X	Grap0766-01-005-01 -75 Grap0766-02-005-01 -77 Grap0766-03-005-01 -79
Composite-58  - 100	X	Grap0766-01-025-01 -76 Grap0766-02-025-01 -78 Grap0766-03-025-01 -80



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

## 17-03-2252

DATE: 3/29/17

PAGE: 1 OF 8

HALEY & ALDRICH CLIENT NAME / PROJECT NO.:

UC Riverside North District / 128685-006 2.0

PROJECT CONTACT:

Colleen Canfield

BLANKET SERVICE AGREEMENT NO.:

2015-18-Eurofins Calscience  
Quote: 963193

SAMPLER(S): (PRINT)

Tanya Nelson

CITY: Costa Mesa STATE: CA ZIP: 92626

TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE:

Geotracker EDF

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

### Special Instructions:

Pricing provided on Eurofins Quote 963193

Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	A1003477-01-005-01		3/29/17	1130	SO	1
2	A1003477-01-025-01			1134		1
3	A1003477-02-005-01			1141		1
4	A1003477-02-025-01			1146		1
5	A1003477-03-005-01			1154		1
6	A1003477-03-025-01			1159		1
7	A1003477-04-005-01			1207		1
8	A1003477-04-025-01			1210		1
9	L100741-01-005-01			1217		1
10	L100741-01-025-01			1220		1

Requested Analyzes	Field Filtered	Preserved	Unpreserved	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
			X	X			
				X			X
				X			X
				X			X
				X			X
				X			X
				X			X
				X			X

Received by: (Signature/Affiliation) *AY ECR*  
 Received by: (Signature/Affiliation) *[Signature]*  
 Received by: (Signature/Affiliation) *[Signature]*

Date: 3/30/17 Time: 1140  
 Date: 3/30/17 Time: 1255  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_



Calscience

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

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WO # / LAB USE ONLY

17-03-252

DATE: 3/29/17  
PAGE: 2 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience				
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: 963193				
CITY: Costa Mesa	STATE: CA	ZIP: 92626	SAMPLER(S): (PRINT) Tanya Nelson			
TEL: 714-371-1802	E-MAIL: ccanfield@haleyaldrich.com					
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):						
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF		LOG CODE:				
<input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):						
Special Instructions:						
Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
11	Lind0741-02-005-01		3/29/17	1223	SD	1
12	Lind0741-02-025-01			1227		
13	Lind0741-03-005-01			1231		
14	Lind0741-03-025-01			1234		
15	Lind0741-04-005-01			1239		
16	Lind0741-04-025-01			1241		
17	Utan0384-01-005-01			1352		
18	Utan0384-01-005-02			1352		
19	Utan0384-02-005-01			1355		
20	Utan0384-02-005-01			1402		
Relinquished by: (Signature)		Received by: (Signature/Affiliation)		Time: 1140		
[Signature]		Aly ECF		Date: 3/30/17		
Relinquished by: (Signature)		Received by: (Signature/Affiliation)		Time: 1255		
[Signature]		Aly ECF		Date: 3/30/17		
Relinquished by: (Signature)		Received by: (Signature/Affiliation)		Time:		
[Signature]		Aly		Date:		

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	
		X	X		X	





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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/29/17  
PAGE: 3 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com  
 TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_  
 H&A Standard Sample Archiving requirements (if required to be held greater than 30 days):  
 Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithehl of Haley & Aldrich 619-285-7110

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) \_\_\_\_\_  
 Tanya Nelson

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES													
			DATE	TIME			Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold							
21	UHA3384-02-005-02		3/29/17	1402	SD	1	X													
22	UHA3384-02-025-01			1410																
23	UHA3384-03-005-01			1419																
24	UHA3384-03-005-02			1419																
25	UHA3384-03-025-01			1423																
26	UHA3384-04-005-01			1429																
27	UHA3384-04-005-02			1429																
28	UHA3384-04-025-01			1433																
29	UHA0350-01-005-01			1441																
30	UHA0350-01-025-01			1446																

Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) Aug ECP Date: 3/30/17 Time: 1140  
 Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) [Signature] Date: 3/30/17 Time: 1255  
 Relinquished by: (Signature) [Signature] Received by: (Signature/Affiliation) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-2252

DATE: 3/29/17

PAGE: 4 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: [ccanfield@haleyaldrich.com](mailto:ccanfield@haleyaldrich.com)

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield

BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
31	Plum0850-02-005-01		3/29/17	1501	SO	1
32	Plum0850-02-025-01			1506		
33	Plum0850-03-005-01			1511		
34	Plum0850-03-025-01			1516		
35	Plum0850-04-005-01			1520		
36	Plum0850-04-025-01			1523		
37	Pea0880-01-005-01			1521		
38	Pea0880-01-025-01			1504		
39	Pea0880-02-005-01			1540		
40	Pea0880-02-025-01			1546		

Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*  
 Relinquished by: (Signature) *[Signature]*

REQUESTED ANALYSES						
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)	Hold
X		X	X		X	
			X			
			X		X	
			X			
			X			
			X			
			X			
			X			

Received by: (Signature/Affiliation) *[Signature]*  
 Received by: (Signature/Affiliation) *[Signature]*  
 Received by: (Signature/Affiliation) *[Signature]*

Date: 3/30/17 Time: 1140  
 Date: 3/30/17 Time: 1255  
 Date: Time:



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Calscience

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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/30/17

PAGE: 6 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.		STATE: CA		ZIP: 92626		
ADDRESS: 3187 Red Hill Ave., Suite 155		E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
CITY: Costa Mesa		LOG CODE:				
TEL: 714-371-1802		TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):				
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<input type="checkbox"/> Geotracker EDF				
<input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):				
Special Instructions:						
Pricing provided on Eurofins Quote 963193						
Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
S1	Blai0890-02-025-01		3/30/17	0819	SO	1
S2	Blai0890-03-005-01			0825		
S3	Blai0890-03-005-02			0825		
S4	Blai0890-03-025-01			0829		
S5	Blai0890-04-005-01			0835		
S6	Blai0890-04-005-02			0835		
S7	Blai0890-04-025-01			0839		
S8	B6-01			0850		
S9	Blai0828-01-005-01			0902		
S0	Blai0828-01-025-01			0907		
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			Date: 3/30/17	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			Date: 3/30/17	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			Date: 3/30/17	



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 3/30/17

PAGE: 7 OF 8

17-03-2252

LABORATORY CLIENT: Haley & Aldrich, Inc.		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience				
ADDRESS: 3187 Red Hill Ave., Suite 155		Quote: <b>963193</b>				
CITY: Costa Mesa		SAMPLER(S): (PRINT) Tanya Nelson				
TEL: 714-371-1802		E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>				
STATE: CA		ZIP: 92626				
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD		GLOBAL ID: Sample Archiving requirements (if required to be held greater than 30 days):				
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
61	Blai.0828-02-005-01		3/30/17	0911	SO	1
62	Blai.0828-02-025-01			0918		
63	Blai.0828-03-065-01			0923		
64	Blai.0828-03-025-01			0927		
65	Blai.0828-04-005-01			0933		
66	Blai.0828-04-025-01			0937		
67	Grap.0828-01-005-01			0947		
68	Grap.0828-01-015-01			0953		
69	Grap.0828-02-005-01			095A		
70	Grap.0828-02-005-01			1002		
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		Date: 3/30/17	
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		Date: 3/30/17	
Relinquished by: (Signature)			Received by: (Signature/Affiliation)		Date: 3/30/17	

## REQUESTED ANALYSES

Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)															
X			X																	
			X																	
			X																	
			X																	
			X																	

Time: 1140

Date: 3/30/17

Time: 1255

Date: 3/30/17

Time: \_\_\_\_\_

Date: \_\_\_\_\_



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

17-03-252

DATE: 3/30/17

PAGE: 8 OF 8

LABORATORY CLIENT: Haley & Aldrich, Inc.  
 ADDRESS: 3187 Red Hill Ave., Suite 155  
 CITY: Costa Mesa STATE: CA ZIP: 92626  
 TEL: 714-371-1802 E-MAIL: ccanfield@haleyaldrich.com

HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0  
 PROJECT CONTACT: Colleen Canfield  
 BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience  
 Quote: 963193  
 SAMPLER(S): (PRINT) Tanya Nelson

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 Geotracker EDF GLOBAL ID: LOG CODE:

H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):

Special Instructions:  
 Pricing provided on Eurofins Quote 963193  
 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		NO. OF CONT.
			DATE	TIME	
71	Grap0828-03-005-01		3/30/17	1010	1
72	Grap0828-03-025-01			1015	
73	Grap0828-04-005-01			1019	
74	Grap0828-04-025-01			1072	
75	Grap0766-01-005-01			1038	
76	Grap0766-01-025-01			1041	
77	Grap0766-02-005-01			1048	
78	Grap0766-02-025-01			1051	
79	Grap0766-03-005-01			1055	
80	Grap0766-03-025-01			1059	

REQUESTED ANALYSES					
Unpreserved	Preserved	Field Filtered	Lead - 6010B (Soil)	Arsenic - 6010B (Soil)	Organochlorine Pesticides 8081A (Soil)
X			X		
			X		
			X		
			X		
			X		
			X		
			X		
			X		

Relinquished by: (Signature) *Cheryl* Received by: (Signature/Affiliation) *Aly ECI* Date: 3/30/17 Time: 1140  
 Relinquished by: (Signature) *Aly* Received by: (Signature/Affiliation) *EA* Date: 3/30/17 Time: 1255  
 Relinquished by: (Signature) Received by: (Signature/Affiliation) Date: Time:

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: H&A

DATE: 03 / 30 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.7 °C;  Blank  Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature:  Air  Filter

Checked by: 678

CUSTODY SEAL:

Cooler  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 678

Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....  Yes  No  N/A

COC document(s) received complete .....  Yes  No  N/A

Sampling date  Sampling time  Matrix  Number of containers

No analysis requested  Not relinquished  No relinquished date  No relinquished time

Sampler's name indicated on COC .....  Yes  No  N/A

Sample container label(s) consistent with COC .....  Yes  No  N/A

Sample container(s) intact and in good condition .....  Yes  No  N/A

Proper containers for analyses requested .....  Yes  No  N/A

Sufficient volume/mass for analyses requested .....  Yes  No  N/A

Samples received within holding time .....  Yes  No  N/A

Aqueous samples for certain analyses received within 15-minute holding time

pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....  Yes  No  N/A

Proper preservation chemical(s) noted on COC and/or sample container .....  Yes  No  N/A

Unpreserved aqueous sample(s) received for certain analyses

Volatile Organics  Total Metals  Dissolved Metals

Container(s) for certain analysis free of headspace .....  Yes  No  N/A

Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500)

Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation .....  Yes  No  N/A

CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB

125PB<sub>z</sub><sub>na</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AG<sub>J</sub>  500AG<sub>J</sub><sub>s</sub>

500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_

Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>,

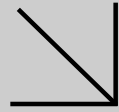
Labeled/Checked by: 1053

s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH

Reviewed by: 1017

\* Sampling date per label is 3/29/17.



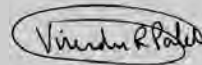

**WORK ORDER NUMBER: 17-03-2356**
*The difference is service*


AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**
**Client:** Haley & Aldrich, Inc.

**Client Project Name:** UC Riverside North District / 128685-006  
2.0

**Attention:** Colleen Canfield  
3187 Red Hill Avenue  
Suite 155  
Costa Mesa, CA 92626-3453



 Approved for release on 04/12/2017 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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 Work Order Number: 17-03-2356

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 03/31/17. They were assigned to Work Order 17-03-2356.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



## Sample Summary

Client: Haley & Aldrich, Inc.	Work Order: 17-03-2356
3187 Red Hill Avenue, Suite 155	Project Name: UC Riverside North District / 128685-006 2.0
Costa Mesa, CA 92626-3453	PO Number:
	Date/Time Received: 03/31/17 12:15
	Number of Containers: 27

Attn: Colleen Canfield

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Grap0766-04-005-01	17-03-2356-1	03/30/17 11:04	1	Solid
Grap0766-04-025-01	17-03-2356-2	03/30/17 11:10	1	Solid
Idah3339-01-005-01	17-03-2356-3	03/30/17 11:30	1	Solid
Idah3339-01-025-01	17-03-2356-4	03/30/17 11:35	1	Solid
Idah3339-02-005-01	17-03-2356-5	03/30/17 11:42	1	Solid
Idah3339-02-025-01	17-03-2356-6	03/30/17 11:50	1	Solid
Idah3339-03-005-01	17-03-2356-7	03/30/17 11:58	1	Solid
Idah3339-03-025-01	17-03-2356-8	03/30/17 12:03	1	Solid
Idah3339-04-005-01	17-03-2356-9	03/30/17 12:09	1	Solid
Idah3339-04-025-01	17-03-2356-10	03/30/17 12:13	1	Solid
Utah3334-01-005-01	17-03-2356-11	03/30/17 12:32	1	Solid
Utah3334-01-025-01	17-03-2356-12	03/30/17 12:36	1	Solid
Utah3334-02-005-01	17-03-2356-13	03/30/17 12:41	1	Solid
Utah3334-02-025-01	17-03-2356-14	03/30/17 12:44	1	Solid
Utah3334-03-005-01	17-03-2356-15	03/30/17 12:48	1	Solid
Utah3334-03-025-01	17-03-2356-16	03/30/17 12:50	1	Solid
Utah3334-04-005-01	17-03-2356-17	03/30/17 12:53	1	Solid
Utah3334-04-025-01	17-03-2356-18	03/30/17 12:59	1	Solid
BG-02	17-03-2356-19	03/30/17 13:06	1	Solid
BG-03	17-03-2356-20	03/30/17 13:19	1	Solid
BG-04	17-03-2356-21	03/30/17 13:35	1	Solid
EB-033017	17-03-2356-22	03/30/17 13:45	2	Aqueous
Composite-59	17-03-2356-23	03/30/17 00:00	1	Solid
Composite-60	17-03-2356-24	03/30/17 00:00	1	Solid
Composite-61	17-03-2356-25	03/30/17 00:00	1	Solid
Composite-62	17-03-2356-26	03/30/17 00:00	1	Solid



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## QC Association Summary

Work Order: 17-03-2356

Page 1 of 1

<u>Client Sample ID</u>	<u>Method Name</u>	<u>Type</u>	<u>Ext Name</u>	<u>Instrument</u>	<u>MS/MSD/SDP</u>	<u>LCS/LCSD</u>
Grap0766-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Grap0766-04-005-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170404S14	170404L14
Grap0766-04-005-01	EPA 8081A Organochlorine Pesticides	R	EPA 3545	GC 41	170404S14	170404L14
Grap0766-04-025-01	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170404S14	170404L14
Idah3339-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Idah3339-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Idah3339-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Idah3339-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Utah3334-01-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Utah3334-02-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Utah3334-03-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
Utah3334-04-005-01	EPA 6010B ICP Metals Scan		EPA 3050B	ICP 7300	170405S06	170405L06
EB-033017	EPA 6010B ICP Metals		EPA 3010A Total	ICP 7300	170403SA5	170403LA5
EB-033017	EPA 8081A Organochlorine Pesticides		EPA 3510C	GC 44		170404L03
Composite-59	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170410S02	170410L02
Composite-60	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170404S14	170404L14
Composite-61	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170404S14	170404L14
Composite-62	EPA 8081A Organochlorine Pesticides		EPA 3545	GC 41	170404S14	170404L14

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R = Rerun

## Detections Summary

Client: Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Work Order: 17-03-2356  
Project Name: UC Riverside North District / 128685-006 2.0  
Received: 03/31/17

Attn: Colleen Canfield

Page 1 of 1

### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
Grap0766-04-005-01 (17-03-2356-1)						
Lead	14.7		0.495	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDD	2.5	J	2.4*	ug/kg	EPA 8081A	EPA 3545
4,4'-DDE	38		25	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	6.6		5.0	ug/kg	EPA 8081A	EPA 3545
Idah3339-01-005-01 (17-03-2356-3)						
Lead	25.2		0.488	mg/kg	EPA 6010B	EPA 3050B
Idah3339-02-005-01 (17-03-2356-5)						
Lead	24.1		0.508	mg/kg	EPA 6010B	EPA 3050B
Idah3339-03-005-01 (17-03-2356-7)						
Lead	15.2		0.481	mg/kg	EPA 6010B	EPA 3050B
Idah3339-04-005-01 (17-03-2356-9)						
Lead	64.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Utah3334-01-005-01 (17-03-2356-11)						
Lead	56.7		0.478	mg/kg	EPA 6010B	EPA 3050B
Utah3334-02-005-01 (17-03-2356-13)						
Lead	46.8		0.488	mg/kg	EPA 6010B	EPA 3050B
Utah3334-03-005-01 (17-03-2356-15)						
Lead	7.89		0.495	mg/kg	EPA 6010B	EPA 3050B
Utah3334-04-005-01 (17-03-2356-17)						
Lead	47.2		0.515	mg/kg	EPA 6010B	EPA 3050B
Composite-59 (17-03-2356-23)						
4,4'-DDE	2.9	J	2.2*	ug/kg	EPA 8081A	EPA 3545
Composite-61 (17-03-2356-25)						
4,4'-DDE	5.0		5.0	ug/kg	EPA 8081A	EPA 3545
4,4'-DDT	7.8		5.0	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

\* MDL is shown

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-04-005-01</b>	<b>17-03-2356-1-A</b>	<b>03/30/17 11:04</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:22</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		14.7		0.495		0.990	
<b>Idah3339-01-005-01</b>	<b>17-03-2356-3-A</b>	<b>03/30/17 11:30</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:23</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.2		0.488		0.976	
<b>Idah3339-02-005-01</b>	<b>17-03-2356-5-A</b>	<b>03/30/17 11:42</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:24</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		24.1		0.508		1.02	
<b>Idah3339-03-005-01</b>	<b>17-03-2356-7-A</b>	<b>03/30/17 11:58</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:25</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		15.2		0.481		0.962	
<b>Idah3339-04-005-01</b>	<b>17-03-2356-9-A</b>	<b>03/30/17 12:09</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:25</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		64.4		0.500		1.00	
<b>Utah3334-01-005-01</b>	<b>17-03-2356-11-A</b>	<b>03/30/17 12:32</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:28</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		56.7		0.478		0.957	
<b>Utah3334-02-005-01</b>	<b>17-03-2356-13-A</b>	<b>03/30/17 12:41</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:29</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		46.8		0.488		0.976	
<b>Utah3334-03-005-01</b>	<b>17-03-2356-15-A</b>	<b>03/30/17 12:48</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 14:30</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		7.89		0.495		0.990	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3050B  
 Method: EPA 6010B  
 Units: mg/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Utah3334-04-005-01	17-03-2356-17-A	03/30/17 12:53	Solid	ICP 7300	04/05/17	04/06/17 14:30	170405L06

Parameter	Result	RL	DF	Qualifiers
Lead	47.2	0.515	1.03	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-24576	N/A	Solid	ICP 7300	04/05/17	04/06/17 12:42	170405L06

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.481	0.962	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B  
 Units: mg/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-033017	17-03-2356-22-A	03/30/17 13:45	Aqueous	ICP 7300	04/03/17	04/04/17 14:51	170403LA5

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

Method Blank	097-01-003-16394	N/A	Aqueous	ICP 7300	04/03/17	04/04/17 11:17	170403LA5
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Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-04-005-01</b>	<b>17-03-2356-1-A</b>	<b>03/30/17 11:04</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 14:10</b>	<b>170404L14</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	2.5	5.0	2.4	1.00	J
4,4'-DDT	6.6	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	24-168	
2,4,5,6-Tetrachloro-m-Xylene	73	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Grap0766-04-005-01</b>	<b>17-03-2356-1-A</b>	<b>03/30/17 11:04</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 15:29</b>	<b>170404L14</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDE	38	25	11	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	24-168	
2,4,5,6-Tetrachloro-m-Xylene	75	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Grap0766-04-025-01	17-03-2356-2-A	03/30/17 11:10	Solid	GC 41	04/04/17	04/10/17 11:43	170404L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	24-168	
2,4,5,6-Tetrachloro-m-Xylene	71	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-59</b>	<b>17-03-2356-23-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/10/17</b>	<b>04/11/17 11:50</b>	<b>170410L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	2.9	5.0	2.2	1.00	J
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	58	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-60</b>	<b>17-03-2356-24-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/10/17 12:13</b>	<b>170404L14</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	77	24-168			
2,4,5,6-Tetrachloro-m-Xylene	70	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-61</b>	<b>17-03-2356-25-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/10/17 12:28</b>	<b>170404L14</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	9.9	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.3	1.00	
4,4'-DDE	5.0	5.0	2.2	1.00	
4,4'-DDT	7.8	5.0	2.2	1.00	
Delta-BHC	ND	9.9	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.1	1.00	
Heptachlor Epoxide	ND	9.9	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	99	44	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	97	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Composite-62</b>	<b>17-03-2356-26-A</b>	<b>03/30/17 00:00</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/10/17 12:43</b>	<b>170404L14</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.3	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.3	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	112	24-168	
2,4,5,6-Tetrachloro-m-Xylene	88	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2655	N/A	Solid	GC 41	04/04/17	04/07/17 09:17	170404L14

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	24-168	
2,4,5,6-Tetrachloro-m-Xylene	83	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A  
 Units: ug/kg

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-537-2659	N/A	Solid	GC 41	04/10/17	04/11/17 10:35	170410L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	5.0	2.2	1.00	
Alpha-BHC	ND	10	3.7	1.00	
Beta-BHC	ND	5.0	2.5	1.00	
Chlordane	ND	50	26	1.00	
4,4'-DDD	ND	5.0	2.4	1.00	
4,4'-DDE	ND	5.0	2.2	1.00	
4,4'-DDT	ND	5.0	2.2	1.00	
Delta-BHC	ND	10	4.4	1.00	
Dieldrin	ND	5.0	2.2	1.00	
Endosulfan I	ND	5.0	2.0	1.00	
Endosulfan II	ND	5.0	2.4	1.00	
Endosulfan Sulfate	ND	5.0	2.6	1.00	
Endrin	ND	5.0	2.4	1.00	
Endrin Aldehyde	ND	5.0	3.0	1.00	
Endrin Ketone	ND	5.0	2.5	1.00	
Gamma-BHC	ND	5.0	2.2	1.00	
Heptachlor	ND	5.0	2.2	1.00	
Heptachlor Epoxide	ND	10	3.7	1.00	
Methoxychlor	ND	5.0	2.7	1.00	
Toxaphene	ND	100	45	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	90	24-168			
2,4,5,6-Tetrachloro-m-Xylene	88	25-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-033017	17-03-2356-22-B	03/30/17 13:45	Aqueous	GC 44	04/04/17	04/06/17 16:59	170404L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.095	0.027	1.00	
Gamma-BHC	ND	0.095	0.029	1.00	
Beta-BHC	ND	0.095	0.029	1.00	
Heptachlor	ND	0.095	0.025	1.00	
Delta-BHC	ND	0.095	0.027	1.00	
Aldrin	ND	0.095	0.025	1.00	
Heptachlor Epoxide	ND	0.095	0.024	1.00	
Endosulfan I	ND	0.095	0.026	1.00	
Dieldrin	ND	0.095	0.027	1.00	
4,4'-DDE	ND	0.095	0.025	1.00	
Endrin	ND	0.095	0.029	1.00	
Endrin Aldehyde	ND	0.095	0.025	1.00	
4,4'-DDD	ND	0.095	0.026	1.00	
Endosulfan II	ND	0.095	0.026	1.00	
4,4'-DDT	ND	0.095	0.025	1.00	
Endosulfan Sulfate	ND	0.095	0.028	1.00	
Methoxychlor	ND	0.095	0.024	1.00	
Chlordane	ND	0.95	0.31	1.00	
Toxaphene	ND	1.9	0.56	1.00	
Endrin Ketone	ND	0.095	0.023	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	55	50-135	
2,4,5,6-Tetrachloro-m-Xylene	83	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3510C  
 Method: EPA 8081A  
 Units: ug/L

Project: UC Riverside North District / 128685-006 2.0

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-529-949	N/A	Aqueous	GC 44	04/04/17	04/06/17 16:44	170404L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1.00	
Gamma-BHC	ND	0.10	0.030	1.00	
Beta-BHC	ND	0.10	0.030	1.00	
Heptachlor	ND	0.10	0.026	1.00	
Delta-BHC	ND	0.10	0.029	1.00	
Aldrin	ND	0.10	0.027	1.00	
Heptachlor Epoxide	ND	0.10	0.025	1.00	
Endosulfan I	ND	0.10	0.028	1.00	
Dieldrin	ND	0.10	0.029	1.00	
4,4'-DDE	ND	0.10	0.027	1.00	
Endrin	ND	0.10	0.031	1.00	
Endrin Aldehyde	ND	0.10	0.026	1.00	
4,4'-DDD	ND	0.10	0.027	1.00	
Endosulfan II	ND	0.10	0.027	1.00	
4,4'-DDT	ND	0.10	0.027	1.00	
Endosulfan Sulfate	ND	0.10	0.029	1.00	
Methoxychlor	ND	0.10	0.025	1.00	
Chlordane	ND	1.0	0.33	1.00	
Toxaphene	ND	2.0	0.59	1.00	
Endrin Ketone	ND	0.10	0.024	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	50-135	
2,4,5,6-Tetrachloro-m-Xylene	85	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.





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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
Work Order: 17-03-2356  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Utah3334-04-005-01	Sample	Solid	ICP 7300	04/05/17	04/06/17 14:30	170405S06
Utah3334-04-005-01	Matrix Spike	Solid	ICP 7300	04/05/17	04/06/17 14:21	170405S06
Utah3334-04-005-01	Matrix Spike Duplicate	Solid	ICP 7300	04/05/17	04/06/17 14:21	170405S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	47.17	25.00	68.90	87	81.45	137	75-125	17	0-20	3

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
Work Order: 17-03-2356  
Preparation: EPA 3010A Total  
Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2324-1	Sample	Aqueous	ICP 7300	04/03/17	04/04/17 11:23	170403SA5
17-03-2324-1	Matrix Spike	Aqueous	ICP 7300	04/03/17	04/04/17 11:26	170403SA5
17-03-2324-1	Matrix Spike Duplicate	Aqueous	ICP 7300	04/03/17	04/04/17 11:27	170403SA5

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.03963	0.5000	0.6080	114	0.5952	111	80-140	2	0-11	
Lead	ND	0.5000	0.5604	112	0.5599	112	84-120	0	0-7	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
Work Order: 17-03-2356  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
<b>Grap0766-04-005-01</b>	<b>Sample</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 14:10</b>	<b>170404S14</b>
<b>Grap0766-04-005-01</b>	<b>Matrix Spike</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 12:55</b>	<b>170404S14</b>
<b>Grap0766-04-005-01</b>	<b>Matrix Spike Duplicate</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 14:59</b>	<b>170404S14</b>

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.43	78	20.50	82	50-135	5	0-25	
Alpha-BHC	ND	25.00	18.99	76	20.24	81	50-135	6	0-25	
Beta-BHC	ND	25.00	23.15	93	25.18	101	50-135	8	0-25	
4,4'-DDD	ND	25.00	62.71	251	70.17	281	50-135	11	0-25	3
4,4'-DDE	38.27	25.00	293.5	1021	302.0	1055	50-135	3	0-25	3
4,4'-DDT	6.608	25.00	63.65	228	73.30	267	50-135	14	0-25	3
Delta-BHC	ND	25.00	20.76	83	22.59	90	50-135	8	0-25	
Dieldrin	ND	25.00	24.87	99	28.10	112	50-135	12	0-25	
Endosulfan I	ND	25.00	23.42	94	26.79	107	50-135	13	0-25	
Endosulfan II	ND	25.00	25.45	102	28.06	112	50-135	10	0-25	
Endosulfan Sulfate	ND	25.00	25.00	100	27.24	109	50-135	9	0-25	
Endrin	ND	25.00	26.09	104	28.89	116	50-135	10	0-25	
Endrin Aldehyde	ND	25.00	11.53	46	12.94	52	50-135	12	0-25	3
Gamma-BHC	ND	25.00	19.47	78	21.09	84	50-135	8	0-25	
Heptachlor	ND	25.00	17.57	70	19.64	79	50-135	11	0-25	
Heptachlor Epoxide	ND	25.00	50.69	203	54.10	216	50-135	6	0-25	3
Methoxychlor	ND	25.00	15.60	62	17.62	70	50-135	12	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - Spike/Spike Duplicate

Haley & Aldrich, Inc.  
3187 Red Hill Avenue, Suite 155  
Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
Work Order: 17-03-2356  
Preparation: EPA 3545  
Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0610-5	Sample	Solid	GC 41	04/10/17	04/11/17 11:35	170410S02
17-04-0610-5	Matrix Spike	Solid	GC 41	04/10/17	04/11/17 11:05	170410S02
17-04-0610-5	Matrix Spike Duplicate	Solid	GC 41	04/10/17	04/11/17 11:20	170410S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	21.92	88	19.72	79	50-135	11	0-25	
Alpha-BHC	ND	25.00	21.43	86	19.25	77	50-135	11	0-25	
Beta-BHC	ND	25.00	30.70	123	21.05	84	50-135	37	0-25	4
4,4'-DDD	ND	25.00	24.74	99	25.09	100	50-135	1	0-25	
4,4'-DDE	ND	25.00	23.62	94	23.39	94	50-135	1	0-25	
4,4'-DDT	ND	25.00	25.40	102	25.09	100	50-135	1	0-25	
Delta-BHC	ND	25.00	22.97	92	21.93	88	50-135	5	0-25	
Dieldrin	ND	25.00	23.71	95	22.79	91	50-135	4	0-25	
Endosulfan I	ND	25.00	23.83	95	22.50	90	50-135	6	0-25	
Endosulfan II	ND	25.00	25.17	101	25.59	102	50-135	2	0-25	
Endosulfan Sulfate	ND	25.00	24.62	98	25.73	103	50-135	4	0-25	
Endrin	ND	25.00	24.24	97	23.40	94	50-135	4	0-25	
Endrin Aldehyde	ND	25.00	15.59	62	12.52	50	50-135	22	0-25	
Gamma-BHC	ND	25.00	21.99	88	20.05	80	50-135	9	0-25	
Heptachlor	ND	25.00	23.31	93	20.04	80	50-135	15	0-25	
Heptachlor Epoxide	ND	25.00	21.95	88	20.64	83	50-135	6	0-25	
Methoxychlor	ND	25.00	24.39	98	26.08	104	50-135	7	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3050B  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-002-24576</b>	<b>LCS</b>	<b>Solid</b>	<b>ICP 7300</b>	<b>04/05/17</b>	<b>04/06/17 12:43</b>	<b>170405L06</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	25.23	101	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3010A Total  
 Method: EPA 6010B

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>097-01-003-16394</b>	<b>LCS</b>	<b>Aqueous</b>	<b>ICP 7300</b>	<b>04/03/17</b>	<b>04/04/17 11:18</b>	<b>170403LA5</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic		0.5000	0.5149	103	80-120	
Lead		0.5000	0.5638	113	80-120	

## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2655</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/04/17</b>	<b>04/07/17 09:46</b>	<b>170404L14</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	23.36	93	50-135	36-149	
Alpha-BHC		25.00	24.75	99	50-135	36-149	
Beta-BHC		25.00	23.39	94	50-135	36-149	
4,4'-DDD		25.00	24.21	97	50-135	36-149	
4,4'-DDE		25.00	24.67	99	50-135	36-149	
4,4'-DDT		25.00	25.58	102	50-135	36-149	
Delta-BHC		25.00	25.15	101	50-135	36-149	
Dieldrin		25.00	25.22	101	50-135	36-149	
Endosulfan I		25.00	25.71	103	50-135	36-149	
Endosulfan II		25.00	25.78	103	50-135	36-149	
Endosulfan Sulfate		25.00	24.33	97	50-135	36-149	
Endrin		25.00	22.44	90	50-135	36-149	
Endrin Aldehyde		25.00	25.18	101	50-135	36-149	
Gamma-BHC		25.00	24.90	100	50-135	36-149	
Heptachlor		25.00	25.40	102	50-135	36-149	
Heptachlor Epoxide		25.00	24.26	97	50-135	36-149	
Methoxychlor		25.00	23.85	95	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-537-2659</b>	<b>LCS</b>	<b>Solid</b>	<b>GC 41</b>	<b>04/10/17</b>	<b>04/11/17 10:50</b>	<b>170410L02</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Aldrin		25.00	21.84	87	50-135	36-149	
Alpha-BHC		25.00	24.51	98	50-135	36-149	
Beta-BHC		25.00	23.41	94	50-135	36-149	
4,4'-DDD		25.00	24.08	96	50-135	36-149	
4,4'-DDE		25.00	23.78	95	50-135	36-149	
4,4'-DDT		25.00	25.13	101	50-135	36-149	
Delta-BHC		25.00	24.70	99	50-135	36-149	
Dieldrin		25.00	25.25	101	50-135	36-149	
Endosulfan I		25.00	26.20	105	50-135	36-149	
Endosulfan II		25.00	26.98	108	50-135	36-149	
Endosulfan Sulfate		25.00	25.81	103	50-135	36-149	
Endrin		25.00	24.10	96	50-135	36-149	
Endrin Aldehyde		25.00	25.75	103	50-135	36-149	
Gamma-BHC		25.00	24.62	98	50-135	36-149	
Heptachlor		25.00	24.76	99	50-135	36-149	
Heptachlor Epoxide		25.00	23.99	96	50-135	36-149	
Methoxychlor		25.00	24.19	97	50-135	36-149	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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## Quality Control - LCS/LCSD

Haley & Aldrich, Inc.  
 3187 Red Hill Avenue, Suite 155  
 Costa Mesa, CA 92626-3453

Date Received: 03/31/17  
 Work Order: 17-03-2356  
 Preparation: EPA 3510C  
 Method: EPA 8081A

Project: UC Riverside North District / 128685-006 2.0

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-529-949	LCS	Aqueous	GC 44	04/04/17	04/06/17 16:16	170404L03				
099-12-529-949	LCSD	Aqueous	GC 44	04/04/17	04/06/17 16:30	170404L03				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.5388	108	0.5378	108	50-135	36-149	0	0-25	
Gamma-BHC	0.5000	0.5439	109	0.5437	109	50-135	36-149	0	0-25	
Beta-BHC	0.5000	0.5223	104	0.5213	104	50-135	36-149	0	0-25	
Heptachlor	0.5000	0.4943	99	0.4952	99	50-135	36-149	0	0-25	
Delta-BHC	0.5000	0.5661	113	0.5651	113	50-135	36-149	0	0-25	
Aldrin	0.5000	0.4450	89	0.4453	89	50-135	36-149	0	0-25	
Heptachlor Epoxide	0.5000	0.5427	109	0.5447	109	50-135	36-149	0	0-25	
Endosulfan I	0.5000	0.5496	110	0.5509	110	50-135	36-149	0	0-25	
Dieldrin	0.5000	0.5398	108	0.5413	108	50-135	36-149	0	0-25	
4,4'-DDE	0.5000	0.5415	108	0.5394	108	50-135	36-149	0	0-25	
Endrin	0.5000	0.5696	114	0.5704	114	50-135	36-149	0	0-25	
Endrin Aldehyde	0.5000	0.5256	105	0.5281	106	50-135	36-149	0	0-25	
4,4'-DDD	0.5000	0.5569	111	0.5595	112	50-135	36-149	0	0-25	
Endosulfan II	0.5000	0.5511	110	0.5531	111	50-135	36-149	0	0-25	
4,4'-DDT	0.5000	0.5476	110	0.5478	110	50-135	36-149	0	0-25	
Endosulfan Sulfate	0.5000	0.5313	106	0.5342	107	50-135	36-149	1	0-25	
Methoxychlor	0.5000	0.5210	104	0.5209	104	50-135	36-149	0	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 17-03-2356

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3010A Total	935	ICP 7300	1
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8081A	EPA 3510C	669	GC 44	1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

## Virendra Patel

---

**From:** Raithel, Mathew <MRaithel@haleyaldrich.com>  
**Sent:** Wednesday, April 05, 2017 1:33 PM  
**To:** Virendra Patel; Erick Ovalle  
**Subject:** UC Riverside project

Virendra/Erick,

We will need J flags reported for the 8081 analyses for the UC Riverside project. I just realized that this was not requested on the COCs. Below are the work order numbers:

17-03-2035

17-03-2146

17-03-2252

17-03-2356

Thanks,  
Matt

**Mathew T. Raithel**  
Senior Scientist

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

T: (619) 285.7110

C: (619) 922.1769

[www.haleyaldrich.com](http://www.haleyaldrich.com)

Notify us [here](#) to report this email as spam.

Revised COC received from  
Matt Raithe (H&A) on 04/03/17  
at 14:02pm.  
- Virendra (ECI)

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**HALEY & ALDRICH CHAIN OF CUSTODY**  
DATE: 3/30/17 OF 3  
PAGE: 1

WO # / LAB USE ONLY  
**17-03-2356**

LABORATORY CLIENT: <b>Haley &amp; Aldrich, Inc.</b> ADDRESS: <b>3187 Red Hill Ave., Suite 155</b> CITY: <b>Costa Mesa</b> STATE: <b>CA</b> ZIP: <b>92626</b> TEL: <b>714-371-1802</b> E-MAIL: <b>ccanfield@haleyaldrich.com</b>		BLANKET SERVICE AGREEMENT NO.: <b>2015-18-Eurofins Calscience</b> Quote: <b>963193</b> SAMPLER(S): (PRINT) <b>Tanya Neilson</b>		
HALEY & ALDRICH CLIENT NAME / PROJECT NO.: <b>UC Riverside North District / 128685-006 2.0</b>		PROJECT CONTACT: <b>Colleen Canfield</b>		
<b>REQUESTED ANALYSES</b>				
Turnaround Time (such surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		LOG CODE:		
<input type="checkbox"/> Geotracker EDF		<input checked="" type="checkbox"/> H&A Standard Sample Archiving requirements (if required to be held greater than 30 days): EDD		
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110				
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)		NO. OF CONT.
		DATE	TIME	
1	128685-04-005-01	3/30/17	1104	1
2	128685-04-025-01		1110	
3	128685-01-005-01		1130	
4	128685-01-025-01		1135	
5	128685-02-005-01		1142	
6	128685-02-075-01		1150	
7	128685-03-005-01		1158	
8	128685-03-025-01		1203	
9	128685-04-005-01		1209	
10	128685-04-025-01		1213	
Requisitioned by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>		
Requisitioned by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <b>ECI</b>		
Requisitioned by: (Signature) <i>[Signature]</i>		Received by: (Signature/Affiliation) <i>[Signature]</i>		
Date: <u>3/30/17</u> Time: <u>1400</u>		Date: <u>3/30/17</u> Time: <u>1050</u>		
Date: <u>3/30/17</u> Time: <u>1215</u>		Date: <u>3/30/17</u> Time: <u>1215</u>		

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.

17-03-2356

## Sample Composite Table

Composite Sample ID	Analyze for OCPs by 8081	Samples to be Composited
Composite-59 - 23	X	Idah3339-01-005-01 - 3 Idah3339-02-005-01 - 5 Idah3339-03-005-01 - 7 Idah3339-04-005-01 - 9
Composite-60 - 24	X	Idah3339-01-025-01 - 4 Idah3339-02-025-01 - 6 Idah3339-03-025-01 - 8 Idah3339-04-025-01 - 10
Composite-61 - 25	X	Utah3334-01-005-01 - 11 Utah3334-02-005-01 - 13 Utah3334-03-005-01 - 15 Utah3334-04-005-01 - 17
Composite-62 - 26	X	Utah3334-01-025-01 - 12 Utah3334-02-025-01 - 14 Utah3334-03-025-01 - 16 Utah3334-04-025-01 - 18

Revised COC received from  
Matt Raitel (H&A) on  
04/03/17 at 14:02pm.  
- Virendra (ECI)



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

## 17-03-2356

DATE: 3/30/17

PAGE: 1 OF 3

LABORATORY CLIENT: Haley & Aldrich, Inc.		E-MAIL: <u>ccanfield@haleyaldrich.com</u>		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193		
ADDRESS: 3187 Red Hill Ave., Suite 155		STATE: CA ZIP: 92626		PROJECT CONTACT: Colleen Canfield		
CITY: Costa Mesa		LOG CODE:		SAMPLER(S): (PRINT) Tanya Nelson		
TEL: 714-371-1802		TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0		
<input type="checkbox"/> Geotracker EDF		GLOBAL ID:		PROJECT CONTACT:		
<input checked="" type="checkbox"/> H&A Standard EDD		Sample Archiving requirements (if required to be held greater than 30 days):		PROJECT CONTACT:		
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Raithe of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
1	Grp07H6-04-055-01		3/30/17	1104	SO	1
2	Grp07H6-04-025-01			1110		
3	Idah3339-01-005-01			1130		
4	Idah3339-01-025-01			1135		
5	Idah3339-02-005-01			1142		
6	Idah3339-02-025-01			1150		
7	Idah3339-03-005-01			1158		
8	Idah3339-03-025-01			1203		
9	Idah3339-04-005-01			1209		
10	Idah3339-04-025-01			1213		
Relinquished by: (Signature) <i>Colleen Canfield</i>			Received by: (Signature/Affiliation) <i>[Signature]</i>			Date: 3/30/17 Time: 1400
Relinquished by: (Signature) <i>Paul F. [Signature]</i>			Received by: (Signature/Affiliation) <i>Alex ECF</i>			Date: 3/30/17 Time: 1050
Relinquished by: (Signature) <i>[Signature]</i>			Received by: (Signature/Affiliation) <i>[Signature]</i>			Date: 3/31/17 Time: 1215

Eurofins Calscience Inc.'s services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement # 2015-18-Eurofins Calscience by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Eurofins Calscience Inc.



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# HALEY & ALDRICH CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

2356

DATE: 3/30/17

PAGE: 2 OF 3

LABORATORY CLIENT: <b>Haley &amp; Aldrich, Inc.</b> ADDRESS: 3187 Red Hill Ave., Suite 155 CITY: Costa Mesa STATE: CA ZIP: 92626 TEL: 714-371-1802 E-MAIL: <a href="mailto:ccanfield@haleyaldrich.com">ccanfield@haleyaldrich.com</a>		HALEY & ALDRICH CLIENT NAME / PROJECT NO.: UC Riverside North District / 128685-006 2.0 PROJECT CONTACT: Colleen Canfield Tanya Nelson		BLANKET SERVICE AGREEMENT NO.: 2015-18-EurofinsCalscience Quote: 963193 SAMPLER(S): (PRINT)		
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						
<input type="checkbox"/> Geotracker EDF <input checked="" type="checkbox"/> H&A Standard EDD Sample Archiving requirements (if required to be held greater than 30 days):						
Special Instructions: Pricing provided on Eurofins Quote 963193 Composite required for Pesticides - Discuss with Matt Rathel of Haley & Aldrich 619-285-7110						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (For COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.
			DATE	TIME		
11	UTAH3334-01-005-01		3/30/17	1232	SO	1
12	UTAH3334-01-025-01			1236		
13	UTAH3334-02-005-01			1241		
14	UTAH3334-02-025-01			1244		
15	UTAH3334-03-005-01			1248		
16	UTAH3334-03-025-01			1250		
17	UTAH3334-04-005-01			1253		
18	UTAH3334-04-025-01			1259		
19	BG-02			1306		
20	BG-03			1319		
Relinquished by: (Signature) <i>Colleen Canfield</i> Received by: (Signature/Affiliation) <i>John P.</i> Date: 3/30/17 Time: 1400						
Relinquished by: (Signature) <i>John P.</i> Received by: (Signature/Affiliation) <i>ALY ECG</i> Date: 3/30/17 Time: 1050						
Relinquished by: (Signature) <i>ALY</i> Received by: (Signature/Affiliation) <i>John P.</i> Date: 3/31/17 Time: 1215						
REQUESTED ANALYSES Field Filtered Preserved Unpreserved Arsenic - 6010B (Soil) Lead - 6010B (Soil) Organochlorine Pesticides 8081A (Soil)						





**SAMPLE RECEIPT CHECKLIST**

COOLER 1 OF 1

CLIENT: H & A

DATE: 03 / 31 / 2017

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 3.8 °C (w/ CF): 3.8 °C;  Blank  Sample  
 Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)  
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter  
 Checked by: 678

**CUSTODY SEAL:**  
 Cooler  Present and Intact  Present but Not Intact  Not Present  N/A  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A  
 Checked by: 678  
 Checked by: 1017

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)  
**Aqueous:**  VOA  VOAh  VOAna<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  
 125PBz<sub>na</sub>  250AGB  250CGB  250CGBs  250PB  250PBn  500AGB  500AGJ  500AGJs  
 500PB  1AGB  1AGBna<sub>2</sub>  1AGBs  1PB  1PBna  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (P)  EnCores® (\_\_\_\_\_)  TerraCores® (\_\_\_\_\_)  \_\_\_\_\_  
**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_\_) :  \_\_\_\_\_  \_\_\_\_\_  
 Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag  
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1017  
 s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, z<sub>na</sub> = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 8012

Return to Contents



## **APPENDIX B**

### **Preliminary Human Health Screen Risk Evaluation Calculations**

**Appendix B, Table B-1**  
**Intake and Risk Equations - Composite Receptor/Age-Adjusted**  
**Soil -**  
**Resident - Child and ADULT**

Limited Environmental Site Assessment  
 North of West Linden Street and East of Canyon Crest Drive  
 Riverside, California

<u>Exposure Routes Evaluated</u>		<u>ELCR (Total)</u>
Incidental Ingestion	Yes	5E-05
Dermal Contact	Yes	1E-05
Particulate Inhalation	Yes	3E-09
Ambient Vapor Inhalation	Yes	
		<b>6E-05</b>

NC - not carcinogenic by this exposure route      NV - not volatile      EC - exposure concentration      CSF - cancer slope factor      ELCR - excess lifetime cancer risk      COPC - chemical of potential concern  
 NTV - no toxicity value available      DAD - dermally absorbed dose      ABS - absorption factor      UR - cancer unit risk      EPC - exposure point concentration (if blank, then COPC was not detected)

COPC	CASRN	EPC (mg/kg)	Intake Calculations				Absorption Factors		Cancer Toxicity Values			ELCR <sub>ingestion</sub>	ELCR <sub>dermal</sub>	ELCR <sub>particulate</sub>	ELCR <sub>vapor</sub>	ELCR <sub>total</sub>
			Intake <sub>ingestion</sub> (mg/kg/day)	DAD <sub>dermal</sub> (mg/kg/day)	EC <sub>particulate</sub> (ug/m <sup>3</sup> )	EC <sub>vapor</sub> (ug/m <sup>3</sup> )	ABS <sub>ing</sub> (unitless)	ABS <sub>d</sub> (unitless)	CSF <sub>oral</sub> (mg/kg/day) <sup>-1</sup>	CSF <sub>dermal</sub> (mg/kg/day) <sup>-1</sup>	IUR (ug/m <sup>3</sup> ) <sup>-1</sup>					
DDD	72-54-8	5.2E-01	7.5E-07	7.2E-08	1.4E-07	NV	1	0.03	2.4E-01	2.4E-01	6.9E-05	1.8E-07	1.7E-08	9.4E-12	NV	2.0E-07
DDE	72-55-9	1.4E+00	2.0E-06	1.9E-07	3.7E-07	NV	1	0.03	3.4E-01	3.4E-01	9.7E-05	6.8E-07	6.6E-08	3.6E-11	NV	7.5E-07
DDT	50-29-3	1.2E+00	1.7E-06	1.7E-07	3.1E-07	NV	1	0.03	3.4E-01	3.4E-01	9.7E-05	5.9E-07	5.7E-08	3.0E-11	NV	6.4E-07
Chlordane	12789-03-6	1.5E+01	2.2E-05	2.8E-06	3.9E-06	NV	1	0.04	1.3E+00	1.3E+00	3.4E-04	2.8E-05	3.6E-06	1.3E-09	NV	3.2E-05
Dieldrin	60-57-1	5.0E-01	7.2E-07	2.3E-07	1.3E-07	NV	1	0.1	1.6E+01	1.6E+01	4.6E-03	1.2E-05	3.7E-06	6.0E-10	NV	1.5E-05
Endrin	72-20-8	5.0E-03	NC	NC	NC	NV	NC	NC							NV	
Heptachlor	76-44-8	8.3E-02	1.2E-07	5.0E-08	2.2E-08	NV	1	0.13	4.1E+00	4.1E+00	1.2E-03	4.9E-07	2.0E-07	2.5E-11	NV	6.9E-07
Heptachlor Epoxide	1024-57-3	1.3E+00	1.9E-06	6.0E-07	3.4E-07	NV	1	0.1	5.5E+00	5.5E+00	1.6E-03	1.0E-05	3.3E-06	5.4E-10	NV	1.4E-05

<b>Appendix B, Table B-2</b> <b>Non-Cancer Risk Calculations</b> <b>Soil -</b> <b>Resident - Child</b>		<b>Exposure Routes Evaluated</b>		<b>HI (Total)</b>
<b>Limited Environmental Site Assessment</b> <b>North of West Linden Street and East of Canyon Crest Drive</b> <b>Riverside, California</b>		Incidental Ingestion	Yes	2E+00
		Dermal Contact	Yes	5E-01
		Particulate Inhalation	Yes	2E-05
		Ambient Vapor Inhalation	Yes	
				<b>2.3</b>

NV - not volatile      EC - exposure concentration      RfD - reference dose      HI - hazard index      EPC - exposure point concentration (if blank, then COPC was not detected)  
 NTV - no toxicity value available      DAD - dermally absorbed dose      ABS - absorption factor      RfC - reference concentration      COPC - chemical of potential concern

COPC	CASRN	EPC (mg/kg)	Intake Calculations				Absorption Factors		Non-Cancer Toxicity Values			HQ <sub>ingestion</sub>	HQ <sub>dermal</sub>	HQ <sub>particulate</sub>	HQ <sub>vapor</sub>	HQ <sub>total</sub>
			Intake <sub>ingestion</sub> (mg/kg/day)	DAD <sub>dermal</sub> (mg/kg/day)	EC <sub>particulate</sub> (mg/m <sup>3</sup> )	EC <sub>vapor</sub> (mg/m <sup>3</sup> )	ABS <sub>ing</sub> (unitless)	ABS <sub>d</sub> (unitless)	RfD <sub>oral</sub> (mg/kg/day)	RfD <sub>dermal</sub> (mg/kg/day)	RfC (mg/m <sup>3</sup> )					
DDD	72-54-8	5.2E-01	6.6E-06	5.8E-07	3.7E-10	NV	1	0.03	5.0E-04	5.0E-04		1.3E-02	1.2E-03	NTV	NV	1.4E-02
DDE	72-55-9	1.4E+00	1.8E-05	1.6E-06	9.9E-10	NV	1	0.03	5.0E-04	5.0E-04		3.6E-02	3.1E-03	NTV	NV	3.9E-02
DDT	50-29-3	1.2E+00	1.5E-05	1.3E-06	8.5E-10	NV	1	0.03	5.0E-04	5.0E-04		3.1E-02	2.7E-03	NTV	NV	3.3E-02
Chlordane	12789-03-6	1.5E+01	1.9E-04	2.2E-05	1.1E-08	NV	1	0.04	5.0E-04	5.0E-04	7.0E-04	3.8E-01	4.4E-02	1.5E-05	NV	4.3E-01
Dieldrin	60-57-1	5.0E-01	6.4E-06	1.9E-06	3.5E-10	NV	1	0.1	5.0E-05	5.0E-05		1.3E-01	3.7E-02	NTV	NV	1.6E-01
Endrin	72-20-8	5.0E-03	6.4E-08	1.9E-08	3.5E-12	NV	1	0.1	3.0E-04	3.0E-04		2.1E-04	6.2E-05	NTV	NV	2.7E-04
Heptachlor	76-44-8	8.3E-02	1.1E-06	4.0E-07	5.9E-11	NV	1	0.13	5.0E-04	5.0E-04		2.1E-03	8.0E-04	NTV	NV	2.9E-03
Heptachlor Epoxide	1024-57-3	1.3E+00	1.7E-05	4.8E-06	9.2E-10	NV	1	0.1	1.3E-05	1.3E-05		1.3E+00	3.7E-01	NTV	NV	1.6E+00

-----NOT USED-----  
**Intake and Risk Equations - Single Age**  
  
**Limited Environmental Site Assessment**  
**North of West Linden Street and East of Canyon Crest Drive**  
**Riverside, California**

**Cancer Risk from Ingestion**

$$ELCR = Intake_{ing} * CSF$$

$$Intake_{ing (age group x)} = \frac{[EPC]_{soil} * IR * ABS_{ing} * FI * EF * ED * C1}{BW_x * AT_{lifetime}}$$

**Cancer Risk from Dermal Absorption**

$$ELCR = DAD * CSF$$

$$DAD_{derm(age group x)} = \frac{DA_{Event} * SA * EV * EF * ED}{BW_x * AT_{lifetime}}$$

$$DA_{Event} = [EPC]_{soil} * ABS_d * AF * C1$$

**Cancer Risk from Inhalation**

$$ELCR_{inh} = EC_{can} * IUR$$

$$EC_{can (age group x)} = \frac{[EPC]_{PART} * ET_{Part} * EF * ED \text{ --- OR --- } [EPC]_{VAPOR} * ET_{Vap} * EF * ED}{24 * AT_{lifetime}}$$

**Noncancer Risk from Ingestion**

$$HQ = \frac{Intake_{ing}}{RfD}$$

$$Intake_{ing} = \frac{[EPC]_{soil} * IR * ABS_{ing} * FI * EF * ED * C1}{BW * AT}$$

**Noncancer Risk from Dermal Absorption**

$$HQ = \frac{DAD}{RfD}$$

$$DAD_{derm} = \frac{DA_{Event} * SA * EV * EF * ED}{BW * AT}$$

$$DA_{Event} = [EPC]_{soil} * ABS_d * AF * C1$$

**Noncancer Risk from Inhalation**

$$HQ = \frac{EC_{nc}}{RfC}$$

$$EC_{nc} = \frac{[EPC]_{PART} * ET_{Part} * EF * ED * C2 \text{ --- OR --- } [EPC]_{VAPOR} * ET_{Vap} * EF * ED * C2}{24 * AT}$$

Parameter	Value - Cancer	Value - Non-Cancer	Units
CSF	Chemical specific	--	(mg/kg-day) <sup>-1</sup>
IUR	Chemical specific	--	(ug/m <sup>3</sup> ) <sup>-1</sup>
Intake	Age/chemical specific	--	mg/kg-day
EC <sub>can</sub>	Age/chemical specific	--	(ug/m <sup>3</sup> )
ELCR	Age/chemical specific	--	unitless
RfD	--	Chemical specific	mg/kg-day
RfC	--	Chemical specific	(mg/m <sup>3</sup> )
DAD	Age/chemical specific	Age/chemical specific	mg/kg-day
DA <sub>Event</sub>	Age/chemical specific	Age/chemical specific	mg/cm <sup>2</sup> -event
EC <sub>nc</sub>	--	Age/chemical specific	mg/m <sup>3</sup>
HQ	--	Age/chemical specific	unitless
[EPC] <sub>soil</sub>	Chemical specific	Chemical specific	mg/kg
[EPC] <sub>PART</sub>	Appendix B, TABLE B-4	Appendix B, TABLE B-4	ug/m <sup>3</sup>
[EPC] <sub>VAPOR</sub>	Appendix B, TABLE A-X	Appendix B, TABLE A-X	ug/m <sup>3</sup>
ABS <sub>ing</sub>	Chemical specific	Chemical specific	unitless
ABS <sub>d</sub>	Chemical specific	Chemical specific	unitless
BW	NA	NA	kg
EF	350	350	day/year
ED	26	26	year
AT	--	9490	day
AT <sub>lifetime</sub>	25550	--	day
IR	NA	NA	mg/day
FI	1	1	unitless
C1	0.000001	0.000001	kg/mg
SA	NA	NA	cm <sup>2</sup>
AF	NA	NA	mg/cm <sup>2</sup>
EV	1	1	event/day
ET <sub>Part</sub>	24	24	hours/day
C2	0.001	0.001	mg/ug
ET <sub>Vap</sub>	24	24	hours/day

**Appendix B, Table B-4  
Exposure Factors**

**Limited Environmental Site Assessment  
North of West Linden Street and East of Canyon Crest Drive  
Riverside, California**

**PLACE "X" IN THE APPROPRIATE YELLOW SHADED CELLS FOR THE APPROPRIATE RECEPTOR AND BASIS FOR CALCULATIONS**

SCENARIO USED TO CALCULATE RISKS			x	Resident		
BASIS FOR CANCER CALCULATIONS						
BASIS FOR NON-CANCER CALCULATIONS			x			
RECEPTOR			Child		ADULT	
<b>Standard Parameters</b>						
Body Weight	BW	kg	15	EPA, 2011 [1]	80	EPA, 2014
Exposure Frequency	EF	day/year	350	Site-specific [12]	350	Site-specific [12]
Exposure Duration	ED	year	6	Ages 11 - <16	20	Balance of 26-yr exposure [2]
Non-carcinogenic Averaging Time	AT	day	2190	Exposure duration expressed in days	7300	Exposure duration expressed in days
Carcinogenic Averaging Time	AT <sub>lifetime</sub>	day	25550	70 year lifetime	25550	70 year lifetime
<b>Incidental Ingestion of Soil</b>						
Soil Ingestion Rate	IR	mg/day	200	EPA, 2014	100	EPA, 2011 [5]
Fraction Ingested	FI	unitless	1.0	Site-specific [4]	1.0	Site-specific [4]
Age-Adjusted Soil Ingestion Rate	IFSadj	mg-yr/kg-day	NA		NA	
<b>Dermal Exposure with Soil</b>						
Exposed Skin Surface Area	SA	cm <sup>2</sup>	2900	DTSC, 2014	6032	EPA, 2011 [7]
Soil Adherence Factor	AF	mg/cm <sup>2</sup>	0.200	EPA, 2011 [8]	0.07	EPA, 2011 [8]
Fraction Dermal	EV	event/day	1.0	Site-specific [6]	1.0	Site-specific [6]
Age-Adjusted Dermal Contact Factor	DFSadj	mg-yr/kg-day	NA		NA	
<b>Particulate Inhalation</b>						
Exposure Time	ET <sub>Part</sub>	hours/day	24	Site-specific [12]	24	Site-specific [12]
<b>Vapor Inhalation</b>						
Exposure Time	ET <sub>Vap</sub>	hours/day	24	Site-specific [12]	24	Site-specific [12]

**Notes and Abbreviations**

EPA, 2011 - Exposure Factors Handbook. EPA/600/R-10/030. October, 2011.  
 EPA, 2014 - Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER 9200.1-120. February 6, 2014.  
 DTSC, 2014 - HHRA Note Number 1 - Default HHRA Exposure Parameter, 30 September 2014  
 Values are based on time-weighted average of child, adolescent, and adult exposure values, calculated as follows:  
 EF = (child EF x child ED) + (adolescent EF x adolescent ED) + (adult EF x adult ED) / total scenario ED  
 IFSadj = (child ED x child IR / child BW) + (adolescent ED x adolescent IR / adolescent BW) + (adult ED x adult IR / adult BW)  
 DFSadj = (child ED x child SA x child AF / child BW) + (adolescent ED x adolescent SA x adolescent AF / adolescent BW) + (adult ED x adult SA x adult AF / adult BW)  
 ET = (child ET x child ED) + (adolescent ET x adolescent ED) + (adult ET x adult ED) / total scenario ED



**Appendix B, Table B-5**  
**Particulate to Outdoor Air EPC Calculations**  
**Soil -**  
**Resident - Child and ADULT**

**Limited Environmental Site Assessment**  
**North of West Linden Street and East of Canyon Crest Drive**  
**Riverside, California**

**EQUATIONS:**

$EPC_{[PARTICULATE]} = EPC_{[SOIL]} \times PARTICULATE_{[AIR]} \times 1E-06 \text{ [kg/mg]}$

where:  
 $PARTICULATE_{[AIR]} = (1/PEF \times 1E+09 \text{ ug/kg}) \text{ or Measured/Modelled}$   
 and:  
 $PEF \text{ (m}^3/\text{kg)} = Q/C \times [(3600 \text{ s/hr)} / ((0.036 \times (1-V) \times (U_m/U_t)^3 \times F(x)))]$

PARAMETER/DEFINITION	UNITS	DEFAULT	Source
PARTICULATE <sub>[Air]</sub> / Particulate concentration in air	ug/m <sup>3</sup>	0.74	Calculated or measured
Measured or modeled PARTICULATE <sub>[Air]</sub>	ug/m <sup>3</sup>		Measured value
PEF / Particulate emission factor	m <sup>3</sup> /kg		Guidance value
PEF / Particulate emission factor	m <sup>3</sup> /kg	1.36E+09	Calculated here
Q/C / inverse of the mean concentration at the center of a 0.5-acre-square source	g/m <sup>2</sup> -s per kg/m <sup>3</sup>	93.77	Calculated / USEPA, 2014 [a]
V / Fraction of vegetative cover	unitless	0.5	Site-specific, estimated
U <sub>m</sub> / mean annual windspeed	m/s	4.69	Site-specific / USEPA, 2014
U <sub>t</sub> / equivalent threshold value of wind speed at 7 m	m/s	11.32	USEPA, 2014
F(x) / function dependant on U <sub>r</sub> /U <sub>t</sub> derived using Cowherd et al. (1985)	unitless	1.94E-01	Calculated / USEPA, 2014

USEPA, 2014. Regional Screening Levels.

[a] Climactic zone: Phoenix Arizona

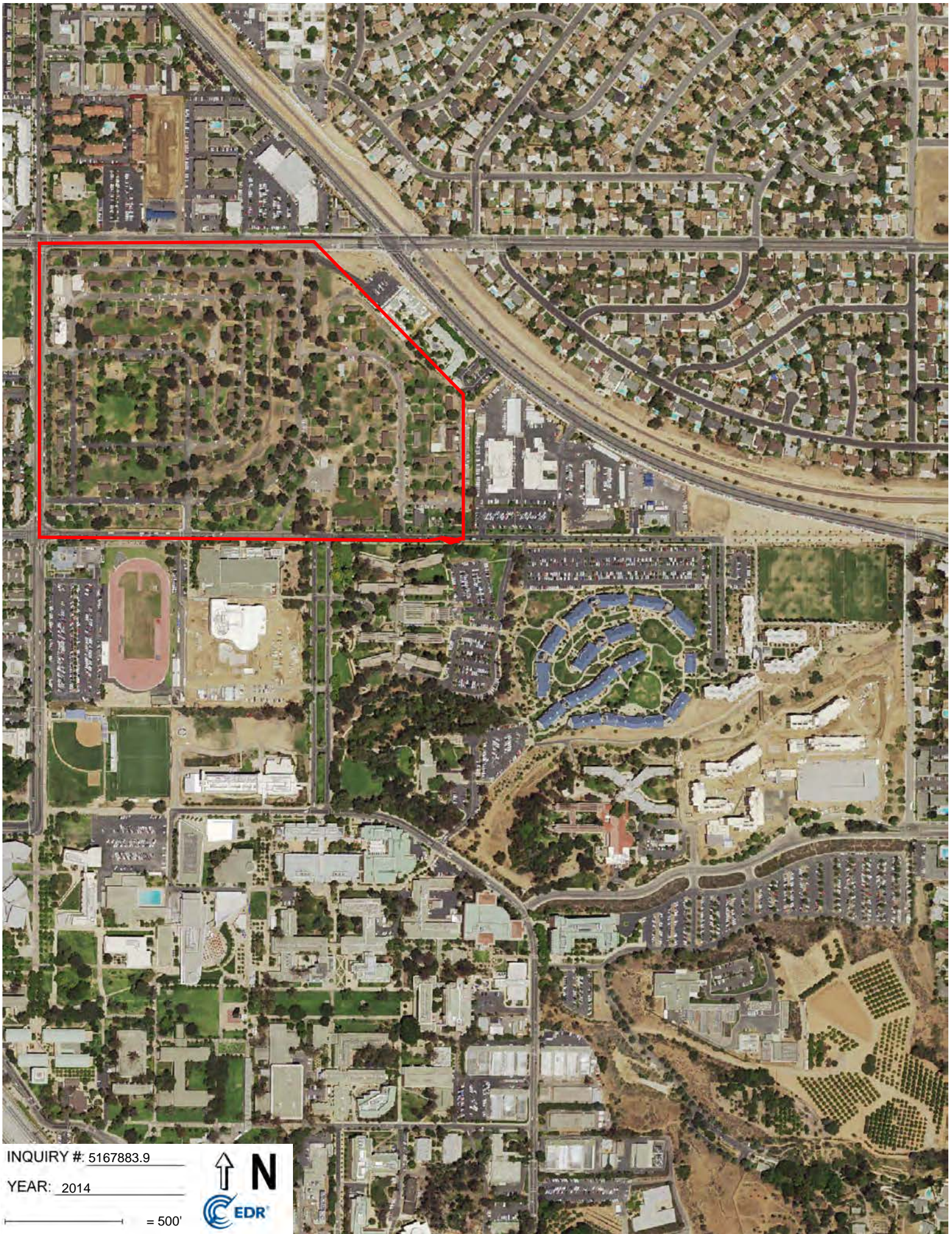
[a] Area of Source:

Specific to size of Exposure Area

CASRN	COPC	EPC Soil (mg/kg)	EPC Particulate (ug/m <sup>3</sup> )
72-54-8	DDD	0.52	3.8E-07
72-55-9	DDE	1.4	1.0E-06
50-29-3	DDT	1.2	8.8E-07
12789-03-6	Chlordane	15	1.1E-05
60-57-1	Dieldrin	0.5	3.7E-07
72-20-8	Endrin	0.005	3.7E-09
76-44-8	Heptachlor	0.083	6.1E-08
1024-57-3	Heptachlor Epoxide	1.3	9.6E-07

## **APPENDIX C**

### **Historical Research Documentation**



INQUIRY #: 5167883.9

YEAR: 2014

— = 500'





INQUIRY #: 5167883.9

YEAR: 2010

— = 500'





INQUIRY #: 5167883.9

YEAR: 2006

— = 500'





INQUIRY #: 5167883.9

YEAR: 1994

— = 500'





INQUIRY #: 5167883.9

YEAR: 1989

— = 500'





INQUIRY #: 5167883.9

YEAR: 1985

— = 500'







INQUIRY #: 5167883.9

YEAR: 1978

— = 500'





INQUIRY #: 5167883.9

YEAR: 1975

— = 500'





INQUIRY #: 5167883.9

YEAR: 1967

— = 500'





INQUIRY #: 5167883.9

YEAR: 1953

— = 500'





INQUIRY #: 5167883.9

YEAR: 1949

— = 500'



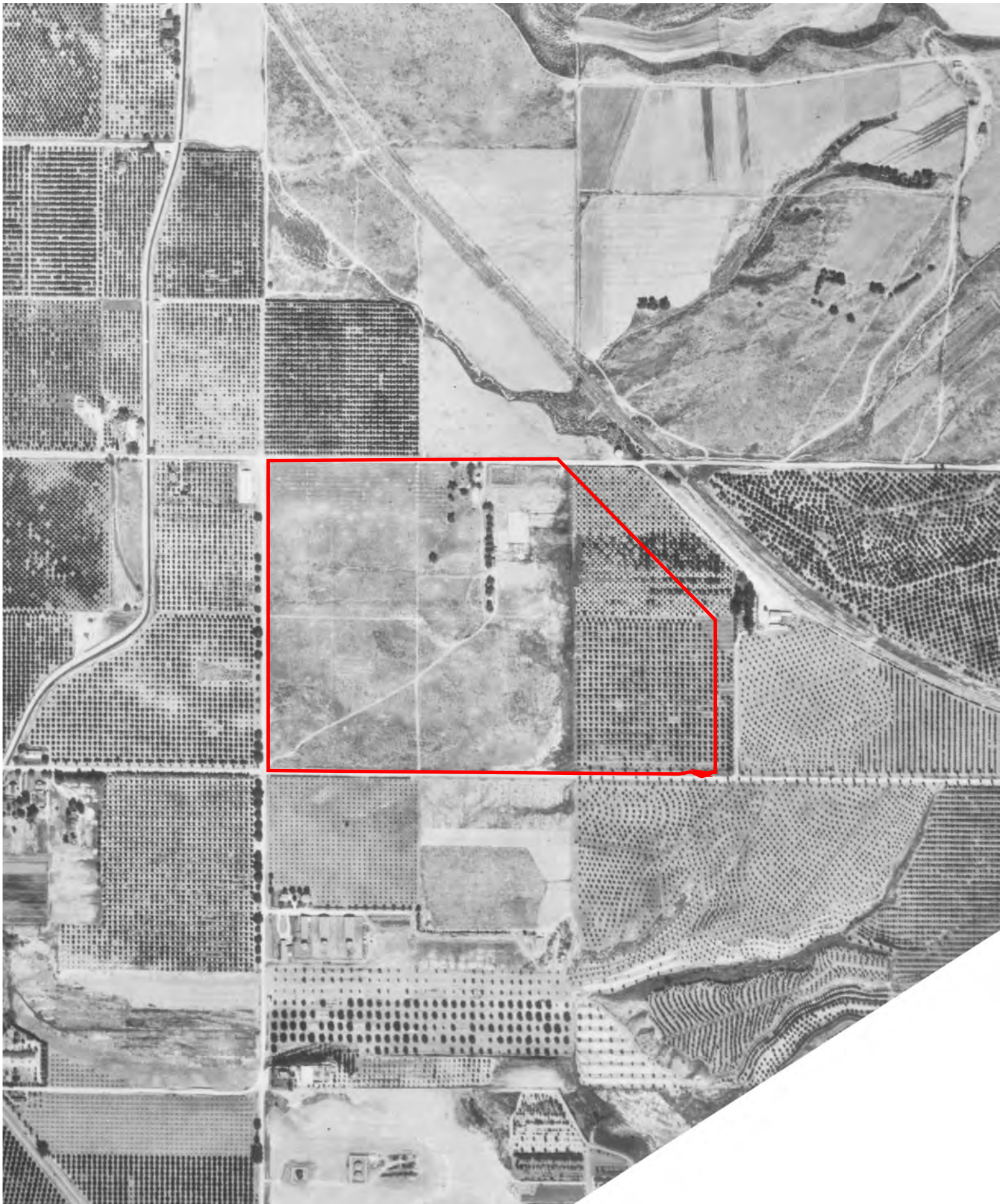


INQUIRY #: 5167883.9

YEAR: 1938

— = 500'



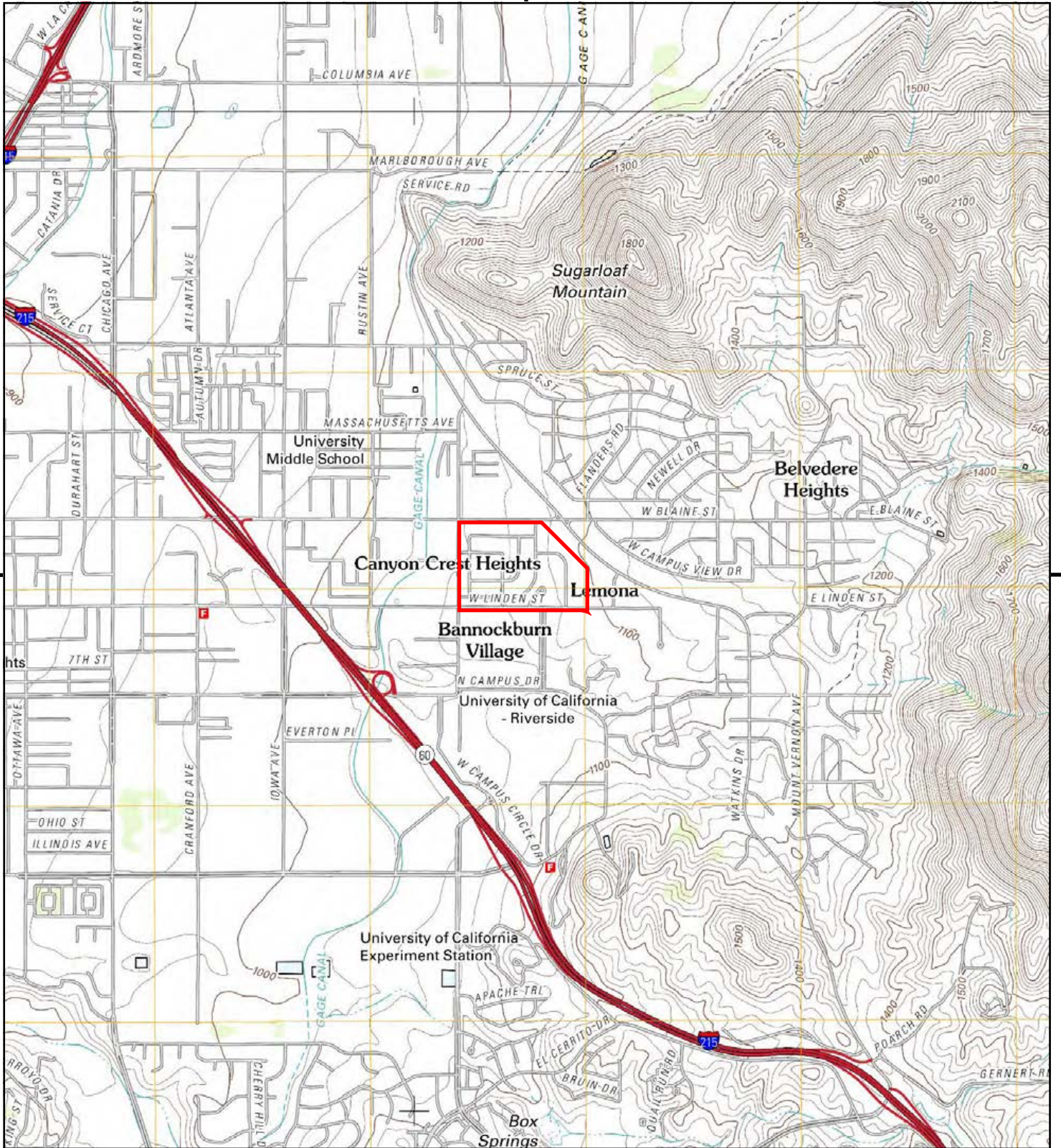


INQUIRY # 5167883.9

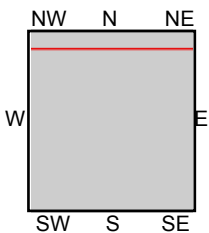
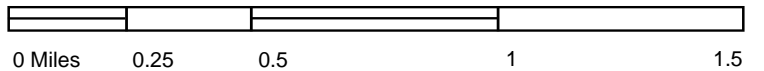
YEAR: 1931

— = 500'





This report includes information from the following map sheet(s).

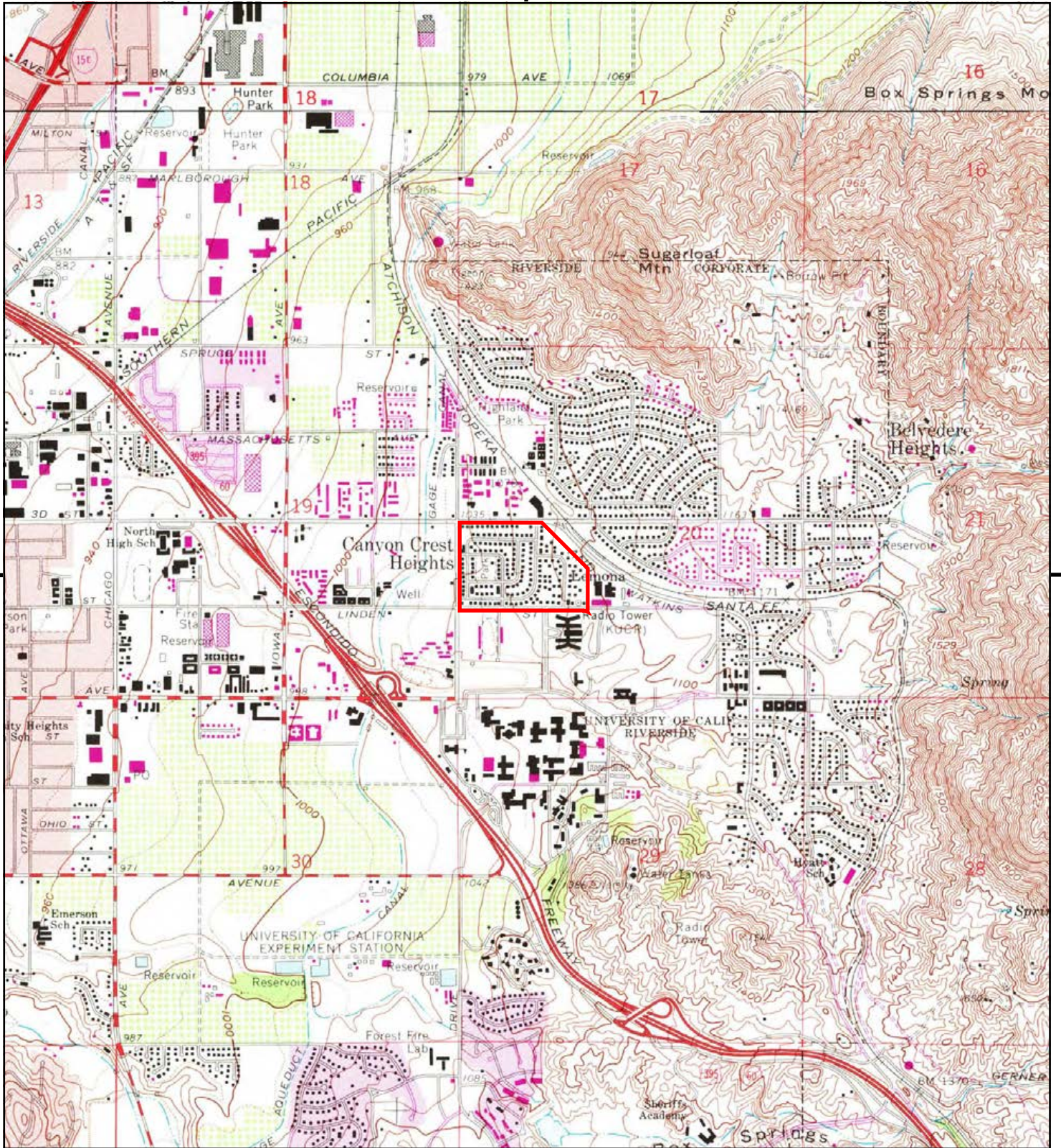


TP, Riverside East, 2012, 7.5-minute  
N, San Bernardino South, 2012, 7.5-minute

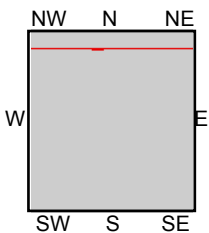
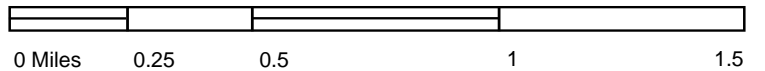
SITE NAME: American Campus Phase 1A  
ADDRESS: Linden St  
Riverside, CA 92507  
CLIENT: Haley & Aldrich







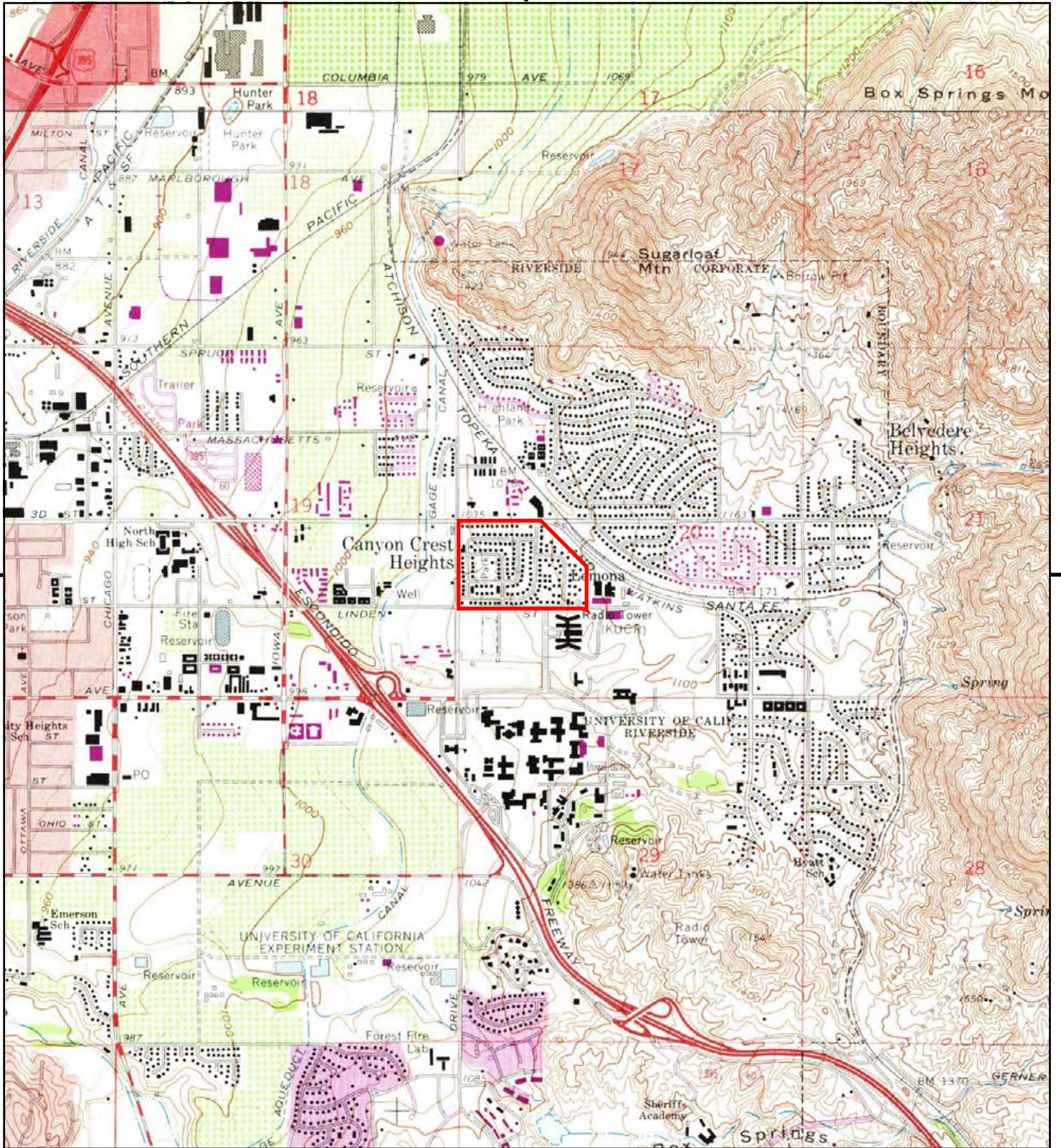
This report includes information from the following map sheet(s).



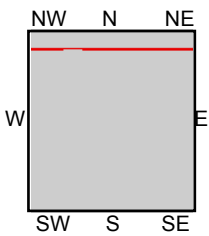
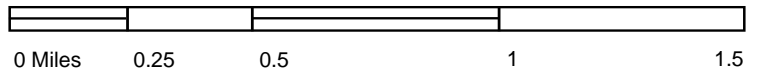
TP, Riverside East, 1980, 7.5-minute  
 N, San Bernardino South, 1980, 7.5-minute

**SITE NAME:** American Campus Phase 1A  
**ADDRESS:** Linden St  
 Riverside, CA 92507  
**CLIENT:** Haley & Aldrich





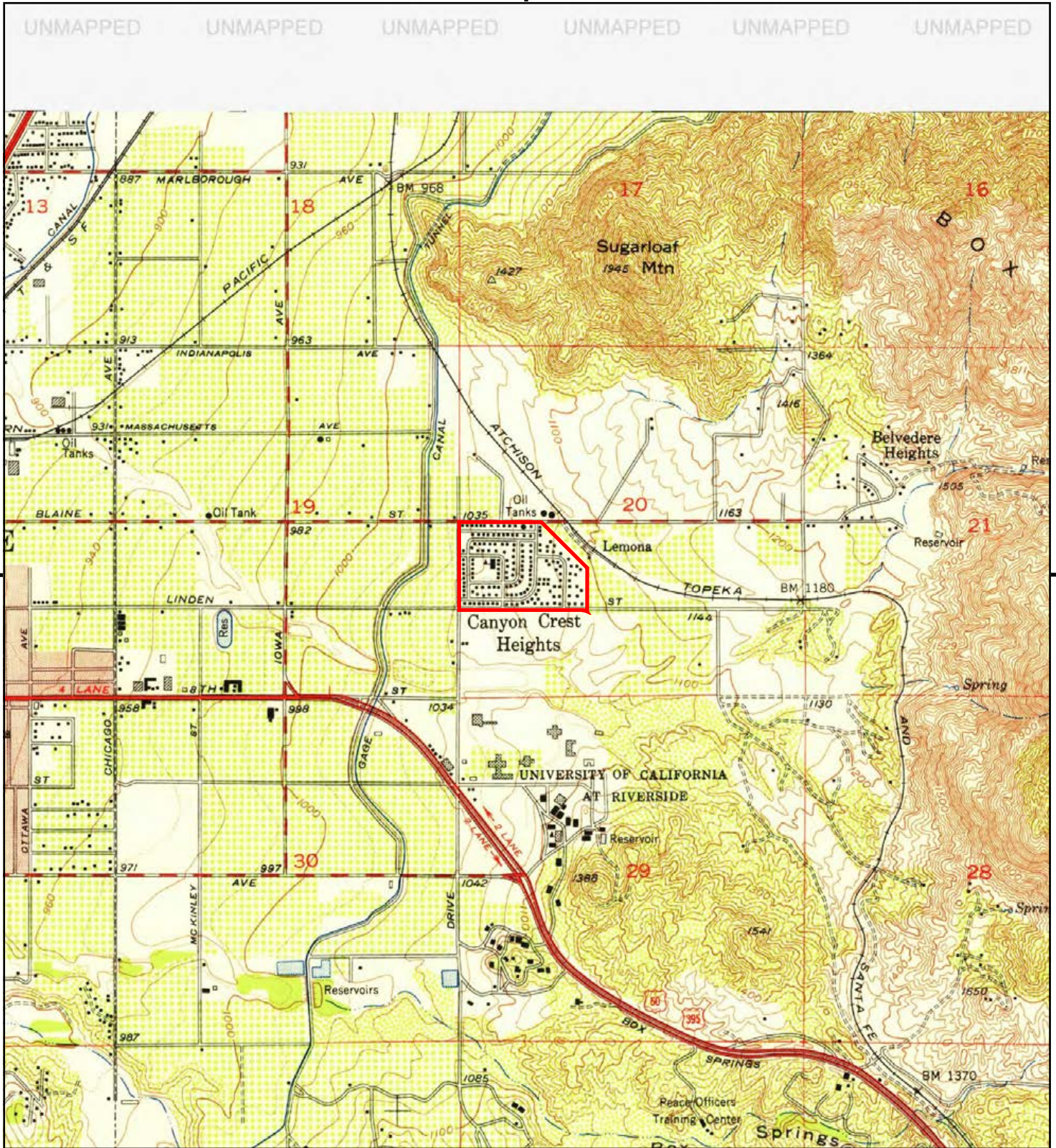
This report includes information from the following map sheet(s).



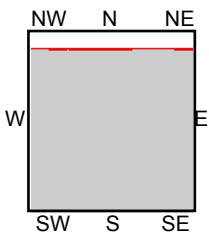
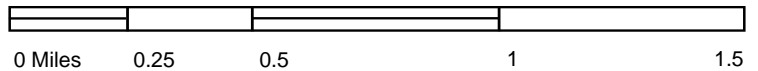
TP, Riverside East, 1967, 7.5-minute  
 N, San Bernardino South, 1967, 7.5-minute

**SITE NAME:** American Campus Phase 1A  
**ADDRESS:** Linden St  
 Riverside, CA 92507  
**CLIENT:** Haley & Aldrich





This report includes information from the following map sheet(s).



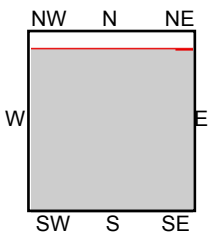
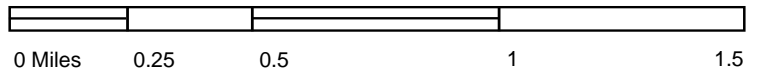
TP, Riverside East, 1953, 7.5-minute

SITE NAME: American Campus Phase 1A  
 ADDRESS: Linden St  
 Riverside, CA 92507  
 CLIENT: Haley & Aldrich





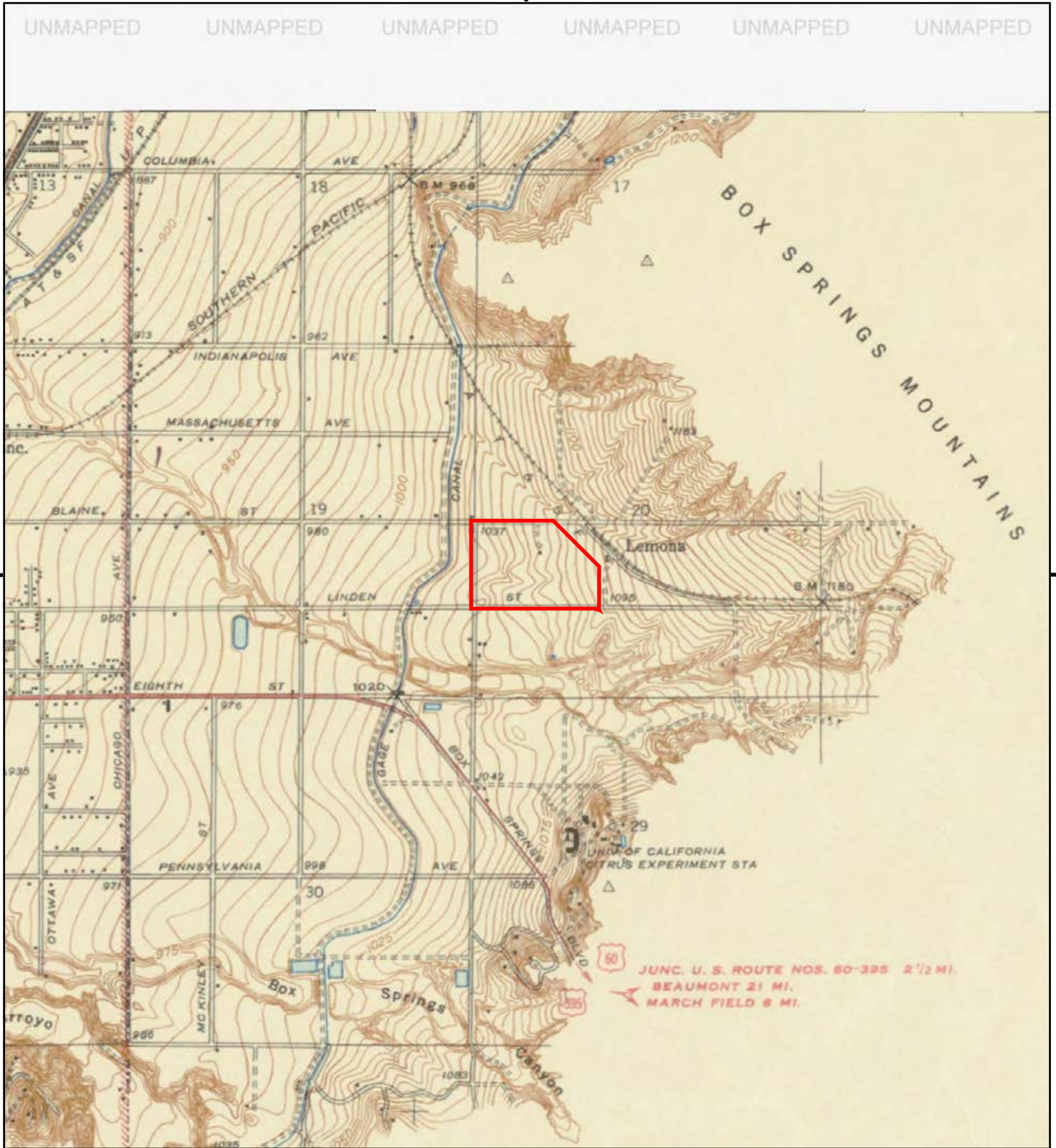
This report includes information from the following map sheet(s).



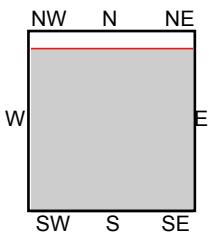
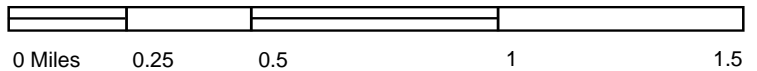
TP, RIVERSIDE, 1947, 15-minute

SITE NAME: American Campus Phase 1A  
 ADDRESS: Linden St  
 Riverside, CA 92507  
 CLIENT: Haley & Aldrich





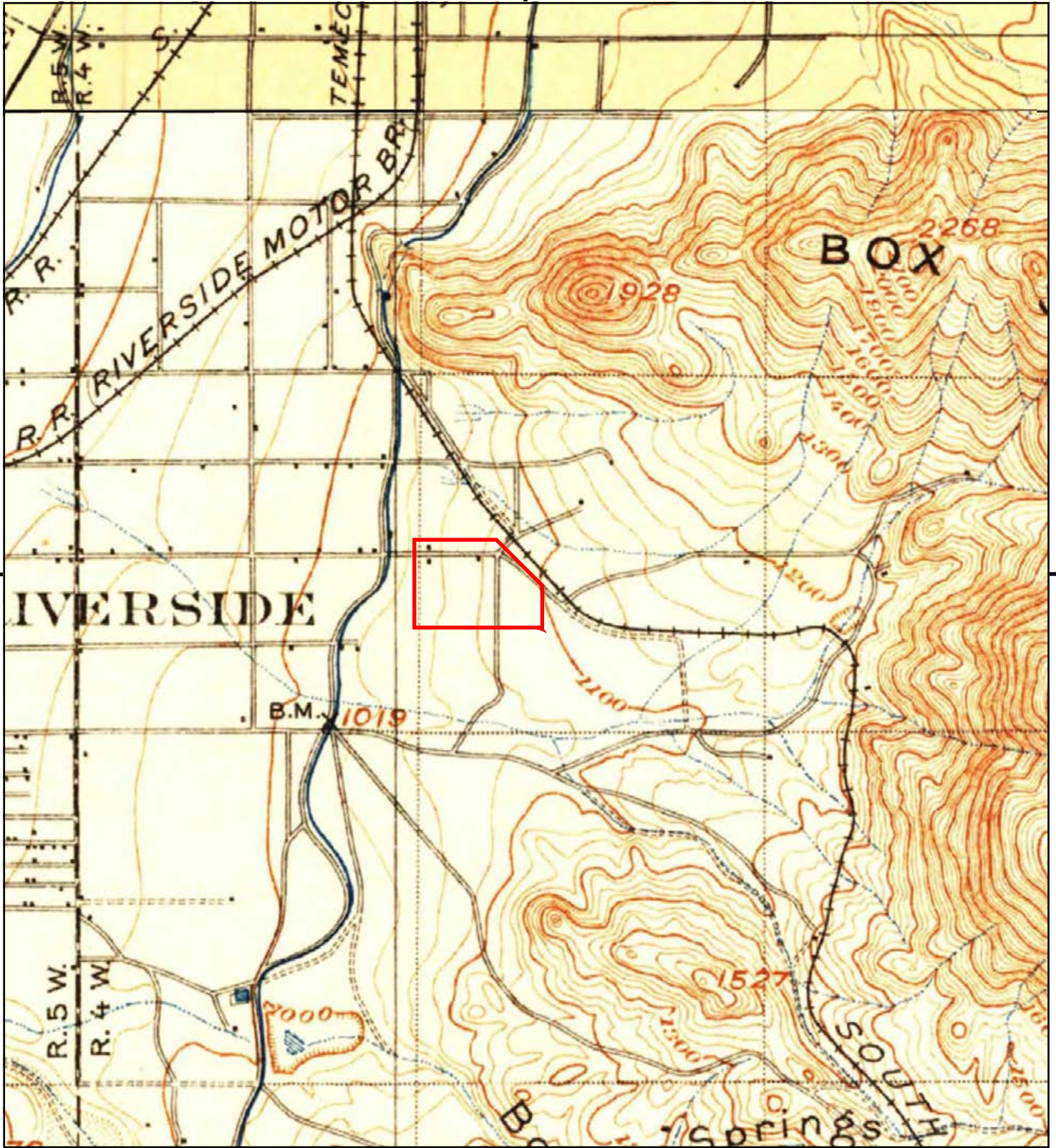
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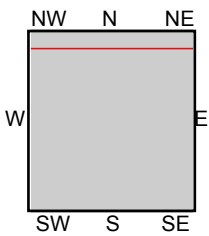
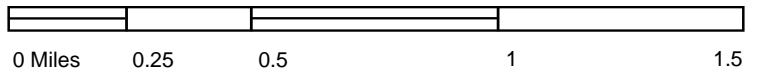
TP, RIVERSIDE VICINITY, 1942, 7.5-minute

SITE NAME: American Campus Phase 1A  
 ADDRESS: Linden St  
 Riverside, CA 92507  
 CLIENT: Haley & Aldrich





This report includes information from the following map sheet(s).



TP, Riverside, 1901, 15-minute  
N, San Bernardino, 1901, 15-minute

**SITE NAME:** American Campus Phase 1A  
**ADDRESS:** Linden St  
Riverside, CA 92507  
**CLIENT:** Haley & Aldrich



## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1921 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 1320 feet of the target property.

A summary of the information obtained is provided in the text of this report.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

**infoUSA**<sup>®</sup>

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### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2005	EDR Digital Archive	-	X	X	-
2002	SBC PACIFIC BELL	-	X	X	-
2001	Haines & Company, Inc.	-	X	X	-
1996	Pacific Bell	-	X	X	-
1993	Pacific Bell	-	-	-	-
1990	Pacific Bell	-	X	X	-
1986	Pacific Bell Yellow Pages	-	X	X	-
1981	Pacific Telephone	-	X	X	-
1977	Pacific Telephone	-	X	X	-
1970	Pacific Telephone	-	X	X	-

## EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1967	Luskey Brothers & Co.	-	-	-	-
1966	Luskey Brothers & Company Inc.	-	X	X	-
1961	Luskey Brothers & Co.	-	-	-	-
1960	Luskeys Brothers & Co., Publishers	-	X	X	-
1956	Luskey Brothers & Co.	-	-	-	-
1955	Luskeys Brothers & Co., Publishers	-	X	X	-
1951	Los Angeles Directory Co.	-	X	X	-
1946	Southern California Telephone Company	-	X	X	-
1945	Los Angeles Directory Co.	-	X	X	-
1941	Pacific Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1936	Los Angeles Directory Co.	-	-	-	-
1931	Southern California Telephone Co.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	X	X	-
1924	Kaasen Directory Co.	-	-	-	-
1921	Riverside Directory Co.	-	-	-	-



## EXECUTIVE SUMMARY

### SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<b><u>Address</u></b>	<b><u>Type</u></b>	<b><u>Findings</u></b>
3500 Canyon Crest Drive	Client Entered	
900 University	Client Entered	X
691 W Linden St	Client Entered	X
1 Pentland Way	Client Entered	
100 Aberdeen Drive	Client Entered	

## FINDINGS

### TARGET PROPERTY INFORMATION

#### ADDRESS

Linden St  
Riverside, CA 92507

#### FINDINGS DETAIL

Target Property research detail.

## FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### AVOCADO

##### **3401 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	AVOCADO CONT D	SBC PACIFIC BELL
	Yi Haak Rho	SBC PACIFIC BELL
1970	Mayne Emmett M	Pacific Telephone

##### **3402 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Chen Yen Hao	SBC PACIFIC BELL

##### **3403 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Shabunov Kirill	SBC PACIFIC BELL
1970	Norton Chris	Pacific Telephone
	Norton Jas M	Pacific Telephone

##### **3404 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Yang Junjie	SBC PACIFIC BELL
1970	ONeal Jas M	Pacific Telephone

##### **3408 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Pinedo Desiree	SBC PACIFIC BELL
1970	Ariaratnam V	Pacific Telephone

##### **3411 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kew George E	Pacific Telephone

##### **3412 AVOCADO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kolesar Peter	Pacific Telephone

## FINDINGS

### 3413 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Horspool Debra E	SBC PACIFIC BELL
1970	Rogers Leland E	Pacific Telephone

### 3414 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Velazquez Monreai Jose	SBC PACIFIC BELL
1970	Denver John Vaughn	Pacific Telephone

### 3418 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Pignataro Frank V Jr	Pacific Telephone

### 3421 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Talamante Leticia E	SBC PACIFIC BELL
1970	Dahleen Wm K	Pacific Telephone

### 3422 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Jiang Guoping	SBC PACIFIC BELL
1970	Khasimuddin Syed	Pacific Telephone

### 3423 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Gong Tao	SBC PACIFIC BELL
1970	Rowe Michael H	Pacific Telephone

### 3424 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ahn Sangjoon	SBC PACIFIC BELL
1970	Mc Elroy David K	Pacific Telephone

### 3430 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Wang Liming	SBC PACIFIC BELL

### 3433 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Scott Brian	Pacific Telephone
	Scott Kathy	Pacific Telephone

## FINDINGS

### 3436 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Turk Bicakc Lori	SBC PACIFIC BELL
1970	Whitmore Robt A	Pacific Telephone

### 3438 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Klem Robt E	Pacific Telephone

### 3442 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Avant W Bernard Jr	Pacific Telephone

### 3444 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Cox Robert	SBC PACIFIC BELL
1970	Opoku Adu	Pacific Telephone

### 3445 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Cao Tie Gang	SBC PACIFIC BELL
1970	Bale Jack	Pacific Telephone

### 3446 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Irwin Eric & Becky	SBC PACIFIC BELL

### 3448 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Lazarte Alfredo	SBC PACIFIC BELL
1970	Mc Farlane Jas Craig	Pacific Telephone

### 3449 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Salvo Jaime	SBC PACIFIC BELL

### 3450 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Siahaan Evan	SBC PACIFIC BELL

## FINDINGS

### 3452 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Oliver Roger O	Pacific Telephone

### 3454 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Zhang Xiao Fei	SBC PACIFIC BELL
1970	Tracy Susan I	Pacific Telephone
	Tracy Jas M	Pacific Telephone

### 3456 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Barkley Laura	SBC PACIFIC BELL
1970	Ali M Taskeen	Pacific Telephone

### 3459 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Harris Carol	Pacific Telephone

### 3460 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ammons James	SBC PACIFIC BELL
1970	Ingersoll Royal B	Pacific Telephone

### 3461 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Garcia Mayda D	SBC PACIFIC BELL
1970	Daugherty Howard Dr	Pacific Telephone

### 3462 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Prather O J Jr	Pacific Telephone
	Prather Carole	Pacific Telephone

### 3465 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Nash John	Pacific Telephone

### 3467 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Coronel Victoria	Pacific Telephone
	Coronel Roberto	Pacific Telephone

## FINDINGS

### 3468 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Qiu Shenfeng	SBC PACIFIC BELL
1970	Wong Yeng Pal	Pacific Telephone

### 3471 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Bimboni Hugo	Pacific Telephone
	Bimboni Margarita	Pacific Telephone

### 3472 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Wang Liangwei	SBC PACIFIC BELL
1970	Dahl John G	Pacific Telephone

### 3473 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Griffin Ronnie	Pacific Telephone
	Griffin Micheline	Pacific Telephone

### 3474 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Smith David A	SBC PACIFIC BELL
1970	Mc Clain Booker T	Pacific Telephone
	Mc Clain E L	Pacific Telephone

### 3477 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Carr Steve E	Pacific Telephone

### 3478 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Slater Geo A Jr	Pacific Telephone

### 3479 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Dekker Teunis	SBC PACIFIC BELL

### 3480 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ygloria Silya S	SBC PACIFIC BELL
1970	Auth Kurt	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Auth Irma	Pacific Telephone

### 3483 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Sngh Atinder J	SBC PACIFIC BELL
1970	Gianos Phillip L	Pacific Telephone

### 3484 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Peck George	SBC PACIFIC BELL

### 3485 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Malik Mahmood N	Pacific Telephone

### 3486 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Bokhari Unab Gul	Pacific Telephone

### 3489 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Jimenez Hector	SBC PACIFIC BELL
1970	Cummings Jeffrey A	Pacific Telephone

### 3490 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Michihata Kaihei	SBC PACIFIC BELL
1970	Sinden Sidney	Pacific Telephone

### 3492 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Thiaw Samba	SBC PACIFIC BELL

### 3495 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Murphy Dennis W	Pacific Telephone

### 3497 AVOCADO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kalin John E	Pacific Telephone



## FINDINGS

### **AVOCADO AVE**

#### **3401 AVOCADO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1981	Omar Hamad S H	Pacific Telephone
1977	Omar Mobasher S I	Pacific Telephone
1966	Harrington Frank L Erma 3401 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Miklich FJ	Luskeys Brothers & Co., Publishers
1955	Straw C D	Luskeys Brothers & Co., Publishers
1945	Williams W H	Los Angeles Directory Co.

#### **3402 AVOCADO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2001	GELHAUSJen	Haines & Company, Inc.
1977	Sloan Michael P	Pacific Telephone
1966	Camp Haney B Paula 3402 Avocado Rivo h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Mc Cook G M	Luskeys Brothers & Co., Publishers
1945	Liston Harry	Los Angeles Directory Co.

#### **3403 AVOCADO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2001	SHA 9 UNOVKinl I	Haines & Company, Inc.
1981	Culak David	Pacific Telephone
1977	Brooks Ray	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Colvin GB	Luskeys Brothers & Co., Publishers
1955	Samuelson D A	Luskeys Brothers & Co., Publishers
1945	Stewart Helen Mrs music tchr	Los Angeles Directory Co.
	Stewart H T	Los Angeles Directory Co.

#### **3404 AVOCADO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2001	XXXX	Haines & Company, Inc.
1986	Le Ster L H	Pacific Bell Yellow Pages
1981	Borg L H	Pacific Telephone
1977	Nafie Nafie Ali	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Murphr Gary E Janice 3404 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Krieger RA	Luskeys Brothers & Co., Publishers
1955	Godfrey W P	Luskeys Brothers & Co., Publishers
1945	Collins C A	Los Angeles Directory Co.

### 3408 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1981	Armstrong Jas D	Pacific Telephone
1966	Beck Barry Patricia 3408 Avocado Riv h 1 engineering aide City	Luskey Brothers & Company Inc.
1960	Ferguson BJ	Luskeys Brothers & Co., Publishers
1955	Christiansen D W	Luskeys Brothers & Co., Publishers
1951	Young Fred R r	Los Angeles Directory Co.
1945	Parkinson Alf	Los Angeles Directory Co.

### 3411 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Duncan Carl & Kathy	Pacific Bell Yellow Pages
1981	Moghadam Hosien	Pacific Telephone
1966	Brown Kirby W Iran 3411 Avocado Riv h 1 student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Hill Dan I C	Luskeys Brothers & Co., Publishers
1951	Davis Jas E r	Los Angeles Directory Co.
1945	Bushell L A	Los Angeles Directory Co.

### 3412 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1977	Vaughn John	Pacific Telephone
1966	Area Manuet N Maria 3412 Avocado Riv h 3 student	Luskey Brothers & Company Inc.
1960	Evans GR	Luskeys Brothers & Co., Publishers
1955	Schoellen Richd H	Luskeys Brothers & Co., Publishers
1945	Hicks Mrs	Los Angeles Directory Co.

### 3413 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HORSPOOLDebra E	Haines & Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1977	Mc Cue MM	Pacific Telephone
1966	Moore David M Louise 3413 Avocado Riv h 1 student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Skinner O R	Luskeys Brothers & Co., Publishers
1951	Adams Jas H r	Los Angeles Directory Co.
1945	Brislane Patk	Los Angeles Directory Co.

### 3414 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	VELAZQUEZ Monreal	Haines & Company, Inc.
1966	Herholdt Jan A Lydia 3414 Avocado Riv h 4 student	Luskey Brothers & Company Inc.
1960	Sislo RJ	Luskeys Brothers & Co., Publishers
1955	Beattie G B	Luskeys Brothers & Co., Publishers
1951	Beattie W F r	Los Angeles Directory Co.
1945	Hunt S A	Los Angeles Directory Co.

### 3418 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Hammontid Marion & Patricia	Pacific Bell
1986	Elnagar Hassan & Romi	Pacific Bell Yellow Pages
1966	Peterson David M Valerie 3418 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Garlet BD	Luskeys Brothers & Co., Publishers
1955	Garlet Beverly	Luskeys Brothers & Co., Publishers

### 3421 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Morell Luis A	Pacific Bell
1981	Khair Mohommed	Pacific Telephone
1966	Kogan Marco Jenny 3421 Avocado Riv h 2 student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	ONeill J G	Luskeys Brothers & Co., Publishers
1951	Johnson H G Jr r	Los Angeles Directory Co.
1945	Satterfield J W	Los Angeles Directory Co.

## FINDINGS

### 3422 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PARKER K	Haines & Company, Inc.
1986	Peck David & Christina	Pacific Bell Yellow Pages
1981	Boyd Steve	Pacific Telephone
1977	Higgins Howard	Pacific Telephone
1966	Jacobson Jerry L Cheryl 3422 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	King BG	Luskeys Brothers & Co., Publishers
1955	Stark Curtis W	Luskeys Brothers & Co., Publishers

### 3423 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Ling Nilson	Pacific Bell
1986	Oroomiefar Getyon	Pacific Bell Yellow Pages
1981	Wolley John A	Pacific Telephone
1977	Brinkerhoff Jonathan	Pacific Telephone
1966	Smalling Larry P Diana 3423 Avocado Riv h student	Luskey Brothers & Company Inc.
	Morin Karen L Mrs 3423 Avocado Riv h entomologist UCR	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Barnett Wm	Luskeys Brothers & Co., Publishers
1945	LMc Carthy Helen Mrs	Los Angeles Directory Co.

### 3424 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Garcia Alvaro	Pacific Bell Yellow Pages
1981	Vazirzadeh Kianshid	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Bittmann RA D	Luskeys Brothers & Co., Publishers
1955	Lumgair Jas B	Luskeys Brothers & Co., Publishers
1951	Lumgair Jas B r	Los Angeles Directory Co.
1945	Carr Mae Mrs	Los Angeles Directory Co.

### 3428 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HANBo	Haines & Company, Inc.
1986	Tudor Mark E	Pacific Bell Yellow Pages
1981	Kuko Mustafa Hamza	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1977	Kim Chul	Pacific Telephone
1966	Romero Cova Sabastian Lorena 3428 Avocado Riv h 2 student	Luskey Brothers & Company Inc.
1960	Mac Lead NS	Luskeys Brothers & Co., Publishers
1955	Sokal Sam I B V	Luskeys Brothers & Co., Publishers
1951	Sokal Sam r	Los Angeles Directory Co.
1945	Rosenzweig A A	Los Angeles Directory Co.

### 3430 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	WANGSiaoymg	Haines & Company, Inc.
1996	Wang Siaoqing	Pacific Bell
1990	Rodr Iiguez Jose C	Pacific Bell
1986	Bennett Steven R	Pacific Bell Yellow Pages
1981	Bennett Steven R	Pacific Telephone
1977	Clay Val E	Pacific Telephone
1966	Brownstein Bernard H Bonnie 3430 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Newton MS	Luskeys Brothers & Co., Publishers
1955	Hashimoto Sab	Luskeys Brothers & Co., Publishers
1945	Tyler Betty V	Los Angeles Directory Co.

### 3433 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HSIAOYang Xiao	Haines & Company, Inc.
1981	Martinez Jose L	Pacific Telephone
1966	Leong Jorge K Veronica 3433 Avocado Riv h 1 student	Luskey Brothers & Company Inc.
1960	Ewe MJ	Luskeys Brothers & Co., Publishers
1955	Miller R J	Luskeys Brothers & Co., Publishers
1951	Popejoy Dorothy M r	Los Angeles Directory Co.
1945	Tate H A	Los Angeles Directory Co.

### 3436 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DEVEGA Palrcia	Haines & Company, Inc.
1996	Burns Martha	Pacific Bell
1981	Johnston Clifford T	Pacific Telephone
1977	Stirling Graham	Pacific Telephone
1966	Taylor Wm A 3436 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Wuiltehead WV	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1955	Davis Wm W O	Luskeys Brothers & Co., Publishers

### 3438 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	ZHANGYongcun	Haines & Company, Inc.
1986	Roterdam Michael & Melissa	Pacific Bell Yellow Pages
1981	Fawcett Jeffrey H	Pacific Telephone
1977	Clark Roger W	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Boyd RG	Luskeys Brothers & Co., Publishers
1955	Goodwin D P	Luskeys Brothers & Co., Publishers
1945	Ruliffson C F	Los Angeles Directory Co.

### 3442 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	De Ramos Alicia Michel	Pacific Bell Yellow Pages
1981	Broomhall Dave & Susan	Pacific Telephone
1977	Vaughan Donald L	Pacific Telephone
	Vaughan Betty K	Pacific Telephone
1966	Bow Walter J Marcella 3442 Avocado Riv hstudent	Luskey Brothers & Company Inc.
1960	Unks NL	Luskeys Brothers & Co., Publishers
1955	Unks N L Mrs	Luskeys Brothers & Co., Publishers
1945	George J H	Los Angeles Directory Co.

### 3444 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	MOYAOMana	Haines & Company, Inc.
1996	Cui Shulin	Pacific Bell
1981	Mulroy L	Pacific Telephone
	Gallagher Sean	Pacific Telephone
1966	Ayeke Cyril A 3444 Avocado Riv hstudent	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Cumming P B	Luskeys Brothers & Co., Publishers
1945	Ganahl J T	Los Angeles Directory Co.

## FINDINGS

### 3445 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CAOTie Gang	Haines & Company, Inc.
1977	Reclam Michael	Pacific Telephone
1960	Wardrip KB	Luskeys Brothers & Co., Publishers
1955	Persechini M J	Luskeys Brothers & Co., Publishers
1951	Stowell Frederick R Capt r	Los Angeles Directory Co.
1945	Swing C E	Los Angeles Directory Co.

### 3446 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Madiel Geo Lt Col Ret Madibo Gadelkarim M	Pacific Bell Yellow Pages Pacific Bell Yellow Pages
1977	Adeoye K B	Pacific Telephone
1960	Kee Fe MW	Luskeys Brothers & Co., Publishers
1955	Lesh D M	Luskeys Brothers & Co., Publishers
1945	Hampton Benj	Los Angeles Directory Co.

### 3448 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	MITCHELLRoss E	Haines & Company, Inc.
1996	Tomkins Edward & Sharon	Pacific Bell
1986	Vallega Victor	Pacific Bell Yellow Pages
1966	Birdsell Dale C 3448 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Frost FJ	Luskeys Brothers & Co., Publishers
1955	Michaels W J	Luskeys Brothers & Co., Publishers
1951	Killingsworth Ben W Sr r	Los Angeles Directory Co.

### 3449 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SALVO Jaime 909 3 B	Haines & Company, Inc.
1981	Guttinan S H	Pacific Telephone
1966	Monte John D Mariko 3449 Avocado Riv h 3 student	Luskey Brothers & Company Inc.
1960	Menzle JC	Luskeys Brothers & Co., Publishers
1955	Coonrad C F	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

## FINDINGS

### 3450 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CHATMAN Riley Denisa	Haines & Company, Inc.
1990	Rail Ellis & Paula	Pacific Bell
1986	Zareh Nasser	Pacific Bell Yellow Pages
1981	De Matos Aristoteles Pires	Pacific Telephone
1977	Wild Brian L	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Meares DD D	Luskeys Brothers & Co., Publishers
1955	Yance J R	Luskeys Brothers & Co., Publishers
1945	Squadrielle E P	Los Angeles Directory Co.

### 3451 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Hughes William L	Pacific Bell Yellow Pages
1977	Nagengast C	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Amador MR Mrs	Luskeys Brothers & Co., Publishers
1955	Amador Melba Mrs	Luskeys Brothers & Co., Publishers
1951	Amador Melba R r	Los Angeles Directory Co.
1946	Amador Julian W r	Southern California Telephone Company
1945	Cooper Kathareen Mrs	Los Angeles Directory Co.

### 3452 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1996	Landtiser Gina	Pacific Bell
1986	Almanza Dan I J	Pacific Bell Yellow Pages
	Almaiman Aljouharah	Pacific Bell Yellow Pages
1977	Robarchek Clay	Pacific Telephone
1966	Atkinson E Ronald Begay 3452 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Farwell LB	Luskeys Brothers & Co., Publishers
1955	Garlet C B Jr	Luskeys Brothers & Co., Publishers
1945	Kelley R L	Los Angeles Directory Co.



## FINDINGS

### 3454 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1977	Johnson Bette R	Pacific Telephone
1966	Meek Burl D Karen 3454 Avocado Riv hstudent	Luskey Brothers & Company Inc.
1960	Duffy DR	Luskeys Brothers & Co., Publishers
1955	Fuller G G	Luskeys Brothers & Co., Publishers
1951	Caldwell C D r	Los Angeles Directory Co.
1945	ndrews R H	Los Angeles Directory Co.

### 3455 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Smith M	Pacific Bell Yellow Pages
1977	Reilly Timothy	Pacific Telephone
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Baker J J	Luskeys Brothers & Co., Publishers

### 3456 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	GUJin	Haines & Company, Inc.
1990	Crone Wilson & Donna	Pacific Bell
1981	Choy Jose E	Pacific Telephone
1977	Santos Rixio	Pacific Telephone
1966	Lizarraga Garcia J Minerva 3456 Avocado Riv h 2 student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Moulyn R C	Luskeys Brothers & Co., Publishers

### 3459 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Cruz Joseph	Pacific Bell
1986	Cruz Joseph	Pacific Bell Yellow Pages
1981	Ibrahim Hassan S	Pacific Telephone
1977	Aborisade Ola	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Ames DD	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1955	Ames D D	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3460 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DEIK 6 Paul	Haines & Company, Inc.
	EIKEBe Vie	Haines & Company, Inc.
1990	Yamashita T	Pacific Bell
1981	Elugardo Ray	Pacific Telephone
1966	Adham Samy A Sohair 3460 Avocado Riv hi student UCR	Luskey Brothers & Company Inc.
1960	Sanders JC	Luskeys Brothers & Co., Publishers
1955	Ibarra David W	Luskeys Brothers & Co., Publishers
1945	Cox L E	Los Angeles Directory Co.

### 3461 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DIEGUEZJavier	Haines & Company, Inc.
1990	Abreu Jose	Pacific Bell
1986	Botto Eduardo N	Pacific Bell Yellow Pages
1981	Marquez Julio Alberto	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Records J H	Luskeys Brothers & Co., Publishers
1946	Thomas J H r	Southern California Telephone Company
1945	Thomas J H	Los Angeles Directory Co.

### 3462 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Gama De Lopez Lilia M	Pacific Bell
1986	Meyers R J	Pacific Bell Yellow Pages
1981	Bryat Affinita Hollowa	Pacific Telephone
	Bryant Vern	Pacific Telephone
1977	Owen Eric J	Pacific Telephone
1966	Ocana Gilberto Gladys 3462 Avocado Riv h student UCR	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Archibek P L	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1945	LMOen Bert	Los Angeles Directory Co.

### 3465 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LlChun Yan	Haines & Company, Inc.
1990	Rodriguez Gerardo	Pacific Bell
1981	Extine Douglas D	Pacific Telephone
1977	Grinyer Mark A	Pacific Telephone
1966	Brown Lon R Patricia 3465 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Archer RD	Luskeys Brothers & Co., Publishers
1955	Bailey S L	Luskeys Brothers & Co., Publishers
1945	Rainey Paul jr	Los Angeles Directory Co.

### 3466 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	All Anwar	Pacific Bell
1986	Vocal Oscar	Pacific Bell Yellow Pages
1981	Findsen Eric & Leonore	Pacific Telephone
1977	Buell Fredrick A	Pacific Telephone
1966	Daughheter Parker H Jr Bonnie 3466 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Zweibohmer G R	Luskeys Brothers & Co., Publishers
1946	Bastyr Tom G Lt r	Southern California Telephone Company
1945	Hughes J E	Los Angeles Directory Co.

### 3467 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Abreu Jose	Pacific Bell Yellow Pages
1981	Warrag MO	Pacific Telephone
1966	Abdelaziz Shawky A 3467 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Henry C D	Luskeys Brothers & Co., Publishers
1951	Klure Mack r	Los Angeles Directory Co.
1945	Bigger C W	Los Angeles Directory Co.

## FINDINGS

### 3468 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	QIUShenfeng	Haines & Company, Inc.
1996	Valenzuela Solano Cesar	Pacific Bell
1986	Immaraju John A	Pacific Bell Yellow Pages
1981	Youngman Rod & Cindy	Pacific Telephone
1977	Abdalla Yahia	Pacific Telephone
1966	Clark Leslie M 3468 Avocado Riv h student	Luskey Brothers & Company Inc.
1955	Grove Jack T	Luskeys Brothers & Co., Publishers
1945	Sheppard Marjorie Mrs	Los Angeles Directory Co.

### 3471 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Geary David & Leslie	Pacific Bell Yellow Pages
1981	Vaziri Ahmad	Pacific Telephone
1966	Kaufman Jeffrey A Diane 3471 Avocado Riv h 1 junior right of way	Luskey Brothers & Company Inc.
1960	Matern MV	Luskeys Brothers & Co., Publishers
1955	Saunders P F	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3472 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	WANG Liangwel	Haines & Company, Inc.
1986	Lie Wooyong	Pacific Bell Yellow Pages
1977	Habib Ghazi	Pacific Telephone
1966	Hawthorne Brian T Jacqueline 3472 Avocado Riv h 2 student	Luskey Brothers & Company Inc.
1960	Hall MO	Luskeys Brothers & Co., Publishers
1955	Jones Clinton T	Luskeys Brothers & Co., Publishers
1951	Tuft Theo O r	Los Angeles Directory Co.
1945	Thaemner E E	Los Angeles Directory Co.

### 3473 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	WANGYong	Haines & Company, Inc.
1981	Ahmedelowad Hassan Osman	Pacific Telephone
1977	Schuckman Richard	Pacific Telephone
1966	Hensley John W Diana 3473 Avocado Riv h 1 student	Luskey Brothers & Company Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Kearney JA	Luskeys Brothers & Co., Publishers
1955	Miller J M	Luskeys Brothers & Co., Publishers
1945	SSmith L D	Los Angeles Directory Co.

### 3474 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Weaver Kim & Sofia	Pacific Bell
1977	Muhalhal Mutawakel A	Pacific Telephone
1966	Jackson Warren C Margaret 3474 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Troxel R J	Luskeys Brothers & Co., Publishers
1945	Makovicka F J	Los Angeles Directory Co.

### 3476 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

### 3477 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Rouson S F	Pacific Telephone
1977	Mc Gregor Darlene E	Pacific Telephone
1966	Hunt Darrel W Faith 3477 Avocado Riv h 1 operator Linde Hydrogen	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Murphy John N	Luskeys Brothers & Co., Publishers
1951	Rainey Paul r	Los Angeles Directory Co.
1945	Leonard J M	Los Angeles Directory Co.

### 3478 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Marco Guillermo	Pacific Bell
1986	Marco Guillermo	Pacific Bell Yellow Pages
1966	Quezada Jose R Melba 3478 Avocado Riv h 2 student	Luskey Brothers & Company Inc.
1960	Crawford RB	Luskeys Brothers & Co., Publishers
1955	Bomar Robt N	Luskeys Brothers & Co., Publishers
1951	Doucette Arthur O r	Los Angeles Directory Co.

## FINDINGS

### 3479 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DEKKERTeunas	Haines & Company, Inc.
1990	Ibarra Perez Francisco	Pacific Bell
1981	Gomez Mendoza Rene	Pacific Telephone
1977	Pellissier Genelle	Pacific Telephone
1966	Mearns Sylvia S Mrs 3479 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Tighe JRP L	Luskeys Brothers & Co., Publishers
1955	Kooyman H A	Luskeys Brothers & Co., Publishers
1945	Funkhouser F J	Los Angeles Directory Co.

### 3480 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Stocks Peter M	Pacific Bell Yellow Pages
1981	Rottschaefer John	Pacific Telephone
1977	Shouse Pete	Pacific Telephone
1966	Mc Elroy Fred D Marilyn 3480 Avocado Riv h 3 student	Luskey Brothers & Company Inc.
1960	Jordan LS D	Luskeys Brothers & Co., Publishers
1955	Yeager A W	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3483 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	X 0 Zhengyuan	Haines & Company, Inc.
1996	Kaiser Robert	Pacific Bell
1990	Armmand Louis D	Pacific Bell
1981	Mirghan I Abdalla Mohamed	Pacific Telephone
1977	Mc Nitt John	Pacific Telephone
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.
1960	Alverson RL	Luskeys Brothers & Co., Publishers
1955	Gonzalez Manuel	Luskeys Brothers & Co., Publishers
1951	Clark Andrew M r	Los Angeles Directory Co.
1945	Stoddart W L	Los Angeles Directory Co.

### 3484 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PECK George	Haines & Company, Inc.
1996	Verroco P A	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Hernandez Veronica	Pacific Bell Yellow Pages
1977	Soriano Fernando	Pacific Telephone
1966	Cosgrove Richd A Loretta 3484 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Reinecke MG	Luskeys Brothers & Co., Publishers
1955	Mc Collum Neal	Luskeys Brothers & Co., Publishers
1951	Patterson Robt C Mrs r	Los Angeles Directory Co.
1945	Lee W J	Los Angeles Directory Co.

### 3485 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	WOODSIDE Christopher	Haines & Company, Inc.
1977	Fessenden Robt W	Pacific Telephone
1966	Sreeramulu Uddanapalli Rajamani 3485 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Hapgood RDI	Luskeys Brothers & Co., Publishers
1955	Ewe M J	Luskeys Brothers & Co., Publishers
1951	Woods Carl E r	Los Angeles Directory Co.

### 3486 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Elamin Elamin	Pacific Bell
1986	Lazier Loree	Pacific Bell Yellow Pages
	Lazcano Ignacio	Pacific Bell Yellow Pages
1981	Dhillon Major	Pacific Telephone
1977	Dhillon Major	Pacific Telephone
1966	Brown Herbt A Marion 3486 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Amador J W	Luskeys Brothers & Co., Publishers
1946	Kelnhofer John J r	Southern California Telephone Company
1945	Kelnhofer J J	Los Angeles Directory Co.

### 3489 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Bandy Anastasius Anastasia 3489 Avocado Riv h professor UCR	Luskey Brothers & Company Inc.
1960	Bandy AC D	Luskeys Brothers & Co., Publishers
1955	Harvey Paul N	Luskeys Brothers & Co., Publishers
1945	Emmett T G	Los Angeles Directory Co.

## FINDINGS

### 3490 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Van Heuklom Paul E & Iris	Pacific Bell Yellow Pages
1981	Davis Paul J	Pacific Telephone
1977	Davis Paul J	Pacific Telephone
1966	Hohlfeld Jas M Evelyn 3490 Avocado Riv hstudent	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Slabaugh E A	Luskeys Brothers & Co., Publishers
1946	Raby Merle r	Southern California Telephone Company
1945	Vacant	Los Angeles Directory Co.

### 3491 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Khattak Riaz A	Pacific Bell Yellow Pages
1981	Malley K	Pacific Telephone
1977	Bani Hani Mohammed	Pacific Telephone
1966	Mescherin Eug Xenia 3491 Avocado Riv hstudent	Luskey Brothers & Company Inc.
1960	Johnson HC	Luskeys Brothers & Co., Publishers
1955	Elliott J R	Luskeys Brothers & Co., Publishers
1951	Updegraff Leland B r	Los Angeles Directory Co.
1945	Iford K R	Los Angeles Directory Co.

### 3492 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Lewin M	Pacific Bell
1981	Flasted Carl	Pacific Telephone
1977	Young James C	Pacific Telephone
1966	Hopkins Wilhelmina M Mrs 3492 Avocado Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Mostert Gerrit	Luskeys Brothers & Co., Publishers
1951	Records Joe r	Los Angeles Directory Co.
1945	Currie L W	Los Angeles Directory Co.

### 3495 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Kwatata Moses B	Pacific Bell Yellow Pages



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Jensen Joe	Luskeys Brothers & Co., Publishers
1951	Greening Lowell H r	Los Angeles Directory Co.

### 3496 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Dellis C H	Luskeys Brothers & Co., Publishers
1945	Cole R E	Los Angeles Directory Co.

### 3497 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Belden Leslie	Pacific Bell
1977	Cerda Antonio	Pacific Telephone
1966	Schulz Lee H Alice 3497 Avocado Riv h laby technician UCR	Luskey Brothers & Company Inc.
	Palmer John P Gloria 3497 Avocado Riv 82 6158 h 2 student UCR	Luskey Brothers & Company Inc.
1960	Austin SW V	Luskeys Brothers & Co., Publishers
1955	Woods C E	Luskeys Brothers & Co., Publishers
1945	Lawson R V	Los Angeles Directory Co.

### 3498 AVOCADO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	UCR Housing Ofc 3498 Avocado St Riv Lloyd R Jones administrator	Luskey Brothers & Company Inc. Luskey Brothers & Company Inc.
1960	Griffin AL	Luskeys Brothers & Co., Publishers
1955	Hiton Philip	Luskeys Brothers & Co., Publishers
1951	Whipple Martha A r	Los Angeles Directory Co.

### AVOCADO ST

#### 3403 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Stewart Harold T r	Southern California Telephone Company

#### 3411 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Bushell Leonard A r	Southern California Telephone Company

## FINDINGS

### 3418 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Brown Virgil L r	Southern California Telephone Company

### Avocado St

### 3421 Avocado St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	UC RIVERSIDE	EDR Digital Archive
	UC RIVERSIDE	EDR Digital Archive

### AVOCADO ST

### 3423 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Mc Carthy R C r	Southern California Telephone Company

### 3430 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Tyler Betty Voss r	Los Angeles Directory Co.
1946	Tyler Betty Voss r	Southern California Telephone Company

### 3444 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Ganahl John T r	Southern California Telephone Company

### 3449 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Seely Marian r	Southern California Telephone Company

### 3450 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Squadriile Edw r	Southern California Telephone Company

### 3456 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Poor Richard D r	Los Angeles Directory Co.

## FINDINGS

### Avocado St

#### 3459 Avocado St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	JIDE SOFTWARE INC	EDR Digital Archive
	JIDE SOFTWARE INC	EDR Digital Archive
2005	JIDE SOFTWARE INC	EDR Digital Archive
	JIDE SOFTWARE INC	EDR Digital Archive

### AVOCADO ST

#### 3459 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Marshall Morris r	Los Angeles Directory Co.

#### 3462 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Lee Wallace J r	Los Angeles Directory Co.

#### 3468 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Sheppard R B Mrs r	Southern California Telephone Company

#### 3480 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Arrieta Mark B r	Los Angeles Directory Co.

#### 3486 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Swor J H r	Los Angeles Directory Co.

#### 3489 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Emmitt T G r	Southern California Telephone Company

#### 3497 AVOCADO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Lawson Katherine r	Southern California Telephone Company

## FINDINGS

### **CAMPUS VIEW DR**

#### **425 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1966	Ray Jack E 425 Campus View Dr Riv h custodian UCR	Luskey Brothers & Company Inc.

#### **434 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2002	Beckwith G	SBC PACIFIC BELL
1996	Beckwith G	Pacific Bell
1981	Moore L Bingesser	Pacific Telephone
1977	Gemmell Thos J Jr	Pacific Telephone
1966	Foley Wm H Jr Joan 434 Campus View Dr Riv h 2 student	Luskey Brothers & Company Inc.

#### **435 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1966	Whitmore Carl W Elsie 435 Campus View Dr Riv h checker Foremost	Luskey Brothers & Company Inc.

#### **466 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2002	Kasper Wm S S	SBC PACIFIC BELL
1996	Kasper Wm S	Pacific Bell
1966	Russell Jeffrey B Diana 466 Campus View Dr h 3 asst professor UC	Luskey Brothers & Company Inc.

#### **478 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1966	De Rose Francis A Loretta 478 Campus View Dr Riv h	Luskey Brothers & Company Inc.

#### **481 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1966	Tuntland Marshall E Betty 481 Campus View Dr Riv h 2 USAF	Luskey Brothers & Company Inc.

#### **488 CAMPUS VIEW DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2002	Januszewski Victor C	SBC PACIFIC BELL
1966	Ballard John T Ruth 488 Campus View Dr Riv h 2 electrician	Luskey Brothers & Company Inc.

## FINDINGS

### 500 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Corona Frank Mary 500 Campus View Dr Riv h teacher Colton High	Luskey Brothers & Company Inc.

### 511 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Callaway Mel W Mary 511 Campus View Dr Riv h 2 district sales ma	Luskey Brothers & Company Inc.

### 518 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Taylor John W Donna 518 Campus View Dr Riv h 2 electronic techni	Luskey Brothers & Company Inc.

### 530 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Stout Melvin L Carole 530 Campus View Dr Riv h 1 senior orchardi	Luskey Brothers & Company Inc.

### 531 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Hice Edw D	SBC PACIFIC BELL
1996	Hice Edw D	Pacific Bell
1966	Hice Chas A Phyllis 531 Campus View Dr Riv h 5 director Municipa	Luskey Brothers & Company Inc.

### 548 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Babcock Jas	SBC PACIFIC BELL
	Babcock Jas	SBC PACIFIC BELL
1996	Babcock Jas	Pacific Bell
1977	Granett Andrew L	Pacific Telephone
1966	Smith Don K Norma 548 Campus View Dr Riv h 4 employee Calif Wate	Luskey Brothers & Company Inc.

### 556 CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Hanson Mark	Pacific Telephone
1966	Thomas Vernon C Mona 556 Campus View Dr Riv h 1 Major USAF	Luskey Brothers & Company Inc.

## FINDINGS

### FLORENCE ST

#### 3471 FLORENCE ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Bonanno Philip L r	Los Angeles Directory Co.

#### 3493 FLORENCE ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Alexander M G r	Los Angeles Directory Co.

### FLORIDA

#### 3458 FLORIDA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ganguli Subhadra	SBC PACIFIC BELL

#### 3459 FLORIDA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Kohil Jasleen	SBC PACIFIC BELL

#### 3460 FLORIDA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Grantcharov Dimitar	SBC PACIFIC BELL

#### 3475 FLORIDA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Kim Seongyup	SBC PACIFIC BELL

#### 3479 FLORIDA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Chen Gang	SBC PACIFIC BELL

### FLORIDA AVE

#### 3458 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Mills KR	Luskeys Brothers & Co., Publishers
1955	Meyer J G	Luskeys Brothers & Co., Publishers
1945	Underwood J K	Los Angeles Directory Co.

## FINDINGS

### 3459 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Yung Kung H ing Yuet Wo 3459 Florida Riv h 2 student	Luskey Brothers & Company Inc.
1960	Brandon WD	Luskeys Brothers & Co., Publishers
1955	Curlee W A	Luskeys Brothers & Co., Publishers
1945	Puliafco Anna Mrs	Los Angeles Directory Co.

### 3460 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Schwartz Marc M Nancy 3460 Florida Riv h	Luskey Brothers & Company Inc.
1960	Mitchell PS	Luskeys Brothers & Co., Publishers
1955	Woepse W R	Luskeys Brothers & Co., Publishers
1945	Gilliard G E	Los Angeles Directory Co.

### 3475 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Niblett Chas L Tiffany 3475 Florida Riv h 1 student	Luskey Brothers & Company Inc.
1960	Cotton JL	Luskeys Brothers & Co., Publishers
1955	Mc Mahan B B	Luskeys Brothers & Co., Publishers
1945	Donnelly Robt	Los Angeles Directory Co.

### 3479 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Schultz Franklin A 3479 Florida Riv h student	Luskey Brothers & Company Inc.
1960	Hotchkiss CW	Luskeys Brothers & Co., Publishers
1955	Perdue B D C	Luskeys Brothers & Co., Publishers
1945	Krul Jac Jos	Los Angeles Directory Co.

### 3481 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Cooper Alan F Alice 3481 Florida Riv h 2 student	Luskey Brothers & Company Inc.
1960	Mc Kean DW	Luskeys Brothers & Co., Publishers
1955	Hadley Mary W	Luskeys Brothers & Co., Publishers
1945	Hadley Vernon	Los Angeles Directory Co.

### 3489 FLORIDA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	No Return	Luskey Brothers & Company Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Min 5 Attempts Made	Luskey Brothers & Company Inc.
1960	Krieg BL	Luskeys Brothers & Co., Publishers
1955	Kreg B L	Luskeys Brothers & Co., Publishers
1945	Runde Carl	Los Angeles Directory Co.

### **FLORIDA CT**

#### **3458 FLORIDA CT**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Mc Laughlin John R	Pacific Telephone

#### **3459 FLORIDA CT**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Johnson Edw L V	Pacific Telephone

#### **3460 FLORIDA CT**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Norland R Lee	Pacific Telephone

#### **3481 FLORIDA CT**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Beck Patricia	Pacific Telephone

#### **3489 FLORIDA CT**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Devine Richard W	Pacific Telephone

### **FLORIDA ST**

#### **3459 FLORIDA ST**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

#### **3460 FLORIDA ST**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	GRANTCHAROVDimdlar	Haines & Company, Inc.

#### **3475 FLORIDA ST**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CHOIYoon Gr	Haines & Company, Inc.



## FINDINGS

### 3479 FLORIDA ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CHENGang	Haines & Company, Inc.

### 3481 FLORIDA ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Cardon Grant E	Pacific Bell

### 3487 FLORIDA ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

### 3489 FLORIDA ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	GUT 1 ERREZDavI la Imelda	Haines & Company, Inc. Haines & Company, Inc.

## IDAHO

### 3344 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Atkinson E Ronald	Pacific Telephone

### 3359 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Sharma Ram Sewark	SBC PACIFIC BELL
1970	Perkes Robt R	Pacific Telephone

### 3360 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Tian Jianjun	SBC PACIFIC BELL
1970	Sullard John	Pacific Telephone

### 3361 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Robinson Rebecca N	SBC PACIFIC BELL
1970	Ballard Teresa	Pacific Telephone
	Ballard Art	Pacific Telephone

## FINDINGS

### 3364 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Xu Zhong	SBC PACIFIC BELL
1970	Henry Rustie	Pacific Telephone

### 3370 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Liu Jing Chun	SBC PACIFIC BELL
1970	Evans Larry L	Pacific Telephone

### 3371 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Rauch Peter A	Pacific Telephone

### 3374 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Yin Bei	SBC PACIFIC BELL
1970	Osborn Terry W	Pacific Telephone

### 3379 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Culver Dennis	Pacific Telephone

### 3380 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Carreon Phillip	Pacific Telephone

### 3381 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Sutton Robt W	Pacific Telephone

### 3384 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Jinwu Ma	SBC PACIFIC BELL
1970	Amtower Richard E III	Pacific Telephone

### 3388 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Han Ju	SBC PACIFIC BELL
1970	Volek John	Pacific Telephone

## FINDINGS

### 3392 IDAHO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Brook Ezriel M	Pacific Telephone

### IDAHO AVE

#### 3344 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Werth Ronald N Elizabeth 3344 Idaho Riv h professor	Luskey Brothers & Company Inc.
1960	Herman Richd	Luskeys Brothers & Co., Publishers
1955	Stanfield Clarence	Luskeys Brothers & Co., Publishers
1945	Delfs Gus	Los Angeles Directory Co.

#### 3359 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.
1960	Barrett MR	Luskeys Brothers & Co., Publishers
1955	Barrett Marvin R	Luskeys Brothers & Co., Publishers
1945	Peterson Raymond	Los Angeles Directory Co.

#### 3360 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Passenheim Burr C 3360 Idaho Riv h student	Luskey Brothers & Company Inc.
1960	Kray LR	Luskeys Brothers & Co., Publishers
1955	Ellis C C	Luskeys Brothers & Co., Publishers

#### 3361 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Dollwet Helmar H Mildred 3361 Idaho Riv h 3 student	Luskey Brothers & Company Inc.
1960	Brownen HM	Luskeys Brothers & Co., Publishers
1955	Brownen Hershel	Luskeys Brothers & Co., Publishers
1945	Marsh Norma Mrs	Los Angeles Directory Co.

#### 3364 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Biever K Duane Verna 3364 Idaho Riv h 2 student	Luskey Brothers & Company Inc.
1960	Amdahl DL	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1955	Amdahl D L	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3369 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Adams Jas E Carole 3369 Idaho Riv h 4 student	Luskey Brothers & Company Inc.
1960	Anderson DC Jr	Luskeys Brothers & Co., Publishers
1955	Hogan C W	Luskeys Brothers & Co., Publishers

### 3370 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Hiuchan Steph E Anne 3370 Idaho Riv h 2 student	Luskey Brothers & Company Inc.
1960	Greening RE	Luskeys Brothers & Co., Publishers
1955	Baxter V W Jr	Luskeys Brothers & Co., Publishers
1945	Crawford J R	Los Angeles Directory Co.

### 3371 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Page J Malcolm Angela 3371 Idaho Riv h 2 student	Luskey Brothers & Company Inc.
1960	Cook DN	Luskeys Brothers & Co., Publishers
1955	Mc Callion W J	Luskeys Brothers & Co., Publishers

### 3374 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Walker Craig P Barbara 3374 Idaho Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Kniss J M	Luskeys Brothers & Co., Publishers
1945	Mc Millan D L	Los Angeles Directory Co.

### 3379 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Stone Dennis M 3379 Idaho Riv h student	Luskey Brothers & Company Inc.
1960	Allen GC	Luskeys Brothers & Co., Publishers
1955	Baber K L	Luskeys Brothers & Co., Publishers
1945	Black A R	Los Angeles Directory Co.

## FINDINGS

### 3380 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Sadovski Arie Y Irith 3380 Idaho Riv hstudent	Luskey Brothers & Company Inc.
1960	Blocher JM	Luskeys Brothers & Co., Publishers
1955	Rogers L L	Luskeys Brothers & Co., Publishers
1945	Hodge Don	Los Angeles Directory Co.

### 3381 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Wheelan Wr P 3381 Idaho Riv h student	Luskey Brothers & Company Inc.
1960	Collins DJ	Luskeys Brothers & Co., Publishers
1955	Knoble W	Luskeys Brothers & Co., Publishers

### 3384 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Levine JM	Luskeys Brothers & Co., Publishers
1955	Parri Joe	Luskeys Brothers & Co., Publishers
1945	Good C J	Los Angeles Directory Co.

### 3388 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Ross Gregory D Elizabeth 3388 Idaho Riv h student	Luskey Brothers & Company Inc.
1960	Martin RD	Luskeys Brothers & Co., Publishers
1955	Pritchett L A	Luskeys Brothers & Co., Publishers
1945	Pritchett L A	Los Angeles Directory Co.

### 3392 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Harvey Chas E Jean 3392 Idaho Riv h 3 student	Luskey Brothers & Company Inc.
1960	Needham RL	Luskeys Brothers & Co., Publishers
1955	Jones D E	Luskeys Brothers & Co., Publishers
1945	Hawthorne C D	Los Angeles Directory Co.

### 3397 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Rauch Peter A Ines 3397 Idaho Riv h 2 student	Luskey Brothers & Company Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Edwards WT	Luskeys Brothers & Co., Publishers
1955	Walters R L	Luskeys Brothers & Co., Publishers
1945	Simms C C	Los Angeles Directory Co.

### 3398 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Wright Forrest Edna 3398 Idaho Riv h USA	Luskey Brothers & Company Inc.
1960	Hogan CA Mrs	Luskeys Brothers & Co., Publishers
1955	Simms Claude C	Luskeys Brothers & Co., Publishers
1945	LDuggins J A	Los Angeles Directory Co.

### 3399 IDAHO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	h 2 teacher Alvord School District	Luskey Brothers & Company Inc.
	Kasperick Jos E Mary 3399 Idaho Riv	Luskey Brothers & Company Inc.
1960	Mc Laurin JW	Luskeys Brothers & Co., Publishers
1955	Locke Jack T	Luskeys Brothers & Co., Publishers
1945	Bowers W W	Los Angeles Directory Co.

## IDAHO ST

### 3344 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Zhou Zhong Guo	Pacific Bell
1986	Van Every Kenneth W	Pacific Bell Yellow Pages
1981	Roach Robt D	Pacific Telephone
1977	Jacobs Jeff	Pacific Telephone
1951	Sterner Mary r	Los Angeles Directory Co.
	Delfs Gus r	Los Angeles Directory Co.
1946	Delfs Gus r	Southern California Telephone Company

### 3359 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Archibald Allene	Pacific Bell Yellow Pages
1981	Turpin B	Pacific Telephone
1977	Washburn Gary M	Pacific Telephone
1951	Schultz Paul r	Los Angeles Directory Co.

## FINDINGS

### 3360 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Maestas Dennis	Pacific Bell Yellow Pages
1981	Pliego Fernando	Pacific Telephone
1977	Pliego Fernando	Pacific Telephone
1951	Hall Chas r	Los Angeles Directory Co.
1946	Kjolseth John r	Southern California Telephone Company

### 3361 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Melgar Marlo	Pacific Bell
1986	Hull Steven & Louise	Pacific Bell Yellow Pages
1981	Boyt David & Diane	Pacific Telephone
1977	Marin Wilson	Pacific Telephone

### 3364 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XUZhong	Haines & Company, Inc.
1986	Dary Omar	Pacific Bell Yellow Pages
1981	Brice Keith M	Pacific Telephone

### 3369 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Lazcano Ignacio	Pacific Bell
1981	Gomez Roberto	Pacific Telephone
1977	Talcott Jas E	Pacific Telephone
1951	Mc Intyre Walter r	Los Angeles Directory Co.

### 3370 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Wakayama Toshihiro	Pacific Bell Yellow Pages
1981	Woods Johnnie	Pacific Telephone
1977	Millhouse David E	Pacific Telephone
1951	Soto Frank G r	Los Angeles Directory Co.

### 3371 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Hirsch Howard W r	Southern California Telephone Company

## FINDINGS

### 3374 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Anderson Michael E	Pacific Bell
1986	Anderson Michael E	Pacific Bell Yellow Pages
1981	Ferguson Jas J	Pacific Telephone
1977	Ferguson Jas J	Pacific Telephone
1951	Zippler Warren F r	Los Angeles Directory Co.
1946	Nogle W S r	Southern California Telephone Company

### 3379 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PAEChan Woo	Haines & Company, Inc.
1990	Parks Brian & Cheryl	Pacific Bell
1986	Rodriguez Martha H	Pacific Bell Yellow Pages
1981	Duffie S	Pacific Telephone
1977	Dunn Donald	Pacific Telephone
1951	Baird Geo H Jr r	Los Angeles Directory Co.

### 3380 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Gold S	Pacific Bell
1981	Moussavi Saadat	Pacific Telephone
1977	Baham John	Pacific Telephone
1951	Arnold Robt J r	Los Angeles Directory Co.
1946	Hyman Ray r	Southern California Telephone Company

### 3381 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Kaloostlan Geo	Pacific Bell Yellow Pages
	Kalnin Peter Wayne	Pacific Bell Yellow Pages
1981	Ghaly Fatma M	Pacific Telephone
1977	Tse P K	Pacific Telephone

### 3384 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	0 NWUMa	Haines & Company, Inc.
1990	Abdelbagi Azharti	Pacific Bell
1981	Tomlinson Edward L Jr	Pacific Telephone
1977	Figueroa Alfred R	Pacific Telephone
1951	Miller Dorothy Mae r	Los Angeles Directory Co.
1946	Russell V G r	Southern California Telephone Company



## FINDINGS

### 3388 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Keating Terry	Pacific Bell
1986	Hampton Michael	Pacific Bell Yellow Pages
1951	Pritchett L A r	Los Angeles Directory Co.

### 3392 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Khawaja Zia	Pacific Bell
1990	IDAHO Ng Daniel Y	Pacific Bell Pacific Bell
1986	Rust Richard R & Laura	Pacific Bell Yellow Pages
1977	Hayward John C	Pacific Telephone
1951	Fulton Leslie W r	Los Angeles Directory Co.

### 3393 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

### 3397 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LITianran	Haines & Company, Inc.
1990	Alsewailen Mohamed	Pacific Bell
1981	Moeller Curt	Pacific Telephone
1977	Moeller Curt	Pacific Telephone
1946	Simms Claude C r	Southern California Telephone Company

### 3398 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Kim Chang Yub	Pacific Bell
1986	Murphy Michelle Murphy Mike	Pacific Bell Yellow Pages Pacific Bell Yellow Pages
1981	Mc Elroy S	Pacific Telephone
1977	Davooddzadeh Jalal	Pacific Telephone

### 3399 IDAHO ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	BRUNSSTEINLuis F PENDLETONJared PENDLETON Debl	Haines & Company, Inc. Haines & Company, Inc. Haines & Company, Inc.
1996	Dimitrov Ivan	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Mc Junkin Roy	Pacific Bell Yellow Pages
1981	Goodell Peter	Pacific Telephone
1977	Alvarado R	Pacific Telephone
1951	Mayer Clyde C r	Los Angeles Directory Co.

### LINDEN

#### 721 LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Xu Zhao Hui	SBC PACIFIC BELL

#### 743 LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Carlson D	SBC PACIFIC BELL

#### 749 LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Flowers Jeanine	SBC PACIFIC BELL

#### 755 LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Perez Irais	SBC PACIFIC BELL

### LINDEN ST

#### 387 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1925	Vacant	Los Angeles Directory Co.

#### 395 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1925	Newton W S	Los Angeles Directory Co.
	cor Gage Canal Brittain G N	Los Angeles Directory Co.
	Dunlap C E	Los Angeles Directory Co.
	cor Blaine Field Wm	Los Angeles Directory Co.

#### 500 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Schoonover Myrtle 500 Linden Riv h head resident Lothian Hall	Luskey Brothers & Company Inc.
	Myrtle Schoonover head resident	Luskey Brothers & Company Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	UCR Lothian Res Hall Wing B 500 Linden Riv	Luskey Brothers & Company Inc.
	UCR Lothian Res Hall Wing A 500 Linden Riv Mrs Marie Jones head	Luskey Brothers & Company Inc.

### 640 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	UCRAberdeenInverness Res Wing A 640 Linden Riv Mrs Edna E Burn h	Luskey Brothers & Company Inc.
	UCR AberdeenInverness Res Wing D 640 Linden Riv Irene Thompson h	Luskey Brothers & Company Inc.
	Myrtle Schoonover head resident	Luskey Brothers & Company Inc.
	UCR AberdeenInverness Res Wing E 640 Linden Riv Irene Thompson h	Luskey Brothers & Company Inc.
	Rojas Santiago 640 Linden Riv h director Casa Hispanica UCR	Luskey Brothers & Company Inc.
	Richard Irene 640 Linden Riv h directress of Maison Fmancaise UC	Luskey Brothers & Company Inc.
	UCRAberdeenInverness Res Wing B 640 Linden Rjy Marjorie G Best he	Luskey Brothers & Company Inc.

### 684 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1946	Simmons Vergil N Maj r	Southern California Telephone Company

### 685 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Taylor Clifford C 685 Linden Riv h student	Luskey Brothers & Company Inc.

### 686 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Washington WI I lie	Luskeys Brothers & Co., Publishers
1951	Allsup Jack r	Los Angeles Directory Co.

### 687 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.

### 690 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Whitlock WO V	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Myers Ray E r	Los Angeles Directory Co.

### 692 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Osborne AD	Luskeys Brothers & Co., Publishers

### 720 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1951	Hunter E T r	Los Angeles Directory Co.
1945	Price R D	Los Angeles Directory Co.

### 721 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Boyle John F 721 Lindenjdvh student	Luskey Brothers & Company Inc.

### 722 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1951	Evans Arthur Jr r	Los Angeles Directory Co.
1945	Hewitt Theo	Los Angeles Directory Co.

### 723 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Lin Jin Song	Pacific Bell
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.

### 730 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Jordan EM	Luskeys Brothers & Co., Publishers
1951	Nicol Jas Jr r	Los Angeles Directory Co.
1945	Wilson Kenneth	Los Angeles Directory Co.

### 731 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Yount Larry 0 Patricia 731 Linden Riv h student	Luskey Brothers & Company Inc.

## FINDINGS

### 732 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1945	De Lara Chas	Los Angeles Directory Co.

### 733 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Chiou Chwei L Flora 733 Linden Riv h 1 student	Luskey Brothers & Company Inc.

### 740 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Hess LD	Luskeys Brothers & Co., Publishers
1945	Roachelle G W	Los Angeles Directory Co.

### 741 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Simonaitis Romualdas Helen 741 Linden Riv h I student	Luskey Brothers & Company Inc.

### 742 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Bowen WR	Luskeys Brothers & Co., Publishers
1945	Morr R R	Los Angeles Directory Co.

### 743 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Jones Reeves Vera	Pacific Bell
1966	Mitschele C Jonathan Diann 743 Linden Riv h I student	Luskey Brothers & Company Inc.

### 746 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Rhoades GD D	Luskeys Brothers & Co., Publishers
1945	Fischer E J	Los Angeles Directory Co.

### 747 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Vacant	Luskey Brothers & Company Inc.
	Location Not Occupied	Luskey Brothers & Company Inc.

## FINDINGS

### 748 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Brown JT	Luskeys Brothers & Co., Publishers
1951	Osborn Paul r	Los Angeles Directory Co.
1946	Lewis Ben P Sgt r	Southern California Telephone Company
1945	Lewis B P	Los Angeles Directory Co.

### 749 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Hermanson Harvey P Maria 749 Linden Riv h l enton Rologist UCR	Luskey Brothers & Company Inc.

### 752 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Vacant	Luskeys Brothers & Co., Publishers
1951	Henson Earchel N r	Los Angeles Directory Co.
1946	Sollinger Al Dee r	Southern California Telephone Company
1945	Sollinger A D	Los Angeles Directory Co.

### 753 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Costa Jefferson & Giselle	Pacific Bell
1966	Gregorich David T Karen 753 Linden Riv h 1 student	Luskey Brothers & Company Inc.

### 754 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Chapman RW	Luskeys Brothers & Co., Publishers
1951	Griffin Wm R r	Los Angeles Directory Co.
1945	Hall W M	Los Angeles Directory Co.

### 755 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Mouat Andrew	Pacific Bell

### 756 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Canyon Crest Nursery School	Southern California Telephone Company

### 870 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Kane A M r	Los Angeles Directory Co.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Kane A M r	Southern California Telephone Company
1945	Karf A M	Los Angeles Directory Co.
	Kane A M	Los Angeles Directory Co.

### 874 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Anderson Gloria r	Los Angeles Directory Co.
1945	Clay R C	Los Angeles Directory Co.

### 876 LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Gray Hardy K r	Los Angeles Directory Co.
1945	Hastings J M	Los Angeles Directory Co.

### Pentland Way

#### 1 Pentland Way

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive
2010	CRAM MAGAZINE	EDR Digital Archive
	SOCAL DISTRIBUTOR	EDR Digital Archive

### PLUM

#### 806 PLUM

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Coviella Carlos E	SBC PACIFIC BELL
1970	Carew Thos J	Pacific Telephone
	Carew Mary Jo	Pacific Telephone

#### 808 PLUM

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kadish A Ron	Pacific Telephone

### PLUM ST

#### 806 PLUM ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	COVIELLACarlos E	Haines & Company, Inc.
1996	Coviella Carlos E	Pacific Bell
1986	Fonseca Raymond	Pacific Bell Yellow Pages

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Gould Rligny S	Pacific Telephone
1977	Stucker Bruce W	Pacific Telephone
1966	Vacant Location Not Occupied	Luskey Brothers & Company Inc. Luskey Brothers & Company Inc.
1960	Bates Ellz R	Luskeys Brothers & Co., Publishers
1955	Hale F M	Luskeys Brothers & Co., Publishers
1946	Satterfield Clara L r	Southern California Telephone Company
1945	Vacant	Los Angeles Directory Co.

### 808 PLUM ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Ameen Nasir	Pacific Telephone
1977	Stival Gayle	Pacific Telephone
1966	Kadish Amram Shifra 808 Plum Riv h 3 student	Luskey Brothers & Company Inc.
1960	Wong Po Ping V	Luskeys Brothers & Co., Publishers
1955	Voorhees C L	Luskeys Brothers & Co., Publishers
1951	Cornell Wm G r	Los Angeles Directory Co.

### 811 PLUM ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Epstein Gary M Marsha 811 Plum Riv h student	Luskey Brothers & Company Inc.

### University

#### 900 University

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SCNCESTECH UCR CAMPUS HEALTH	Haines & Company, Inc.
	UCRGRADSCOFMNG	Haines & Company, Inc.
	UCR PLANNING	Haines & Company, Inc.
	DEANS OFC UCRGRADSCOFMNG	Haines & Company, Inc.
	PHOTO UCR PARKING SERVICE	Haines & Company, Inc.
	UCRSTDNTBSNS	Haines & Company, Inc.
	UNIV OF CALIFORNIA	Haines & Company, Inc.
	UCRACCOUNT 1 NB	Haines & Company, Inc.
	UNDRGRD	Haines & Company, Inc.
	UCR ALUMNI RELATION	Haines & Company, Inc.
	UCR ART GALLERY	Haines & Company, Inc.
	UCRASC	Haines & Company, Inc.



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	ASUCR UCRASCSTDNT W	Haines & Company, Inc.
	PBLCN	Haines & Company, Inc.
	UCRATHLTCS 909 7 S 7 M	Haines & Company, Inc.
	NTRCLG UCRBANNOCKBUBN	Haines & Company, Inc.
	VILLAGE&PLAZA	Haines & Company, Inc.
	UCR BOOKSTORE 909 7 W	Haines & Company, Inc.
	UCRCA COUNCIL ON	Haines & Company, Inc.
	DAY OR NIGHT 9 CR CAREER PLCMNT	Haines & Company, Inc.
	UCR CAREER SMMR	Haines & Company, Inc.
	EMP UCR CAREER SVCT	Haines & Company, Inc.
	MBA BUS ADMIN UCR CAREER SVS INFO	Haines & Company, Inc.
	UCR CHANCELLOR	Haines & Company, Inc.
	FC UCR COOP EXTENSION	Haines & Company, Inc.
	UCR CULTURAL	Haines & Company, Inc.
	EVENTS UCREDUCSC	Haines & Company, Inc.
	GRADUATE	Haines & Company, Inc.
	PROGRAMS UCREDUCSCTCHNG	Haines & Company, Inc.
	EXTENSION CONTINUI	Haines & Company, Inc.
	NGEDUC UCR FINANCIALAID	Haines & Company, Inc.
	UCR FN ARTS TICKET	Haines & Company, Inc.
	UCRGRADDIV	Haines & Company, Inc.
	ADMSS	Haines & Company, Inc.
	UCR GRADDIV DEAN	Haines & Company, Inc.
	STDNTSAFFR UCR HUMAN	Haines & Company, Inc.
	RESOURCES UCR HUMAN RSRC OFC	Haines & Company, Inc.
	BENEFITS UCR HUMAN RSRC OFC	Haines & Company, Inc.
	EMPLOYMENT UCR INFOTELENMBRS	Haines & Company, Inc.
	UCR INTL EDUC PRORM	Haines & Company, Inc.
	UCR INTERNATIONAL	Haines & Company, Inc.
	s VCT UCRLBRYADMIN	Haines & Company, Inc.
	UCR LBRY CIRCULATN	Haines & Company, Inc.
	UCR LBRY MUSIC	Haines & Company, Inc.
	UCR LBRY REFERENCE	Haines & Company, Inc.
	CR LIBRARIES	Haines & Company, Inc.
	CR LOAN	Haines & Company, Inc.
	COLLECTION UCR MUSEUM OF	Haines & Company, Inc.
	UCR PHYSICALPLANT	Haines & Company, Inc.
	DESIGNSCONSTR UCR POLICE	Haines & Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	UCR PURCHASING	Haines & Company, Inc.
	UCRREC	Haines & Company, Inc.
	ABERDN UCR RES HALL LOTHN	Haines & Company, Inc.
	UCRRGSTRAR	Haines & Company, Inc.
	UCR RGSTRAR	Haines & Company, Inc.
	TRNSCPT UCRRLTNS	Haines & Company, Inc.
	TRANSFERORE ENTRY	Haines & Company, Inc.
	SV UCR RLTNS WITH SC	Haines & Company, Inc.
	UCRSERV&GENINFO	Haines & Company, Inc.
	SERV UCRSTTWDEAIR	Haines & Company, Inc.
	UCR STUDENT	Haines & Company, Inc.
	UCR SUMMER SESSION	Haines & Company, Inc.
	UCR 4 H PROGRAM	Haines & Company, Inc.
	UCRADMSSNS	Haines & Company, Inc.
	CRDNTLPRGRM UCR	Haines & Company, Inc.
	NTRAMURALS UCR RES HALL	Haines & Company, Inc.
	NTRAMURALS UCR RES HALL	Haines & Company, Inc.
WEALTH CODE	Haines & Company, Inc.	
1990	UNIVERSITY OF CALIFORNIA RIVERSIDE	Pacific Bell
1986	RIVE RS IDE	Pacific Bell Yellow Pages
	A Dial	Pacific Bell Yellow Pages
	ACCOUN TIN G	Pacific Bell Yellow Pages
	ADMIS S ION S UN DE RGRADUATE	Pacific Bell Yellow Pages
	ARCHITE CTS & E N GIN E E RS	Pacific Bell Yellow Pages
	AS UCR Office	Pacific Bell Yellow Pages
	Art Rental Library	Pacific Bell Yellow Pages
	Publications Highlander	Pacific Bell Yellow Pages
	ATHLE TICS IN TE RCOLLE GIATE	Pacific Bell Yellow Pages
	BAN N OCKBURN IN FORMATION	Pacific Bell Yellow Pages
	BOOKS TORE	Pacific Bell Yellow Pages
	BUS IN E S S OFFICE CHE CKS LOAN S	Pacific Bell Yellow Pages
	PHOTOGRAPHY	Pacific Bell Yellow Pages
	CAMPUS ACTIVITIE S	Pacific Bell Yellow Pages
	HOUS IN G	Pacific Bell Yellow Pages
	Academic Internship Center	Pacific Bell Yellow Pages
	Career Positions	Pacific Bell Yellow Pages
	Cooperative Education Center	Pacific Bell Yellow Pages
	Employment	Pacific Bell Yellow Pages

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	CATE RIN G	Pacific Bell Yellow Pages
	COOPE RATIVE E XTE N S ION	Pacific Bell Yellow Pages
	FE DE RAL	Pacific Bell Yellow Pages
	E DUCATION AL PLACE ME N T	Pacific Bell Yellow Pages
	FIN AN CIAL AID	Pacific Bell Yellow Pages
	GRADUATE DIVI SION	Pacific Bell Yellow Pages
	HOUS IN G IN FORMATION	Pacific Bell Yellow Pages
	ADMIN IS TRATION	Pacific Bell Yellow Pages
	N UMBE RS	Pacific Bell Yellow Pages
	IN TE N S IVE E N GLIS H PROGRAM	Pacific Bell Yellow Pages
	IN TRAMURAL S PORTS	Pacific Bell Yellow Pages
	JOB OPE N IN G IN FORMATION S TAFF	Pacific Bell Yellow Pages
	Hours Information	Pacific Bell Yellow Pages
	Circulation	Pacific Bell Yellow Pages
	Reference	Pacific Bell Yellow Pages
	Circulation	Pacific Bell Yellow Pages
	Reference	Pacific Bell Yellow Pages
	Media Library	Pacific Bell Yellow Pages
	Music Library	Pacific Bell Yellow Pages
	Physical Sciences Library	Pacific Bell Yellow Pages
	OFFICE	Pacific Bell Yellow Pages
	Materiel Manager	Pacific Bell Yellow Pages
	Property	Pacific Bell Yellow Pages
	Purchasing	Pacific Bell Yellow Pages
	Receiving	Pacific Bell Yellow Pages
	ME DIA RE S OURCE S	Pacific Bell Yellow Pages
	COMMUN ICATION S	Pacific Bell Yellow Pages
	OFFICE OF THE CHAN CE LLOR	Pacific Bell Yellow Pages
	PARKIN G S E RVICE	Pacific Bell Yellow Pages
	PRE S E N TATION S	Pacific Bell Yellow Pages
	PE RS ON N E L OFFICE S TAFF	Pacific Bell Yellow Pages
	PHYS ICAL E DUCATION DE PT	Pacific Bell Yellow Pages
	PHYS ICAL PLAN T DE PT	Pacific Bell Yellow Pages
	World Affairs Council University Of California Riverside	Pacific Bell Yellow Pages
	World Airways Inc Reservations & Information	Pacific Bell Yellow Pages
	No Charge To Calling Party	Pacific Bell Yellow Pages
	No Charge To Calling Party	Pacific Bell Yellow Pages

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	No Charge To Calling Party	Pacific Bell Yellow Pages
	BUS IN E S S E RVICE S OFFICE	Pacific Bell Yellow Pages
	Storehouse	Pacific Bell Yellow Pages
	KUCR	Pacific Bell Yellow Pages
	E DUCATION	Pacific Bell Yellow Pages
	Reserve Book Room	Pacific Bell Yellow Pages
	UN IVE RS ITY OF CALIFORN IA RIVE RS IDE Contd	Pacific Bell Yellow Pages
1981	UN IVE RS ITY OF CAUFORN IA	Pacific Telephone
	World Affairs Council University Of California Riverside	Pacific Telephone
	Pixley John B	Pacific Telephone
1977	Nichols Harvey A Co	Pacific Telephone
	Smith Elden L	Pacific Telephone
	World Affairs Council University Of California Riverside	Pacific Telephone
	UN IVE RS ITY OF CALIFORN IA	Pacific Telephone

### UTAH

#### 3333 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Goughnour Thos P	Pacific Telephone

#### 3334 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Tejada Luis O	Pacific Telephone

#### 3337 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Burch Archie K	Pacific Telephone

#### 3338 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Willis John W	Pacific Telephone

#### 3341 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kram S Edw	Pacific Telephone

## FINDINGS

### 3344 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Horst Ben L	Pacific Telephone
	Horst Ronna J	Pacific Telephone

### 3346 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Andreasen Dale	Pacific Telephone
	Andreasen Susan	Pacific Telephone

### 3348 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Chung Howard	Pacific Telephone

### 3350 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Perrin Tim	Pacific Telephone

### 3351 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Jacobs Jesse	Pacific Telephone

### 3352 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Mc Dermott Edw J	Pacific Telephone
	Mc Dermott Kathleen	Pacific Telephone

### 3353 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Olson Robt	Pacific Telephone

### 3354 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kinjo Toshie	Pacific Telephone
	Kinjo Toshiaki	Pacific Telephone

### 3356 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Covington D E	Pacific Telephone
	Covington K D	Pacific Telephone

## FINDINGS

### 3359 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Barton Richard	Pacific Telephone

### 3360 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Mc Hugh J A	Pacific Telephone

### 3363 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Black Wm E	Pacific Telephone

### 3364 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Myrtle Jas F	Pacific Telephone

### 3367 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Spafford David C	Pacific Telephone

### 3368 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Blackburn Michael N	Pacific Telephone

### 3372 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kilpatrick Brian	Pacific Telephone

### 3375 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kaae Richard S	Pacific Telephone

### 3376 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Guyer David L	Pacific Telephone

### 3379 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Wild Jas R	Pacific Telephone

### 3380 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Mohammed Eltayeb	Pacific Telephone

## FINDINGS

### 3384 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Grumet Stanley	Pacific Telephone

### 3385 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Bertolini Andrea	Pacific Telephone

### 3388 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Peacock Kenneth J	Pacific Telephone

### 3392 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Scragg Carl K	Pacific Telephone

### 3395 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Engquist Rexford P	Pacific Telephone
	Engquist Vicky	Pacific Telephone

### 3396 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Baker John L	Pacific Telephone

### 3397 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Schulze Wm	Pacific Telephone

### 3398 UTAH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Wouts W M	Pacific Telephone

## UTAH AVE

### 3334 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1996	Ashley Denise	Pacific Bell
1990	Mallick N & Basanti	Pacific Bell
1981	Gutierrez Tony & Olivia	Pacific Telephone
1977	Said Abdel Gaffar	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Froehlich Jeffery W Patricia 3334 Utah Riv h 2 student	Luskey Brothers & Company Inc.
1960	Satuloff MB	Luskeys Brothers & Co., Publishers
1955	Spees J H	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3337 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Roshell Ericka	SBC PACIFIC BELL
1986	Reyes Arnel P	Pacific Bell Yellow Pages
1977	Thompson Stephen C	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Tarvyd ES	Luskeys Brothers & Co., Publishers
1955	Danford Chas	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3338 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Mascaro Patrick	Pacific Bell Yellow Pages
	Mascari Lawrence Anthony	Pacific Bell Yellow Pages
1981	Case Judd & Sandra	Pacific Telephone
1977	Shelton Tony M	Pacific Telephone
1966	Babcock Elkanah A Gail 3338 Utah Riv h I student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	OShaughnessy Mary	Luskeys Brothers & Co., Publishers
1945	Blackie W C	Los Angeles Directory Co.

### 3341 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Xu Huayang	SBC PACIFIC BELL
1981	Sudduth Klinger J	Pacific Telephone
1977	Tibbs Dean	Pacific Telephone
1966	Donahue Danl H Madeline 3341 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Ot Jen EE	Luskeys Brothers & Co., Publishers
1955	Orr M K	Luskeys Brothers & Co., Publishers
1945	Cain E	Los Angeles Directory Co.



## FINDINGS

### 3342 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Dong Aneli	SBC PACIFIC BELL
	Chen Yi	SBC PACIFIC BELL
2001	WANGAi JUn	Haines & Company, Inc.
1986	Hawkins Laneika A	Pacific Bell Yellow Pages
1981	Fisher Eric & Jan	Pacific Telephone
1977	Rollins ML	Pacific Telephone
1966	Fuentes Santiago Victoria 3342 Utah Riv h 2 student	Luskey Brothers & Company Inc.
1960	Gove ME O	Luskeys Brothers & Co., Publishers
1955	Wyant D L	Luskeys Brothers & Co., Publishers
1945	Vacant	Los Angeles Directory Co.

### 3344 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Salih Ahmed Ali	Pacific Telephone
1977	Johnson Jeffery L	Pacific Telephone
1966	Zhang Hwe i Heh 3344 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Smith R A	Luskeys Brothers & Co., Publishers
1945	Hoseay A B	Los Angeles Directory Co.

### 3346 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Cheng Jing Rong	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.
1966	Hays Gerald N Diana 3346 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Clark Lloyd A	Luskeys Brothers & Co., Publishers

### 3348 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Laude David Jr	Pacific Bell Yellow Pages
1981	Jeon Hong	Pacific Telephone
1977	Soto Andres L	Pacific Telephone
1966	Roig Virgilio G 3348 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Ash C R	Luskeys Brothers & Co., Publishers

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1945	Peterson S	Los Angeles Directory Co.

### 3350 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Jia Li	SBC PACIFIC BELL
2001	JIALi	Haines & Company, Inc.
1990	Lee Keunnmyoung	Pacific Bell
1986	Johnson Albert & Yvonne	Pacific Bell Yellow Pages
1981	Andrews A W	Pacific Telephone
	Boldridge David W	Pacific Telephone
1977	Patterson Thos L	Pacific Telephone
1966	Alixopuios Hedrick R Janet 3350 Utah Riv t 2 student	Luskey Brothers & Company Inc.
1960	Meyer RW	Luskeys Brothers & Co., Publishers
1955	El Ani A S	Luskeys Brothers & Co., Publishers

### 3351 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ramirez Jose	SBC PACIFIC BELL
1986	Woolls Richard	Pacific Bell Yellow Pages
1981	Swanson T A	Pacific Telephone
1977	Kei Myoung Sun	Pacific Telephone
1960	Houk HW	Luskeys Brothers & Co., Publishers
1955	Resh J C	Luskeys Brothers & Co., Publishers

### 3352 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Mc Crackin Deysi	SBC PACIFIC BELL
2001	MCCRACKINDeysl G S	Haines & Company, Inc.
1981	Forand Roger & Denise	Pacific Telephone
1977	Mackuliak Timmothy	Pacific Telephone
1966	Gray Robt T Regina 3352 Utah Riv hi teacher Jurupa School Distri	Luskey Brobts & Company Inc.
1960	Lantz RM	Luskeys Brothers & Co., Publishers
1955	Lupinacci J P	Luskeys Brothers & Co., Publishers
1945	Cook J H	Los Angeles Directory Co.

### 3353 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Curtin Michael	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Huerta Gerty	Pacific Bell Yellow Pages
	Huerta Alfredo J	Pacific Bell Yellow Pages
1981	Huerta Alfredo J	Pacific Telephone
1977	Koonce Stephen A	Pacific Telephone
1966	Harris Franklin W Boonchira 3353 Utah Riv h l student	Luskey Brothers & Company Inc.
1960	Battles JV	Luskeys Brothers & Co., Publishers
1955	Harman D H	Luskeys Brothers & Co., Publishers
1945	Ede Belle Mrs	Los Angeles Directory Co.

### 3354 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Liu Ping	SBC PACIFIC BELL
2001	Lt UPmi	Haines & Company, Inc.
1990	Cuff Bradley & Sharon	Pacific Bell
1986	Foster Scott	Pacific Bell Yellow Pages
	Willis Foster S E	Pacific Bell Yellow Pages
	Willis Harold & Lois	Pacific Bell Yellow Pages
1981	Ahmed Syed I	Pacific Telephone
1960	Roberts JB	Luskeys Brothers & Co., Publishers
1955	Loveless Ellis Jr	Luskeys Brothers & Co., Publishers

### 3356 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Lin Chen	SBC PACIFIC BELL
2001	ZHANTianzhi	Haines & Company, Inc.
1990	Tinder S	Pacific Bell
1986	Case Judd	Pacific Bell Yellow Pages
	Power J D	Pacific Bell Yellow Pages
1966	Lewenberg Henry M Harriet 3356 Utah Riv h 1 student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Kessell J F C	Luskeys Brothers & Co., Publishers

### 3359 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Liu Guanzhi	SBC PACIFIC BELL
2001	ZHAOYong	Haines & Company, Inc.
1990	Hargis Craig	Pacific Bell
1981	Payne Bill & Eileene	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1977	Carroll Devin P	Pacific Telephone
	Carroll Claire	Pacific Telephone
1966	Dinger Robt J Char Lou 3359 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Nelson JB	Luskeys Brothers & Co., Publishers
1955	Smith Leon M C	Luskeys Brothers & Co., Publishers
1945	Shirley A W A 0 Zylman Geo	Los Angeles Directory Co.

### 3360 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Luo Lang	SBC PACIFIC BELL
1986	Maldini Edward	Pacific Bell Yellow Pages
	Malcuit John W	Pacific Bell Yellow Pages
1981	Chen Han Tower	Pacific Telephone
1966	Coleby Arth W Jennifer 3360 Utah Riv h i student UCR	Luskey Brothers & Company Inc.
1960	Warren RCJr	Luskeys Brothers & Co., Publishers
1955	Warren R C Jr	Luskeys Brothers & Co., Publishers
1945	Anderson H L	Los Angeles Directory Co.

### 3363 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Dawson Kevin & Diane	Pacific Bell
1986	Dawson Kevin & Diane	Pacific Bell Yellow Pages
1981	Dacy Patric G	Pacific Telephone
1966	Joshi Martand S 3363 Utah Riv h laboratory technician UCR	Luskey Brothers & Company Inc.
	Burk Francis E Janet 3363 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Walker RH	Luskeys Brothers & Co., Publishers
1955	Huard Donald F	Luskeys Brothers & Co., Publishers
1945	Cadd WA	Los Angeles Directory Co.

### 3364 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Kim Jung Kwan	SBC PACIFIC BELL
1996	Kim Jung Kwan	Pacific Bell
1977	Langenwalter Paul	Pacific Telephone
1966	Wimberly Francis C Joanna 3364 Utah Riv hi student UCR	Luskey Brothers & Company Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Browning BR	Luskeys Brothers & Co., Publishers
1955	Jones F W C	Luskeys Brothers & Co., Publishers
1945	Mansell A C jr	Los Angeles Directory Co.

### 3367 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	WENZELRyan	Haines & Company, Inc.
1986	Moncrieff Scott	Pacific Bell Yellow Pages
1966	Whitehead Warren C 3367 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Secord ODB	Luskeys Brothers & Co., Publishers
1955	Hammes J K	Luskeys Brothers & Co., Publishers

### 3368 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Davis B	SBC PACIFIC BELL
2001	LINChlung Yuan	Haines & Company, Inc.
1996	Sprenkle Gregory S	Pacific Bell
1986	Ibarra Jorge E	Pacific Bell Yellow Pages
1966	Baker Blair C Marie 3368 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Thill RS	Luskeys Brothers & Co., Publishers
1955	Harmor Ralph D Jr	Luskeys Brothers & Co., Publishers
1945	Hanks Virgil	Los Angeles Directory Co.

### 3372 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Borg Kevin & Jere	Pacific Bell Yellow Pages
	Borg S J	Pacific Bell Yellow Pages
1981	Sesma Michael A	Pacific Telephone
1977	Pomeroy L V	Pacific Telephone
1966	Huntley Howard H La Vonne 3372 Utah Riv h	Luskey Brothers & Company Inc.
1960	Bjorge EJ	Luskeys Brothers & Co., Publishers
1955	Carruthers Philp	Luskeys Brothers & Co., Publishers
1945	Smith W	Los Angeles Directory Co.

### 3375 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1981	Peterson V A	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Brink John 0 Jr Evangeline 3375 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Pruyn HP	Luskeys Brothers & Co., Publishers
1955	Pruyn Harry	Luskeys Brothers & Co., Publishers

### 3376 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Alva Shelly	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.
1981	Maksimuk V	Pacific Telephone
1977	Milbauer John	Pacific Telephone
1966	Hall Jas E Jean 3376 Utah Riv h student UCR	Luskey Brothers & Company Inc.
1960	Hill TG	Luskeys Brothers & Co., Publishers
1955	Brown L L Mrs	Luskeys Brothers & Co., Publishers

### 3379 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1996	Cook Matt & Lilliana	Pacific Bell
1981	Ferrer Hermes	Pacific Telephone
1977	Adepoju Yinka	Pacific Telephone
1966	Bownds John M Lynne 3379 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Geary DS	Luskeys Brothers & Co., Publishers
1955	Pugh A L	Luskeys Brothers & Co., Publishers

### 3380 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	Suarez D M	Pacific Bell
1981	Suliman Adam Sallam	Pacific Telephone
1977	Ray AK	Pacific Telephone
1966	Learned Robt E Abby 3380 Utah Riv h 2 student	Luskey Brothers & Company Inc.
1960	Johnson EF	Luskeys Brothers & Co., Publishers
1955	Johnson J L	Luskeys Brothers & Co., Publishers
1945	Lovell C C	Los Angeles Directory Co.

### 3384 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Barrera Evangelina	SBC PACIFIC BELL

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CHENYu Chang	Haines & Company, Inc.
1981	Gronlie Neal B	Pacific Telephone
1977	Daniell Fred	Pacific Telephone
1966	Goolsby Alvin D 3384 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Hygh EH	Luskeys Brothers & Co., Publishers
1955	Johnson C J Mrs	Luskeys Brothers & Co., Publishers

### 3385 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Knop Patricia C	Pacific Telephone
1977	Terry Mike	Pacific Telephone
1960	Fladung JJ	Luskeys Brothers & Co., Publishers
1955	Fladung John J	Luskeys Brothers & Co., Publishers

### 3388 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1966	Keller John M Bonnie 3388 Utah Riv h teacher Moreno Valley High	Luskey Brothers & Company Inc.
1960	Kauffman GB Mrs	Luskeys Brothers & Co., Publishers
1955	Latham O R	Luskeys Brothers & Co., Publishers

### 3391 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Roh Young Jae	SBC PACIFIC BELL
2001	GUAZZOTTI Sergis	Haines & Company, Inc.
1986	Thiaw Samba	Pacific Bell Yellow Pages
1981	Cavender Gary L	Pacific Telephone
1977	Moore RM	Pacific Telephone
1966	Vasvada Ravindra C 3391 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Robison NL	Luskeys Brothers & Co., Publishers
1955	Cleary Shirley W Mrs	Luskeys Brothers & Co., Publishers
1945	Cleary W F	Los Angeles Directory Co.

### 3392 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Mounzer Maroun	Pacific Bell Yellow Pages
1981	Cart D L & C K	Pacific Telephone
1977	Armstrong Jas D	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Fudlallah Abdel S Nawal 3392 Utah Riv h 1 student	Luskey Brothers & Company Inc.
1960	Swanson AJ	Luskeys Brothers & Co., Publishers
1955	Milner Edwin W	Luskeys Brothers & Co., Publishers
1945	Grober V B	Los Angeles Directory Co.

### 3394 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	KIMJung Kwan	Haines & Company, Inc.

### 3395 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1996	Yan Jin	Pacific Bell
1986	Hossain Mokerrom	Pacific Bell Yellow Pages
	Hossein Shojaallah	Pacific Bell Yellow Pages
	Hossler Hal H	Pacific Bell Yellow Pages
	Hossler Mary Beth	Pacific Bell Yellow Pages
1981	Hossain Mokerrom	Pacific Telephone
1977	Chaney Dan S	Pacific Telephone
1966	Guyer De Wayne Cheryl 3395 Utah Riv h 1 driver United Parcel Ser	Luskey Brothers & Company Inc.
1960	Sportel WG	Luskeys Brothers & Co., Publishers
1955	Sportel W G	Luskeys Brothers & Co., Publishers
1945	FPoster Ruby	Los Angeles Directory Co.

### 3396 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Miller Bryan & Shelli	SBC PACIFIC BELL
2001	MILLER Bryan	Haines & Company, Inc.
	MILLER Shelli	Haines & Company, Inc.
1990	Velasquez Enrique L	Pacific Bell
1986	Aidaoud R	Pacific Bell Yellow Pages
1981	Ojala John C	Pacific Telephone
1977	Fanusie Cynthia D	Pacific Telephone
1966	Crawford Timothy S Linda 3396 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Buchanan HF	Luskeys Brothers & Co., Publishers
1955	Terpack Virgil L	Luskeys Brothers & Co., Publishers
1945	Ness E W	Los Angeles Directory Co.



## FINDINGS

### 3397 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Anderson Mark & Norma	SBC PACIFIC BELL
2001	ANDERSON orma ANDERSONMark	Haines & Company, Inc. Haines & Company, Inc.
1990	Newton T	Pacific Bell
1981	Herreid Todd & Mary	Pacific Telephone
1977	Balestrero Robt	Pacific Telephone
1966	Culver Wm W Carman 3397 Utah Riv h student	Luskey Brothers & Company Inc.
1960	Vacant	Luskeys Brothers & Co., Publishers
1955	Wells Wm R	Luskeys Brothers & Co., Publishers
1945	Taylor Ida	Los Angeles Directory Co.

### 3398 UTAH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SHENJun J	Haines & Company, Inc.
1990	Hicks D & R	Pacific Bell
1986	Hicks D & R	Pacific Bell Yellow Pages
1981	Shu Boo Yau	Pacific Telephone
1977	Koester Martha K	Pacific Telephone
1966	Location Not Occupied Vacant	Luskey Brothers & Company Inc. Luskey Brothers & Company Inc.
1960	Francisco RM	Luskeys Brothers & Co., Publishers
1955	Vacant	Luskeys Brothers & Co., Publishers
1945	Fleming J B	Los Angeles Directory Co.

### UTAH ST

#### 3334 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Thornal R B Lt r	Southern California Telephone Company

#### 3337 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Wilson F B r	Los Angeles Directory Co.
1946	Pilant A B r	Southern California Telephone Company

#### 3338 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Geshay R J r	Los Angeles Directory Co.

## FINDINGS

### 3341 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Himes Albert A r	Los Angeles Directory Co.

### 3342 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Galloway Cecil J Jr r	Los Angeles Directory Co.

### 3344 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Petty Raymond H r	Los Angeles Directory Co.
1946	Petty Raymond H r	Southern California Telephone Company

### 3346 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Clark Lloyd A r	Los Angeles Directory Co.

### 3348 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Schwartz Martin r	Los Angeles Directory Co.

### 3350 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Nosser Mary Ellen Mrs r	Los Angeles Directory Co.
1946	Gray H K r	Southern California Telephone Company

### 3352 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Cook Jas H Jr Lt r	Southern California Telephone Company

### 3353 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Crothers Saml H r	Los Angeles Directory Co.

### 3354 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Tait H T r	Los Angeles Directory Co.
1946	Tait H T r	Southern California Telephone Company

### 3356 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Yates Floyd B r	Los Angeles Directory Co.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Vysekal Vincent B r	Southern California Telephone Company

### 3359 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Withey C W r	Los Angeles Directory Co.

### 3363 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Fournier Annette r	Los Angeles Directory Co.

### 3364 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Mansell Arthur C Jr r	Southern California Telephone Company

### 3367 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Bennett Keith r	Los Angeles Directory Co.

### 3368 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Hanks Virgil Sgt r	Southern California Telephone Company

### 3372 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Smith Walter D r	Southern California Telephone Company

### 3375 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Spickelmire David L r	Los Angeles Directory Co.
1946	Fleischman A E Capt r	Southern California Telephone Company

### 3379 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Sherlock E A r	Los Angeles Directory Co.
1946	Sherlock E A r	Southern California Telephone Company

### 3385 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Fladung J J r	Los Angeles Directory Co.

## FINDINGS

### 3388 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1946	Whitmer Chas D r	Southern California Telephone Company

### 3391 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Cleary Shirley M r	Los Angeles Directory Co.
1946	Cleary Walter F r	Southern California Telephone Company

### Utah St

#### 3392 Utah St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	UCR	EDR Digital Archive
	UCR	EDR Digital Archive

### UTAH ST

#### 3397 UTAH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1951	Wells Wm R r	Los Angeles Directory Co.

### W CAMPUS VIEW DR

#### 425 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	RAY Dorothy	Haines & Company, Inc.
1990	Ray Jack E	Pacific Bell
1986	Ray Jack E	Pacific Bell Yellow Pages
1981	Ray Jack E	Pacific Telephone
1977	Ray Jack E	Pacific Telephone

#### 434 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	BECKWITHG	Haines & Company, Inc.
	MOORE L Bingesser	Haines & Company, Inc.
1990	Beckwith G	Pacific Bell
1986	Beckwith G	Pacific Bell Yellow Pages
	Moore L Bingesser	Pacific Bell Yellow Pages
	Moore Landscaping	Pacific Bell Yellow Pages
1981	Beckwith G	Pacific Telephone

## FINDINGS

### 435 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LETEYJohn	Haines & Company, Inc.

### 446 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	VARGAS Anthony	Haines & Company, Inc.

### 466 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	KASPERWm S 909 68 B 7703	Haines & Company, Inc.
1990	Kasper Wm S	Pacific Bell
1986	Kasper Wm S	Pacific Bell Yellow Pages
1981	Kasper Wm S	Pacific Telephone

### 478 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	MANNJohn C	Haines & Company, Inc.
1986	Beaver Rex A	Pacific Bell Yellow Pages
1981	Beaver P	Pacific Telephone
	Brown Doug	Pacific Telephone

### 481 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SONDERLANDKennih	Haines & Company, Inc.
	WITTY James H	Haines & Company, Inc.
1990	Allen Jason	Pacific Bell
	Creamer David	Pacific Bell
1986	Mc Nair Jas E	Pacific Bell Yellow Pages
1981	Mc Nair Jas E	Pacific Telephone
1977	Mc Nair ME	Pacific Telephone

### 488 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	JANUSZEWSKI Victor C	Haines & Company, Inc.
1986	Seguin Fred T III	Pacific Bell Yellow Pages
	Segrist D E	Pacific Bell Yellow Pages
1981	Segrist D E	Pacific Telephone
1977	Segrist D E	Pacific Telephone

## FINDINGS

### 489 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PADILLANicholas	Haines & Company, Inc.
1990	Paulos Steve	Pacific Bell
1981	De Young Louis	Pacific Telephone

### 500 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CORONA Frank	Haines & Company, Inc.

### 511 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CALLAWAYMelvin	Haines & Company, Inc.
1990	Callaway Mel	Pacific Bell
1986	Callaway Mel	Pacific Bell Yellow Pages
1981	Callaway Mel	Pacific Telephone

### 518 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	MILLER Donald	Haines & Company, Inc.
1986	Miller Donald F	Pacific Bell Yellow Pages
	Miller Donna L	Pacific Bell Yellow Pages
1981	Miller Donald F	Pacific Telephone
1977	Miller Donald F	Pacific Telephone

### 530 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DUPREECarole	Haines & Company, Inc.

### 531 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	9 HICE Edw D	Haines & Company, Inc.
1990	Hice Edw D	Pacific Bell
1986	i Hice Edw D	Pacific Bell Yellow Pages
1981	Hice Edw D	Pacific Telephone
1977	Hice Chas A	Pacific Telephone

### 548 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	BABCOCKJas	Haines & Company, Inc.
	BABCOCKJas	Haines & Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Babcock Jas	Pacific Bell
1986	Babcock Jas	Pacific Bell Yellow Pages
1981	Babcock Jas	Pacific Telephone

### 556 W CAMPUS VIEW DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HANSONMark	Haines & Company, Inc.
1990	Hanson Mark	Pacific Bell
1986	Hanson Mark	Pacific Bell Yellow Pages
1977	Hanson Mark	Pacific Telephone

### W LINDEN

#### 687 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Lefevre Stephen	Pacific Telephone

#### 721 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Yousif Yousif	Pacific Telephone

#### 723 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Schiffer Joshua	Pacific Telephone

#### 731 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Wilson Bart H	Pacific Telephone

#### 733 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Sharma Ravindra	Pacific Telephone
	Sharma Nirmala	Pacific Telephone

#### 741 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Casals Pedro	Pacific Telephone

#### 743 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Mitschele Diann	Pacific Telephone

## FINDINGS

### 747 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Jackson Anne	Pacific Telephone
	Jackson Andrew	Pacific Telephone

### 749 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Groven Blair E	Pacific Telephone

### 753 W LINDEN

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Jalyesimi O	Pacific Telephone

### W LINDEN ST

#### 5 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	YOUNG YUJu	Haines & Company, Inc.

#### 9 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HUYNHTruong	Haines & Company, Inc.
	MENDEZEloy	Haines & Company, Inc.
	SONKyung Dong	Haines & Company, Inc.
	SANABRIADerly	Haines & Company, Inc.
	RODRIGUEZJesus	Haines & Company, Inc.

#### 17 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HERNANDEZJose V	Haines & Company, Inc.

#### 24 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HERNANDEZJuan M	Haines & Company, Inc.

#### 28 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LOVEAsall	Haines & Company, Inc.
	PAC PROPERTY	Haines & Company, Inc.
	ROSASJose	Haines & Company, Inc.
	SOLISLorenzo Albedlo	Haines & Company, Inc.
	TURNER Sonny J 90D	Haines & Company, Inc.



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LARAHumber Oo R	Haines & Company, Inc.
	ASSETTS ROMERO Valttrln	Haines & Company, Inc.

### 640 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1977	Batavia Andrew	Pacific Telephone

### W Linden St

#### 680 W Linden St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	RESEARCH GENIUS	EDR Digital Archive
	RESEARCH GENIUS	EDR Digital Archive

### W LINDEN ST

#### 687 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Narayan B	Pacific Bell
1981	Lim M C	Pacific Telephone
1977	Evans Fred L	Pacific Telephone

### W Linden St

#### 691 W Linden St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive
2010	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
2005	UNIVERSITY CAL AT RIVERSIDE	EDR Digital Archive
	UNIVERSITY CAL AT RIVERSIDE	EDR Digital Archive
2001	X 0 XX	Haines & Company, Inc.
1986	KUCR Radio	Pacific Bell Yellow Pages
1981	KUCR Radio	Pacific Telephone

## FINDINGS

### **W LINDEN ST**

#### **721 W LINDEN ST**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2001	XXXX	Haines & Company, Inc.
1986	Jo Nam Jong	Pacific Bell Yellow Pages
1977	Lee Ing Ming	Pacific Telephone

#### **723 W LINDEN ST**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2001	XXXX	Haines & Company, Inc.
1986	Gomez Jorge	Pacific Bell Yellow Pages
1981	A velais R	Pacific Telephone
1977	Sullivan Patrick J	Pacific Telephone

### **W Linden St**

#### **731 W Linden St**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2005	BLAND INVESTMENTS	EDR Digital Archive
	BLAND INVESTMENTS	EDR Digital Archive

### **W LINDEN ST**

#### **731 W LINDEN ST**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1977	Geene Christofer R	Pacific Telephone

#### **733 W LINDEN ST**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1986	Dickerson Scott & Pam	Pacific Bell Yellow Pages
1981	Wever Kurt A	Pacific Telephone
1977	Beavis Dana	Pacific Telephone

#### **741 W LINDEN ST**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1986	Haney Phillip & Francesca	Pacific Bell Yellow Pages
1981	Cadatal Tom	Pacific Telephone
1977	Teixeira Silvio	Pacific Telephone

## FINDINGS

### 743 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	CARLSOND	Haines & Company, Inc.
1990	Carpenter D	Pacific Bell
1986	Carpenter D	Pacific Bell Yellow Pages
1981	Gonzalez Alejandro	Pacific Telephone

### 747 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Smith C M Jr	Pacific Bell Yellow Pages
	Smith CM	Pacific Bell Yellow Pages
1977	Bouscaren Stephen	Pacific Telephone

### 749 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1990	Mc Hau Godwin	Pacific Bell
1981	Quinones Hector	Pacific Telephone
1977	Kubow Richard	Pacific Telephone

### 753 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Treadway Russell M	Pacific Bell Yellow Pages
	Treadway MA	Pacific Bell Yellow Pages
1981	Moraes Jose Francisco V	Pacific Telephone
1977	Stahly Geraldine Butts	Pacific Telephone

### 755 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Mayhew Robt C	Pacific Telephone
1977	Hernandez Joe	Pacific Telephone

### 12508 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DALETamiko	Haines & Company, Inc.

### 12576 W LINDEN ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PEREZ Golndo Marco A	Haines & Company, Inc.

## FINDINGS

### Watkins Dr

#### 3333 Watkins Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
2010	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive
2005	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive

#### 3401 Watkins Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2014	UCR BOTANY AND PLANT SCIENCES	EDR Digital Archive	
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive	
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive	
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive	
	RICHARD STOUTHAMER	EDR Digital Archive	
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive	
	UNIVERSITY OFCA RVRSIDE ALUM	EDR Digital Archive	
	UNIVERSITY CAL RIVERSIDE	EDR Digital Archive	
	UCR BOTANY AND PLANT SCIENCES	EDR Digital Archive	
	RICHARD STOUTHAMER	EDR Digital Archive	
	2010	RICHARD STOUTHAMER	EDR Digital Archive
		NEW CREATIONS BUILDERS	EDR Digital Archive
		INTERNATIONAL SOC CITRICULTURE	EDR Digital Archive
		UCR BOTANY AND PLANT SCIENCES	EDR Digital Archive
UNIVERSITY CAL RIVERSIDE		EDR Digital Archive	
UNIVERSITY CAL RIVERSIDE		EDR Digital Archive	
UNIVERSITY CAL RIVERSIDE		EDR Digital Archive	
MUSIC LIBRARY		EDR Digital Archive	
RICHARD STOUTHAMER		EDR Digital Archive	
MUSIC LIBRARY		EDR Digital Archive	
UNIVERSITY CAL RIVERSIDE	EDR Digital Archive		
UNIVERSITY CAL RIVERSIDE	EDR Digital Archive		
UNIVERSITY CAL RIVERSIDE	EDR Digital Archive		

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	NEW CREATIONS BUILDERS	EDR Digital Archive
	INTERNATIONAL SOC CITRICULTURE	EDR Digital Archive
	UCR BOTANY AND PLANT SCIENCES	EDR Digital Archive
2005	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive
	REGENTS OF THE UNIV OF CAL	EDR Digital Archive

## FINDINGS

### TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

#### Address Researched

Linden St

#### Address Not Identified in Research Source

2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

### ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

#### Address Researched

1 Pentland Way

#### Address Not Identified in Research Source

2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

1 Pentland Way

2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

100 Aberdeen Drive

2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

12508 W LINDEN ST

2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

12576 W LINDEN ST

2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

17 W LINDEN ST

2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

24 W LINDEN ST

2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

28 W LINDEN ST

2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

3333 UTAH

2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

3333 Watkins Dr

2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

3333 Watkins Dr

2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

## FINDINGS

### **Address Researched**

### **Address Not Identified in Research Source**

3334 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3334 UTAH AVE	2014, 2010, 2005, 2002, 1993, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3334 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3337 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3337 UTAH AVE	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1981, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3337 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3338 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3338 UTAH AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3338 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3341 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3341 UTAH AVE	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3341 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3342 UTAH AVE	2014, 2010, 2005, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3342 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3344 IDAHO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3344 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3344 IDAHO ST	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3344 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3344 UTAH AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921







## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3363 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3363 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 IDAHO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 IDAHO ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 UTAH AVE	2014, 2010, 2005, 2001, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3364 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3367 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3367 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3367 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3368 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3368 UTAH AVE	2014, 2010, 2005, 1993, 1990, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3368 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3369 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3369 IDAHO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3370 IDAHO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3370 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3370 IDAHO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921





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### Address Researched

### Address Not Identified in Research Source

3388 IDAHO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3388 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3388 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3388 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3391 UTAH AVE	2014, 2010, 2005, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3391 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 IDAHO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 IDAHO ST	2014, 2010, 2005, 2002, 2001, 1993, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 Utah St	2014, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3392 Utah St	2014, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3393 IDAHO ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3394 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3395 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3395 UTAH AVE	2014, 2010, 2005, 2002, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3396 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3396 UTAH AVE	2014, 2010, 2005, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3397 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3397 IDAHO ST	2014, 2010, 2005, 2002, 1996, 1993, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3397 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3397 UTAH AVE	2014, 2010, 2005, 1996, 1993, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3397 UTAH ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3398 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3398 IDAHO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3398 UTAH	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3398 UTAH AVE	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3399 IDAHO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3399 IDAHO ST	2014, 2010, 2005, 2002, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3401 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3401 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3401 Watkins Dr	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3401 Watkins Dr	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3402 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3402 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3403 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3403 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3403 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3404 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3404 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3408 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3408 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3411 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3411 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3411 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3412 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3412 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3413 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3413 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3414 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3414 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3418 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3418 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3418 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3421 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3421 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1986, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3421 Avocado St	2014, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3421 Avocado St	2014, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3422 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3422 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3423 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3423 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3423 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3424 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3424 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3428 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3430 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3430 AVOCADO AVE	2014, 2010, 2005, 2002, 1993, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3430 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3433 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3433 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3436 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3436 AVOCADO AVE	2014, 2010, 2005, 2002, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3438 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3438 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3442 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3442 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921







## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3460 FLORIDA AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3460 FLORIDA CT	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3460 FLORIDA ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3461 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3461 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1977, 1970, 1967, 1961, 1956, 1951, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3462 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3462 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3462 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3465 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3465 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1986, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3466 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3467 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3467 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3468 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3468 AVOCADO AVE	2014, 2010, 2005, 2002, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3468 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3471 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3471 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3471 FLORENCE ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921



## FINDINGS

### Address Researched

### Address Not Identified in Research Source

3480 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3480 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3480 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3481 FLORIDA AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3481 FLORIDA CT	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3481 FLORIDA ST	2014, 2010, 2005, 2002, 1996, 1993, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3483 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3483 AVOCADO AVE	2014, 2010, 2005, 2002, 1993, 1986, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3484 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3484 AVOCADO AVE	2014, 2010, 2005, 2002, 1993, 1990, 1981, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3485 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3485 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1956, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3486 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3486 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1961, 1956, 1951, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3486 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3487 FLORIDA ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3489 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3489 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3489 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

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### **Address Researched**

### **Address Not Identified in Research Source**

3489 FLORIDA AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3489 FLORIDA CT	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3489 FLORIDA ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3490 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3490 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3491 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3492 AVOCADO	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3492 AVOCADO AVE	2014, 2010, 2005, 2002, 1996, 1993, 1986, 1970, 1967, 1961, 1956, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3493 FLORENCE ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3495 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3495 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1981, 1977, 1970, 1967, 1961, 1956, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3496 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3497 AVOCADO	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3497 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1986, 1981, 1970, 1967, 1961, 1956, 1951, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3497 AVOCADO ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3498 AVOCADO AVE	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3500 Canyon Crest Drive	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
387 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1924, 1921
395 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1924, 1921







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### **Address Researched**

### **Address Not Identified in Research Source**

686 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
687 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
687 W LINDEN	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
687 W LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
690 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
691 W Linden St	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
691 W Linden St	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
691 W Linden St	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
692 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
720 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
721 LINDEN	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
721 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
721 W LINDEN	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
721 W LINDEN ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
722 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
723 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
723 W LINDEN	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921





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### Address Researched

### Address Not Identified in Research Source

755 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
755 W LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
756 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
806 PLUM	2014, 2010, 2005, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
806 PLUM ST	2014, 2010, 2005, 2002, 1993, 1990, 1970, 1967, 1961, 1956, 1951, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
808 PLUM	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
808 PLUM ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
811 PLUM ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
870 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
874 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
876 LINDEN ST	2014, 2010, 2005, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1946, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
9 W LINDEN ST	2014, 2010, 2005, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
900 University	2014, 2010, 2005, 2002, 1996, 1993, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

## **APPENDIX D**

### **Regulatory Records Documentation**

**American Campus Phase 1A**

Linden St

Riverside, CA 92507

Inquiry Number: 5167883.2s

January 24, 2018

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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Physical Setting SSURGO Soil Map .....	A-6
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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

LINDEN ST  
RIVERSIDE, CA 92507

#### COORDINATES

Latitude (North): 33.9782920 - 33° 58' 41.85"  
Longitude (West): 117.3245890 - 117° 19' 28.52"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 470016.6  
UTM Y (Meters): 3759602.2  
Elevation: 1082 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641312 RIVERSIDE EAST, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140603  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
LINDEN ST  
RIVERSIDE, CA 92507

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	CHEVRON STATION 9-37	2099 E. FLORIDA AVEN	RGA LUST	Lower	1 ft.
<a href="#">A2</a>	THRIFTY OIL #352	2105 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">A3</a>	CHEVRON #9-0070	3308 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">A4</a>	ARCO STATION #9722/T	2105 FLORIDA	RGA LUST	Lower	1 ft.
<a href="#">A5</a>	CHEVRON #9-0863	903 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">B6</a>	ARCO #3033	40730 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">B7</a>	ECONO LUBE N TUNE #6	3550 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">A8</a>	MIKE READE CHEVROLET	2505 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">9</a>	T-MOBILE WEST CORPOR	680 W LINDEN	FINDS	Higher	1 ft.
<a href="#">A10</a>	DEPOT DELI	200 FLORIDA AVE	RGA LUST	Lower	1 ft.
<a href="#">C11</a>	UNIV CAL RIVERSIDE	CENTRAL STEAM PLANT-	FINDS	Lower	1 ft.
<a href="#">C12</a>	PLAZA CLEANERS	767 W BLAINE	EDR Hist Cleaner	Lower	73, 0.014, NNW
<a href="#">C13</a>	TY-IN INC	765 BLAINE ST	EDR Hist Cleaner	Lower	75, 0.014, NNW
<a href="#">D14</a>	HELLER WILLIAM B	783 BLAINE ST	EDR Hist Auto	Lower	94, 0.018, NW
<a href="#">D15</a>	QUIXTOP JR MARKET	783 W BLAINE ST	UST, SWEEPS UST	Lower	94, 0.018, NW
<a href="#">D16</a>	QUIXTOP JR MARKET	783 W BLAINE ST	CA FID UST	Lower	94, 0.018, NW
<a href="#">D17</a>	E-Z SERVE #070135	811 BLAINE ST	LUST	Lower	94, 0.018, NW
<a href="#">D18</a>	E-Z SERVE #070135	811 BLAINE	LUST, HIST UST, HIST CORTESE	Lower	94, 0.018, NW
<a href="#">D19</a>	ALTA-DENA DRIVE IN #	811 W BLAINE ST	HIST UST	Lower	94, 0.018, NW
<a href="#">20</a>	UNIVERSITY OF CALIFO	900 UNIVERSITY AVENU	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-LQG, RAATS	Lower	227, 0.043, West
<a href="#">E21</a>	UC RIVERSIDE CENTRAL	3401 WATKINS DR	HIST UST	Higher	838, 0.159, ENE
<a href="#">E22</a>	UC RIVERSIDE CENTRAL	3401 WATKINS DRIVE	HIST UST, CHMIRS	Higher	838, 0.159, ENE
<a href="#">E23</a>	UC RIVERSIDE CENTRAL	3401 WATKINS DR	HIST UST	Higher	838, 0.159, ENE
<a href="#">E24</a>	UCR FLEET SERVICES	3401 WATKINS DR	UST, HIST UST	Higher	838, 0.159, ENE
<a href="#">E25</a>	U C RIVERSIDE FLEET	3401 WATKINS DR	LUST	Higher	838, 0.159, ENE
<a href="#">F26</a>	WEST CAMPUS SOLAR FA	900 UNIVERSITY AVENU	ENVIROSTOR, CHMIRS, HWP, NPDES	Higher	1499, 0.284, South
<a href="#">F27</a>	UNIV CAL, RIVERSIDE	3401 WATKINS DR	LUST, SWEEPS UST, CA FID UST, EMI, HIST CORTESE,...	Higher	1499, 0.284, South
<a href="#">28</a>	CHEVRON #9-8260	1011 UNIVERSITY AVE	LUST, HIST CORTESE	Lower	1514, 0.287, WSW
<a href="#">29</a>	U C RIVERSIDE PARKIN	PARKING LOT #6	LUST, HIST CORTESE	Higher	1738, 0.329, South
<a href="#">30</a>	U C RIVERSIDE PARKIN	UNIVERSITY OF CA, RI	LUST	Higher	2078, 0.394, South
<a href="#">G31</a>	EXXON SERVICE STATIO	1295 UNIVERSITY	LUST, HIST CORTESE	Lower	2169, 0.411, West
<a href="#">G32</a>	TEXACO	1221 UNIVERSITY AVE	LUST	Lower	2169, 0.411, West
<a href="#">G33</a>	THRIFTY OIL #344/ AR	1294 UNIVERSITY AVE	LUST	Lower	2169, 0.411, West
<a href="#">G34</a>	EXXON SERVICE STATIO	1295 UNIVERSITY AVE	LUST	Lower	2169, 0.411, West
<a href="#">G35</a>	UNOCAL #3779	1490 UNIVERSITY AVE	SLIC	Lower	2169, 0.411, West
<a href="#">G36</a>	TEXACO SERVICE STATI	1221 UNIVERSITY AVE	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Lower	2169, 0.411, West
<a href="#">G37</a>	UNOCAL #3779	1490 UNIVERSITY AVE	LUST	Lower	2169, 0.411, West
<a href="#">H38</a>	MOBIL #18-402	1147 UNIVERSITY AVE	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Lower	2169, 0.411, WSW
<a href="#">H39</a>	MOBIL #18-402	1147 UNIVERSITY AVE	LUST, CHMIRS, HAZNET	Lower	2169, 0.411, WSW

MAPPED SITES SUMMARY

Target Property Address:  
 LINDEN ST  
 RIVERSIDE, CA 92507

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">140</a>	GROVE 186	COLE ST	LUST	Lower	2635, 0.499, West
<a href="#">141</a>	SMITH PROPERTY	4088 MISSION INN AVE	LUST	Lower	2635, 0.499, West
<a href="#">42</a>	VALERION CORPORATION	2280 IOWA AVENUE	ENVIROSTOR, HIST CORTESE	Lower	3718, 0.704, NW
<a href="#">43</a>	ARCO STATION #1841	1505 THIRD	Notify 65	Lower	3993, 0.756, WNW
<a href="#">44</a>	THERMOCLAD COMPANY	1541 7TH ST	ENVIROSTOR	Lower	4432, 0.839, West
<a href="#">45</a>	UNIVERSITY OF CALIFO	1060 PENNSYLVANIA AV	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED, CA...	Lower	4976, 0.942, SW
<a href="#">46</a>	CALIFORNIA SPRAY CHE	3530 CHICAGO AV	ENVIROSTOR	Lower	5257, 0.996, West

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal RCRA generators list***

RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

## EXECUTIVE SUMMARY

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
AST..... Aboveground Petroleum Storage Tank Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing  
VCP..... Voluntary Cleanup Program Properties

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT..... Waste Management Unit Database  
SWRCY..... Recycler Database  
HAULERS..... Registered Waste Tire Haulers Listing  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory  
IHS OPEN DUMPS..... Open Dumps on Indian Land

#### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register  
SCH..... School Property Evaluation Program  
CDL..... Clandestine Drug Labs  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
US CDL..... National Clandestine Laboratory Register

#### ***Local Land Records***

LIENS..... Environmental Liens Listing  
LIENS 2..... CERCLA Lien Information  
DEED..... Deed Restriction Listing

#### ***Records of Emergency Release Reports***

HMIRS..... Hazardous Materials Information Reporting System  
CHMIRS..... California Hazardous Material Incident Report System  
LDS..... Land Disposal Sites Listing  
MCS..... Military Cleanup Sites Listing  
SPILLS 90..... SPILLS 90 data from FirstSearch

#### ***Other Ascertainable Records***

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated

## EXECUTIVE SUMMARY

FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

EDR MGP..... EDR Proprietary Manufactured Gas Plants

# EXECUTIVE SUMMARY

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

RGA LF..... Recovered Government Archive Solid Waste Facilities List

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>UNIVERSITY OF CALIFO</i></b>	<b><i>900 UNIVERSITY AVENU</i></b>	<b><i>W 0 - 1/8 (0.043 mi.)</i></b>	<b><i>20</i></b>	<b><i>16</i></b>

### ***Federal RCRA CORRACTS facilities list***

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1

## EXECUTIVE SUMMARY

CORRACTS site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIVERSITY OF CALIFO</b>	<b>900 UNIVERSITY AVENU</b>	<b>W 0 - 1/8 (0.043 mi.)</b>	<b>20</b>	<b>16</b>

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIVERSITY OF CALIFO</b>	<b>900 UNIVERSITY AVENU</b>	<b>W 0 - 1/8 (0.043 mi.)</b>	<b>20</b>	<b>16</b>

### ***Federal RCRA generators list***

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIVERSITY OF CALIFO</b>	<b>900 UNIVERSITY AVENU</b>	<b>W 0 - 1/8 (0.043 mi.)</b>	<b>20</b>	<b>16</b>

### ***State- and tribal - equivalent NPL***

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIVERSITY OF CALIFO</b>	<b>1060 PENNSYLVANIA AV</b>	<b>SW 1/2 - 1 (0.942 mi.)</b>	<b>45</b>	<b>134</b>

Database: RESPONSE, Date of Government Version: 10/30/2017  
AWP Facility Id: 33890001

## EXECUTIVE SUMMARY

Status: Certified O&M - Land Use Restrictions Only  
Facility Id: 33890001

### **State- and tribal - equivalent CERCLIS**

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/30/2017 has revealed that there are 5 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>WEST CAMPUS SOLAR FA</b> Facility Id: 80001663 Status: Refer: SMBRP	<b>900 UNIVERSITY AVENUE</b>	<b>S 1/4 - 1/2 (0.284 mi.)</b>	<b>F26</b>	<b>70</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VALERION CORPORATION</b> Facility Id: 33280139 Status: Refer: Other Agency	<b>2280 IOWA AVENUE</b>	<b>NW 1/2 - 1 (0.704 mi.)</b>	<b>42</b>	<b>131</b>
THERMOCLAD COMPANY Facility Id: 60000209 Status: Inactive - Needs Evaluation	1541 7TH ST	W 1/2 - 1 (0.839 mi.)	44	133
<b>UNIVERSITY OF CALIFO</b> Facility Id: 33890001 Status: Certified O&M - Land Use Restrictions Only	<b>1060 PENNSYLVANIA AV</b>	<b>SW 1/2 - 1 (0.942 mi.)</b>	<b>45</b>	<b>134</b>
CALIFORNIA SPRAY CHE Facility Id: 60000214 Status: Inactive - Needs Evaluation	3530 CHICAGO AV	W 1/2 - 1 (0.996 mi.)	46	157

### **State and tribal leaking storage tank lists**

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 17 LUST sites within approximately 0.5 miles of the target property.



## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>U C RIVERSIDE FLEET</b> Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: RIVERSIDE CO. LUST, Date of Government Version: 10/11/2017 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Status: Case Closed Facility Id: 95454 Facility Id: 980244 Global Id: T0606500425 Global Id: T0606500519 Facility Status: 9 Global ID: T0606500519	3401 WATKINS DR	ENE 1/8 - 1/4 (0.159 mi.)	E25	66
<b>UNIV CAL, RIVERSIDE</b> Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Pollution Characterization Global ID: T0606500425	<b>3401 WATKINS DR</b>	<b>S 1/4 - 1/2 (0.284 mi.)</b>	<b>F27</b>	<b>85</b>
<b>U C RIVERSIDE PARKIN</b> Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606500239	<b>PARKING LOT #6</b>	<b>S 1/4 - 1/2 (0.329 mi.)</b>	<b>29</b>	<b>101</b>
<b>U C RIVERSIDE PARKIN</b> Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0606500239	UNIVERSITY OF CA, RI	S 1/4 - 1/2 (0.394 mi.)	30	102
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>E-Z SERVE #070135</b> Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606500022	811 BLAINE ST	NW 0 - 1/8 (0.018 mi.)	D17	13
<b>E-Z SERVE #070135</b> Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0606500022	<b>811 BLAINE</b>	<b>NW 0 - 1/8 (0.018 mi.)</b>	<b>D18</b>	<b>14</b>
<b>CHEVRON #9-8260</b> Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: RIVERSIDE CO. LUST, Date of Government Version: 10/11/2017 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Status: Case Closed Facility Id: 91776 Global Id: T0606500089 Facility Status: 9 Global ID: T0606500089	<b>1011 UNIVERSITY AVE</b>	<b>WSW 1/4 - 1/2 (0.287 mi.)</b>	<b>28</b>	<b>98</b>
<b>EXXON SERVICE STATIO</b> Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0606500058	<b>1295 UNIVERSITY</b>	<b>W 1/4 - 1/2 (0.411 mi.)</b>	<b>G31</b>	<b>104</b>
<b>TEXACO</b> Database: RIVERSIDE CO. LUST, Date of Government Version: 10/11/2017 Database: LUST, Date of Government Version: 12/11/2017	1221 UNIVERSITY AVE	W 1/4 - 1/2 (0.411 mi.)	G32	105

## EXECUTIVE SUMMARY

Status: Completed - Case Closed Facility Id: 960698 Facility Id: 200117614 Facility Id: 200218406 Global Id: T0606500471 Facility Status: 9 Facility Status: 0				
THRIFTY OIL #344/ AR	1294 UNIVERSITY AVE	W 1/4 - 1/2 (0.411 mi.)	G33	108
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Preliminary site assessment workplan submitted Global ID: T0606500545				
EXXON SERVICE STATIO	1295 UNIVERSITY AVE	W 1/4 - 1/2 (0.411 mi.)	G34	109
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606500058				
<b>TEXACO SERVICE STATI</b>	<b>1221 UNIVERSITY AVE</b>	<b>W 1/4 - 1/2 (0.411 mi.)</b>	<b>G36</b>	<b>111</b>
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606500471				
UNOCAL #3779	1490 UNIVERSITY AVE	W 1/4 - 1/2 (0.411 mi.)	G37	113
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Preliminary site assessment workplan submitted Global ID: T0606500397				
<b>MOBIL #18-402</b>	<b>1147 UNIVERSITY AVE</b>	<b>WSW 1/4 - 1/2 (0.411 mi.)</b>	<b>H38</b>	<b>115</b>
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Pollution Characterization Global ID: T0606500586				
<b>MOBIL #18-402</b>	<b>1147 UNIVERSITY AVE</b>	<b>WSW 1/4 - 1/2 (0.411 mi.)</b>	<b>H39</b>	<b>117</b>
Database: RIVERSIDE CO. LUST, Date of Government Version: 10/11/2017 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Id: 9914834 Global Id: T0606500586 Facility Status: 9				
GROVE 186	COLE ST	W 1/4 - 1/2 (0.499 mi.)	I40	128
Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0606500130				
SMITH PROPERTY	4088 MISSION INN AVE	W 1/4 - 1/2 (0.499 mi.)	I41	130
Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0606500220				

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

## EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNOCAL #3779 Database: SLIC, Date of Government Version: 12/11/2017 Facility Status: Completed - Case Closed Global Id: T0606500397	1490 UNIVERSITY AVE	W 1/4 - 1/2 (0.411 mi.)	G35	110

### ***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>UCR FLEET SERVICES</i></b> Database: RIVERSIDE CO. UST, Date of Government Version: 10/12/2017 Database: UST, Date of Government Version: 12/11/2017 Facility Id: FA0014750 Facility Id: 784	<b><i>3401 WATKINS DR</i></b>	<b><i>ENE 1/8 - 1/4 (0.159 mi.)</i></b>	<b><i>E24</i></b>	<b><i>64</i></b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>QUIXTOP JR MARKET</i></b> Database: UST, Date of Government Version: 12/11/2017 Facility Id: 613	<b><i>783 W BLAINE ST</i></b>	<b><i>NW 0 - 1/8 (0.018 mi.)</i></b>	<b><i>D15</i></b>	<b><i>11</i></b>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Hazardous waste / Contaminated Sites***

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>UNIVERSITY OF CALIFO</i></b>	<b><i>1060 PENNSYLVANIA AV</i></b>	<b><i>SW 1/2 - 1 (0.942 mi.)</i></b>	<b><i>45</i></b>	<b><i>134</i></b>

## EXECUTIVE SUMMARY

### **Local Lists of Registered Storage Tanks**

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>QUIXTOP JR MARKET</b> Status: A Tank Status: A Comp Number: 49307	<b>783 W BLAINE ST</b>	<b>NW 0 - 1/8 (0.018 mi.)</b>	<b>D15</b>	<b>11</b>

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 6 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UC RIVERSIDE CENTRAL Facility Id: 00000019667 Facility Id: 00000019668	3401 WATKINS DR	ENE 1/8 - 1/4 (0.159 mi.)	E21	60
<b>UC RIVERSIDE CENTRAL</b>	<b>3401 WATKINS DRIVE</b>	<b>ENE 1/8 - 1/4 (0.159 mi.)</b>	<b>E22</b>	<b>61</b>
UC RIVERSIDE CENTRAL Facility Id: 00000012224	3401 WATKINS DR	ENE 1/8 - 1/4 (0.159 mi.)	E23	63
<b>UCR FLEET SERVICES</b> Facility Id: 00000009250	<b>3401 WATKINS DR</b>	<b>ENE 1/8 - 1/4 (0.159 mi.)</b>	<b>E24</b>	<b>64</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>E-Z SERVE #070135</b>	<b>811 BLAINE</b>	<b>NW 0 - 1/8 (0.018 mi.)</b>	<b>D18</b>	<b>14</b>
ALTA-DENA DRIVE IN # Facility Id: 00000011198	811 W BLAINE ST	NW 0 - 1/8 (0.018 mi.)	D19	16

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
QUIXTOP JR MARKET Facility Id: 33007068 Status: A	783 W BLAINE ST	NW 0 - 1/8 (0.018 mi.)	D16	12

## EXECUTIVE SUMMARY

### **Other Ascertainable Records**

**FINDS:** The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/23/2017 has revealed that there are 2 FINDS sites within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
T-MOBILE WEST CORPOR	680 W LINDEN	0 - 1/8 (0.000 mi.)	9	9
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNIV CAL RIVERSIDE	CENTRAL STEAM PLANT-	0 - 1/8 (0.000 mi.)	C11	10

**CA BOND EXP. PLAN:** Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIVERSITY OF CALIFO</b>	<b>1060 PENNSYLVANIA AV</b>	<b>SW 1/2 - 1 (0.942 mi.)</b>	<b>45</b>	<b>134</b>

**HIST CORTESE:** The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 7 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>UNIV CAL, RIVERSIDE</b> Reg Id: 083303140T Reg Id: 083303638T Reg Id: 083302681T	<b>3401 WATKINS DR</b>	<b>S 1/4 - 1/2 (0.284 mi.)</b>	<b>F27</b>	<b>85</b>
<b>U C RIVERSIDE PARKIN</b> Reg Id: 083301865T	<b>PARKING LOT #6</b>	<b>S 1/4 - 1/2 (0.329 mi.)</b>	<b>29</b>	<b>101</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>E-Z SERVE #070135</b> Reg Id: 083300132T	<b>811 BLAINE</b>	<b>NW 0 - 1/8 (0.018 mi.)</b>	<b>D18</b>	<b>14</b>
<b>CHEVRON #9-8260</b>	<b>1011 UNIVERSITY AVE</b>	<b>WSW 1/4 - 1/2 (0.287 mi.)</b>	<b>28</b>	<b>98</b>

## EXECUTIVE SUMMARY

Reg Id: 083300839T				
<b>EXXON SERVICE STATIO</b>	<b>1295 UNIVERSITY</b>	<b>W 1/4 - 1/2 (0.411 mi.)</b>	<b>G31</b>	<b>104</b>
Reg Id: 083300510T				
<b>TEXACO SERVICE STATI</b>	<b>1221 UNIVERSITY AVE</b>	<b>W 1/4 - 1/2 (0.411 mi.)</b>	<b>G36</b>	<b>111</b>
Reg Id: 083302877T				
<b>MOBIL #18-402</b>	<b>1147 UNIVERSITY AVE</b>	<b>WSW 1/4 - 1/2 (0.411 mi.)</b>	<b>H38</b>	<b>115</b>
Reg Id: 083303453T				

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 11/20/2017 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>WEST CAMPUS SOLAR FA</b>	<b>900 UNIVERSITY AVENU</b>	<b>S 1/4 - 1/2 (0.284 mi.)</b>	<b>F26</b>	<b>70</b>
EPA Id: CAD073134777				
Cleanup Status: UNDERGOING CLOSURE				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/14/2017 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ARCO STATION #1841	1505 THIRD	WNW 1/2 - 1 (0.756 mi.)	43	133

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HELLER WILLIAM B	783 BLAINE ST	NW 0 - 1/8 (0.018 mi.)	D14	11

## EXECUTIVE SUMMARY

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PLAZA CLEANERS	767 W BLAINE	NNW 0 - 1/8 (0.014 mi.)	C12	10
TY-IN INC	765 BLAINE ST	NNW 0 - 1/8 (0.014 mi.)	C13	10

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

A review of the RGA LUST list, as provided by EDR, has revealed that there are 9 RGA LUST sites within approximately 0.001 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON STATION 9-37	2099 E. FLORIDA AVEN	0 - 1/8 (0.000 mi.)	A1	8
THRIFTY OIL #352	2105 FLORIDA AVE	0 - 1/8 (0.000 mi.)	A2	8
CHEVRON #9-0070	3308 FLORIDA AVE	0 - 1/8 (0.000 mi.)	A3	8
ARCO STATION #9722/T	2105 FLORIDA	0 - 1/8 (0.000 mi.)	A4	8
CHEVRON #9-0863	903 FLORIDA AVE	0 - 1/8 (0.000 mi.)	A5	8
ARCO #3033	40730 FLORIDA AVE	0 - 1/8 (0.000 mi.)	B6	9
ECONO LUBE N TUNE #6	3550 FLORIDA AVE	0 - 1/8 (0.000 mi.)	B7	9
MIKE READE CHEVROLET	2505 FLORIDA AVE	0 - 1/8 (0.000 mi.)	A8	9
DEPOT DELI	200 FLORIDA AVE	0 - 1/8 (0.000 mi.)	A10	9

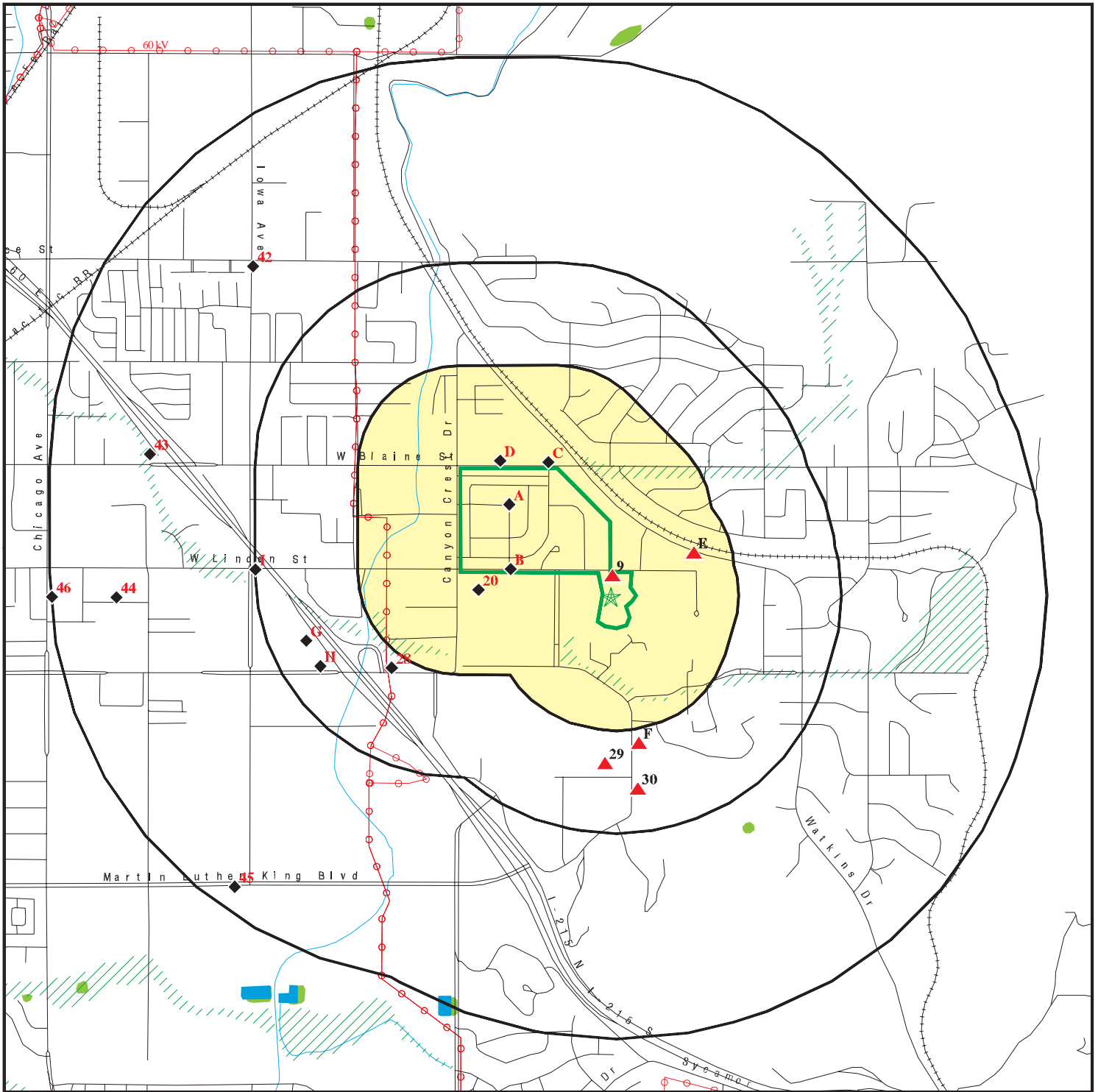
## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
UCR - PARKING LOT 6	LUST
UCR (PESTICIDE PITS)	SLIC



# OVERVIEW MAP - 5167883.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

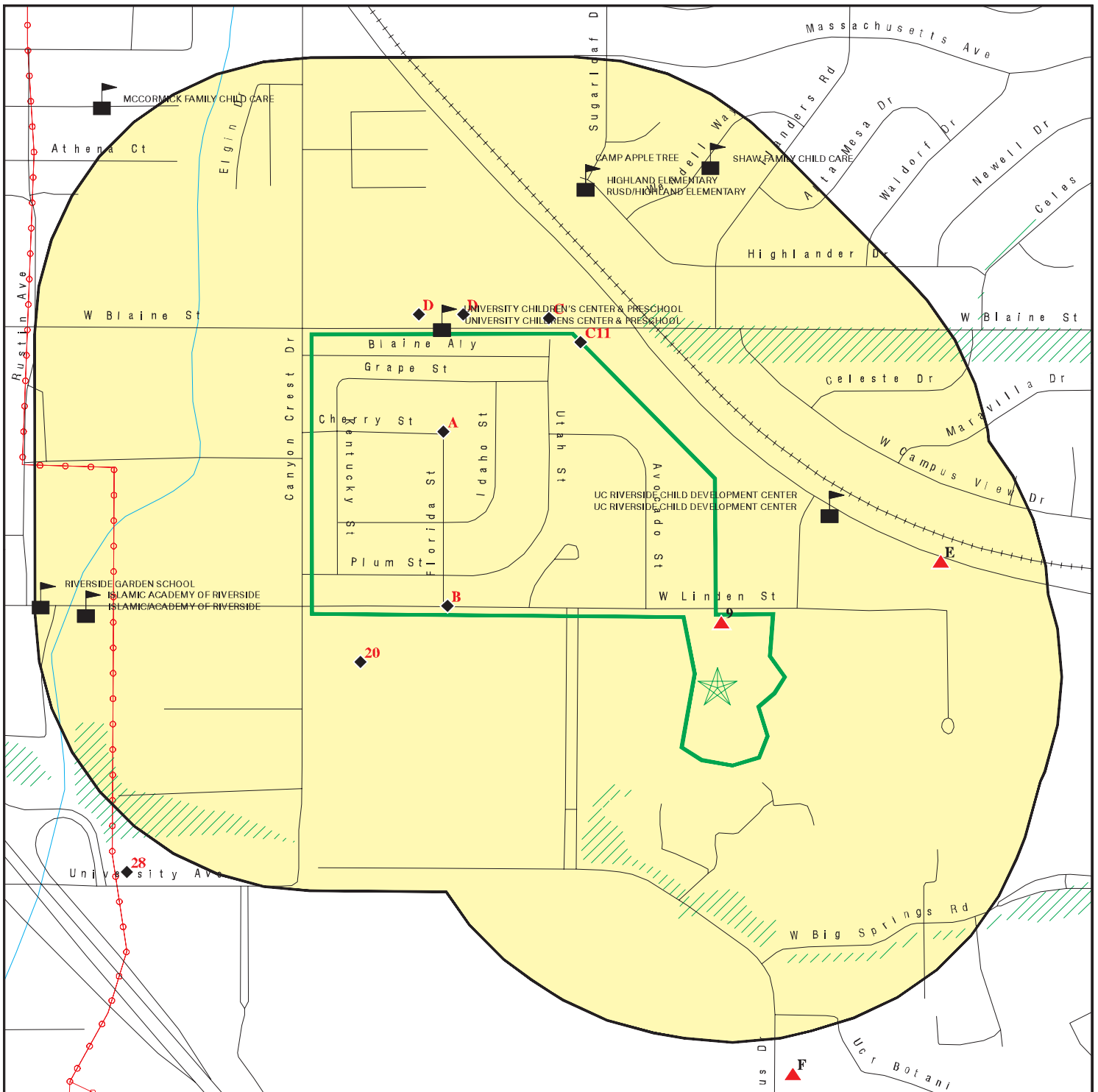
Areas of Concern








This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.






SITE NAME: American Campus Phase 1A  
 ADDRESS: Linden St  
 Riverside CA 92507  
 LAT/LONG: 33.978292 / 117.324589

CLIENT: Haley & Aldrich  
 CONTACT: Carly Nemanic  
 INQUIRY #: 5167883.2s  
 DATE: January 24, 2018 7:55 pm

# DETAIL MAP - 5167883.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p><b>SITE NAME:</b> American Campus Phase 1A  <b>ADDRESS:</b> Linden St                  Riverside CA 92507  <b>LAT/LONG:</b> 33.978292 / 117.324589</p>	<p><b>CLIENT:</b> Haley &amp; Aldrich  <b>CONTACT:</b> Carly Nemanic  <b>INQUIRY #:</b> 5167883.2s  <b>DATE:</b> January 24, 2018 7:57 pm</p>
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## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		1	0	0	NR	NR	1
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		1	0	0	0	NR	1
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		1	0	0	NR	NR	1
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	1	NR	1
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	0	1	4	NR	5
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		2	1	14	NR	NR	17

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	1	NR	NR	1
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	1	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal voluntary cleanup sites</i></b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	1	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<b><i>Local Lists of Registered Storage Tanks</i></b>								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		2	4	NR	NR	NR	6
CA FID UST	0.250		1	0	NR	NR	NR	1
<b><i>Local Land Records</i></b>								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	0.001		0	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		2	NR	NR	NR	NR	2
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0



MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A1 < 1/8 1 ft.	<b>CHEVRON STATION 9-3712</b> 2099 E. FLORIDA AVENUE RIVERSIDE, CA  Site 1 of 7 in cluster A	RGA LUST	S114599695 N/A
Relative: Lower	RGA LUST: 2004 CHEVRON STATION 9-3712 2099 E. FLORIDA AVENUE		
Actual: 1054 ft.	<hr/>		
A2 < 1/8 1 ft.	<b>THRIFTY OIL #352</b> 2105 FLORIDA AVE RIVERSIDE, CA  Site 2 of 7 in cluster A	RGA LUST	S114703139 N/A
Relative: Lower	RGA LUST: 2004 THRIFTY OIL #352 2105 FLORIDA AVE		
Actual: 1054 ft.	<hr/>		
A3 < 1/8 1 ft.	<b>CHEVRON #9-0070</b> 3308 FLORIDA AVE RIVERSIDE, CA  Site 3 of 7 in cluster A	RGA LUST	S114595544 N/A
Relative: Lower	RGA LUST: 2004 CHEVRON #9-0070 3308 FLORIDA AVE		
Actual: 1055 ft.	<hr/>		
A4 < 1/8 1 ft.	<b>ARCO STATION #9722/THRIFTY</b> 2105 FLORIDA RIVERSIDE, CA  Site 4 of 7 in cluster A	RGA LUST	S114576353 N/A
Relative: Lower	RGA LUST: 2004 ARCO STATION #9722/THRIFTY 2105 FLORIDA		
Actual: 1054 ft.	<hr/>		
A5 < 1/8 1 ft.	<b>CHEVRON #9-0863</b> 903 FLORIDA AVE RIVERSIDE, CA  Site 5 of 7 in cluster A	RGA LUST	S114595818 N/A
Relative: Lower	RGA LUST: 2004 CHEVRON #9-0863 903 FLORIDA AVE		
Actual: 1054 ft.	<hr/>		

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
B6		< 1/8	1 ft.	ARCO #3033 40730 FLORIDA AVE RIVERSIDE, CA  Site 1 of 2 in cluster B	RGA LUST	S114573929	N/A
Relative: Lower				RGA LUST: 2004 ARCO #3033 40730 FLORIDA AVE			
Actual: 1059 ft.	_____						
B7		< 1/8	1 ft.	ECONO LUBE N TUNE #60 3550 FLORIDA AVE RIVERSIDE, CA  Site 2 of 2 in cluster B	RGA LUST	S114613452	N/A
Relative: Lower				RGA LUST: 2004 ECONO LUBE N TUNE #60 3550 FLORIDA AVE			
Actual: 1059 ft.	_____						
A8		< 1/8	1 ft.	MIKE READE CHEVROLET 2505 FLORIDA AVE RIVERSIDE, CA  Site 6 of 7 in cluster A	RGA LUST	S114651226	N/A
Relative: Lower				RGA LUST: 2004 MIKE READE CHEVROLET 2505 FLORIDA AVE			
Actual: 1054 ft.	_____						
9		< 1/8	1 ft.	T-MOBILE WEST CORPORATION IE04479A 680 W LINDEN RIVERSIDE, CA 92507	FINDS	1023209034	N/A
Relative: Higher				FINDS: Registry ID: 110064943469			
Actual: 1092 ft.				Environmental Interest/Information System STATE MASTER			
<p><a href="#">Click this hyperlink</a> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.</p>							
A10		< 1/8	1 ft.	DEPOT DELI 200 FLORIDA AVE RIVERSIDE, CA  Site 7 of 7 in cluster A	RGA LUST	S114610297	N/A
Relative: Lower				RGA LUST: 2004 DEPOT DELI 200 FLORIDA AVE			
Actual: 1055 ft.	_____						



MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**C11**      **UNIV CAL RIVERSIDE**      **FINDS**      **1006306620**  
**< 1/8**      **CENTRAL STEAM PLANT-UCR**      **N/A**  
**1 ft.**      **RIVERSIDE, CA 92507**

**Site 1 of 3 in cluster C**

**Relative:**  
**Lower**

FINDS:

Registry ID:                      110012429899

**Actual:**  
**1078 ft.**

Environmental Interest/Information System  
HAZARDOUS AIR POLLUTANT MAJOR

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**C12**      **PLAZA CLEANERS**      **EDR Hist Cleaner**      **1018436714**  
**NNW**      **767 W BLAINE**      **N/A**  
**< 1/8**      **RIVERSIDE, CA 92507**  
**0.014 mi.**      **Site 2 of 3 in cluster C**  
**73 ft.**

**Relative:**  
**Lower**

EDR Hist Cleaner

**Actual:**  
**1075 ft.**

Year:	Name:	Type:
1986	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1987	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1988	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1989	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1990	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1991	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1992	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1993	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1994	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents
1995	PLAZA CLEANERS	Garment Pressing And Cleaners' Agents

**C13**      **TY-IN INC**      **EDR Hist Cleaner**      **1020109773**  
**NNW**      **765 BLAINE ST**      **N/A**  
**< 1/8**      **RIVERSIDE, CA 92507**  
**0.014 mi.**      **Site 3 of 3 in cluster C**  
**75 ft.**

**Relative:**  
**Lower**

EDR Hist Cleaner

**Actual:**  
**1074 ft.**

Year:	Name:	Type:
1969	TY-IN INC	Drycleaning Plants, Except Rugs
1970	TY-IN INC	Drycleaning Plants, Except Rugs
1971	TY-IN INC	Drycleaning Plants, Except Rugs
1972	TY-IN INC	Drycleaning Plants, Except Rugs
1973	TY-IN INC	Drycleaning Plants, Except Rugs
1974	TY-IN INC	Drycleaning Plants, Except Rugs
1975	TY-IN INC	Drycleaning Plants, Except Rugs
1976	TY-IN INC	Drycleaning Plants, Except Rugs
1977	TY-IN INC	Drycleaning Plants, Except Rugs

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**D14**  
**NW**  
**< 1/8**  
**0.018 mi.**  
**94 ft.**  
**HELLER WILLIAM B**  
**783 BLAINE ST**  
**RIVERSIDE, CA 92507**  
**Site 1 of 6 in cluster D**

**EDR Hist Auto**    **1020737226**  
**N/A**

**Relative:**  
**Lower**

EDR Hist Auto

**Actual:**  
**1062 ft.**

Year:	Name:	Type:
1969	HELLER WILLIAM B	Gasoline Service Stations
1970	HELLER WILLIAM B	Gasoline Service Stations
1971	HELLER WILLIAM B	Gasoline Service Stations
1972	HELLER WILLIAM B	Gasoline Service Stations
1973	HELLER WILLIAM B	Gasoline Service Stations
1974	HELLER WILLIAM B	Gasoline Service Stations
1975	HELLER WILLIAM B	Gasoline Service Stations
1989	QUIX STOP SUPERMARKET	Convenience Stores
1990	QUIX STOP SUPERMARKET	Convenience Stores
1991	QUIX STOP SUPERMARKET	Convenience Stores
1992	QUIX STOP SUPERMARKET	Convenience Stores
1993	QUIX STOP SUPERMARKET	Convenience Stores
1994	QUIX STOP SUPERMARKET	Convenience Stores
1995	QUIX STOP SUPERMARKET	Convenience Stores
1996	QUIX STOP SUPERMARKET	Convenience Stores
1997	QUIX STOP SUPERMARKET	Convenience Stores
1998	QUIX STOP SUPERMARKET	Convenience Stores

**D15**  
**NW**  
**< 1/8**  
**0.018 mi.**  
**94 ft.**  
**QUIXTOP JR MARKET**  
**783 W BLAINE ST**  
**RIVERSIDE, CA 92507**  
**Site 2 of 6 in cluster D**

**UST**    **U003659511**  
**SWEEPS UST**    **N/A**

**Relative:**  
**Lower**

UST:

**Actual:**  
**1062 ft.**

Facility ID:            613  
Permitting Agency:    RIVERSIDE COUNTY  
Latitude:                33.984688  
Longitude:               -117.327237

SWEEPS UST:

Status:                Active  
Comp Number:        49307  
Number:                1  
Board Of Equalization: 44-018295  
Referral Date:        11-17-92  
Action Date:          11-17-92  
Created Date:         04-14-89  
Owner Tank Id:        1630  
SWRCB Tank Id:       33-000-049307-000001  
Tank Status:          A  
Capacity:              10000  
Active Date:          11-17-92  
Tank Use:              M.V. FUEL  
STG:                    P  
Content:                REG UNLEADED  
Number Of Tanks:     3  
  
Status:                Active  
Comp Number:        49307

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**QUIXTOP JR MARKET (Continued)**

**U003659511**

Number: 1  
 Board Of Equalization: 44-018295  
 Referral Date: 11-17-92  
 Action Date: 11-17-92  
 Created Date: 04-14-89  
 Owner Tank Id: 1630  
 SWRCB Tank Id: 33-000-049307-000002  
 Tank Status: A  
 Capacity: 10000  
 Active Date: 11-17-92  
 Tank Use: M.V. FUEL  
 STG: P  
 Content: REG UNLEADED  
 Number Of Tanks: Not reported

Status: Active  
 Comp Number: 49307  
 Number: 1  
 Board Of Equalization: 44-018295  
 Referral Date: 11-17-92  
 Action Date: 11-17-92  
 Created Date: 04-14-89  
 Owner Tank Id: 001630  
 SWRCB Tank Id: 33-000-049307-000003  
 Tank Status: A  
 Capacity: 1000  
 Active Date: 11-17-92  
 Tank Use: UNKNOWN  
 STG: P  
 Content: UNKNOWN CONT  
 Number Of Tanks: Not reported

**D16  
 NW  
 < 1/8  
 0.018 mi.  
 94 ft.**

**QUIXTOP JR MARKET  
 783 W BLAINE ST  
 RIVERSIDE, CA 92507  
 Site 3 of 6 in cluster D**

**CA FID UST S101631147  
 N/A**

**Relative:  
 Lower**

CA FID UST:  
 Facility ID: 33007068  
 Regulated By: UTNKA  
 Regulated ID: Not reported  
 Cortese Code: Not reported  
 SIC Code: Not reported  
 Facility Phone: Not reported  
 Mail To: Not reported  
 Mailing Address: 783 W BLAINE ST  
 Mailing Address 2: Not reported  
 Mailing City,St,Zip: RIVERSIDE 92507  
 Contact: Not reported  
 Contact Phone: Not reported  
 DUNs Number: Not reported  
 NPDES Number: Not reported  
 EPA ID: Not reported  
 Comments: Not reported  
 Status: Active

**Actual:  
 1062 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**D17**  
**NW**  
**< 1/8**  
**0.018 mi.**  
**94 ft.**

**E-Z SERVE #070135**  
**811 BLAINE ST**  
**RIVERSIDE, CA 92507**  
**Site 4 of 6 in cluster D**

**LUST**    **1000131469**  
**N/A**

**Relative:**  
**Lower**

LUST REG 8:

**Actual:**  
**1055 ft.**

Region: County: Regional Board: Facility Status: Case Number: Local Case Num: Case Type: Substance: Qty Leaked: Abate Method: Cross Street: Enf Type: Funding: How Discovered: How Stopped: Leak Cause: Leak Source: Global ID: How Stopped Date: Enter Date: Date Confirmation of Leak Began: Date Preliminary Assessment Began: Discover Date: Enforcement Date: Close Date: Date Prelim Assessment Workplan Submitted: Date Pollution Characterization Began: Date Remediation Plan Submitted: Date Remedial Action Underway: Date Post Remedial Action Monitoring: Enter Date: GW Qualifies: Soil Qualifies: Operator: Facility Contact: Interim: Oversight Program: Latitude: Longitude: MTBE Date: Max MTBE GW: MTBE Concentration: Max MTBE Soil: MTBE Fuel: MTBE Tested: MTBE Class: Staff: Staff Initials: Lead Agency: Local Agency: Hydr Basin #: Beneficial:	8 Riverside Santa Ana Region Case Closed 083300132T Not reported Soil only Regular Gasoline Not reported Not reported CANYON CREST CLOS Not reported OM Not reported UNK Tank T0606500022 12/20/1986 1/1/1987 Not reported Not reported 12/20/1986 Not reported 1/14/1992 Not reported 3/1/1987 Not reported Not reported Not reported 1/1/1987 Not reported Not reported Not reported Not reported 1/1/1987 Not reported Not reported Not reported Not reported LUST 33.9830115 -117.3293547 Not reported Not reported 0 Not reported 1 Site NOT Tested for MTBE. Includes Unknown and Not Analyzed. * NOM UNK Local Agency 33000L UPPER SANTA ANA VALL Not reported
---	--

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**E-Z SERVE #070135 (Continued)**

1000131469

Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Summary: Not reported

**D18  
NW  
< 1/8  
0.018 mi.  
94 ft.**

**E-Z SERVE #070135  
811 BLAINE  
RIVERDALE, CA 92507  
Site 5 of 6 in cluster D**

**LUST S105025846  
HIST UST N/A  
HIST CORTESE**

**Relative:  
Lower**

**LUST:**

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500022](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500022)  
Global Id: T0606500022  
Latitude: 33.983337  
Longitude: -117.32928  
Status: Completed - Case Closed  
Status Date: 01/14/1992  
Case Worker: RIV  
RB Case Number: 083300132T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Not reported  
Local Case Number: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**Actual:  
1055 ft.**

**LUST:**

Global Id: T0606500022  
Contact Type: Regional Board Caseworker  
Contact Name: NANCY OLSON-MARTIN  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: [nolson-martin@waterboards.ca.gov](mailto:nolson-martin@waterboards.ca.gov)  
Phone Number: Not reported

Global Id: T0606500022  
Contact Type: Local Agency Caseworker  
Contact Name: Riverside County LOP  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: Not reported  
Phone Number: 9519558980

**LUST:**

Global Id: T0606500022  
Action Type: Other  
Date: 12/20/1986  
Action: Leak Stopped

Global Id: T0606500022  
Action Type: Other  
Date: 12/29/1986  
Action: Leak Reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**E-Z SERVE #070135 (Continued)**

**S105025846**

Global Id: T0606500022  
Action Type: ENFORCEMENT  
Date: 01/14/1992  
Action: Closure/No Further Action Letter

Global Id: T0606500022  
Action Type: Other  
Date: 12/20/1986  
Action: Leak Discovery

**LUST:**

Global Id: T0606500022  
Status: Open - Case Begin Date  
Status Date: 12/20/1986

Global Id: T0606500022  
Status: Open - Site Assessment  
Status Date: 03/01/1987

Global Id: T0606500022  
Status: Completed - Case Closed  
Status Date: 01/14/1992

**HIST UST:**

File Number: 0001F611  
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F611.pdf>  
Region: Not reported  
Facility ID: Not reported  
Facility Type: Not reported  
Other Type: Not reported  
Contact Name: Not reported  
Telephone: Not reported  
Owner Name: Not reported  
Owner Address: Not reported  
Owner City,St,Zip: Not reported  
Total Tanks: Not reported

Tank Num: Not reported  
Container Num: Not reported  
Year Installed: Not reported  
Tank Capacity: Not reported  
Tank Used for: Not reported  
Type of Fuel: Not reported  
Container Construction Thickness: Not reported  
Leak Detection: Not reported

Click here for Geo Tracker PDF:

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083300132T

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**D19**  
**NW**  
**< 1/8**  
**0.018 mi.**  
**94 ft.**

**ALTA-DENA DRIVE IN #571**  
**811 W BLAINE ST**  
**RIVERSIDE, CA 92507**  
  
**Site 6 of 6 in cluster D**

**HIST UST**    **U001576483**  
**N/A**

**Relative:**  
**Lower**

HIST UST:  
File Number: Not reported  
URL: Not reported  
Region: STATE  
Facility ID: 00000011198  
Facility Type: Gas Station  
Other Type: Not reported  
Contact Name: Not reported  
Telephone: 9156726481  
Owner Name: E-Z SERVE, INC.  
Owner Address: 901 SOUTH 1ST  
Owner City,St,Zip: ABILENE, TX 79602  
Total Tanks: 0002

**Actual:**  
**1055 ft.**

Tank Num: 001  
Container Num: 25  
Year Installed: 84  
Tank Capacity: 00009942  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 26  
Year Installed: 78  
Tank Capacity: 00009942  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

**20**  
**West**  
**< 1/8**  
**0.043 mi.**  
**227 ft.**

**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**900 UNIVERSITY AVENUE**  
**RIVERSIDE, CA 92521**

**SEMS-ARCHIVE**    **1000431600**  
**CORRACTS**    **CAD073134777**  
**RCRA-TSDF**  
**RCRA-LQG**  
**RAATS**

**Relative:**  
**Lower**

SEMS Archive:  
Site ID: 901566  
EPA ID: CAD073134777  
Cong District: 36  
FIPS Code: 6065  
FF: N  
NPL: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**Actual:**  
**1050 ft.**

SEMS Archive Detail:  
Region: 9  
Site ID: 901566  
EPA ID: CAD073134777  
Site Name: UNIVERSITY OF CA RIVERSIDE  
NPL: N  
FF: N

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

OU: 0  
Action Code: VS  
Action Name: ARCH SITE  
SEQ: 1  
Start Date: Not reported  
Finish Date: 1990-07-20 00:00:00  
Qual: Not reported  
Current Action Lead: EPA Perf In-Hse

Region: 9  
Site ID: 901566  
EPA ID: CAD073134777  
Site Name: UNIVERSITY OF CA RIVERSIDE  
NPL: N  
FF: N  
OU: 0  
Action Code: SI  
Action Name: SI  
SEQ: 2  
Start Date: Not reported  
Finish Date: 1990-07-20 00:00:00  
Qual: N  
Current Action Lead: EPA Perf

Region: 9  
Site ID: 901566  
EPA ID: CAD073134777  
Site Name: UNIVERSITY OF CA RIVERSIDE  
NPL: N  
FF: N  
OU: 0  
Action Code: SI  
Action Name: SI  
SEQ: 1  
Start Date: Not reported  
Finish Date: 1986-09-01 00:00:00  
Qual: H  
Current Action Lead: EPA Perf

Region: 9  
Site ID: 901566  
EPA ID: CAD073134777  
Site Name: UNIVERSITY OF CA RIVERSIDE  
NPL: N  
FF: N  
OU: 0  
Action Code: DS  
Action Name: DISCVRY  
SEQ: 1  
Start Date: 1980-08-01 00:00:00  
Finish Date: 1980-08-01 00:00:00  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 9  
Site ID: 901566  
EPA ID: CAD073134777



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Site Name: UNIVERSITY OF CA RIVERSIDE  
NPL: N  
FF: N  
OU: 0  
Action Code: PA  
Action Name: PA  
SEQ: 1  
Start Date: 1985-04-01 00:00:00  
Finish Date: 1985-07-01 00:00:00  
Qual: L  
Current Action Lead: St Perf

**CORRACTS:**

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19901201  
Action: CA600EC - Stabilization Measures Implemented, Primary measure is exposure control by barrier and/or institutional control  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19850701  
Action: CA029ST  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19850701  
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19850701  
Action: CA074ME  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19850701  
Action: CA049PA  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: 19980603  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified

NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980603  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified

NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools

Original schedule date: 19980603  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19890106  
Action: CA100 - RFI Imposition

NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19890106  
Action: CA250 - CMS Imposition

NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19960906  
Action: CA500 - CMI Workplan Approved

NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY

Map ID  
Direction  
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MAP FINDINGS

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Actual Date: 19960906  
Action: CA450 - Corrective Measures Design Approved  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19951010  
Action: CA300 - CMS Workplan Approved  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19951010  
Action: CA350 - CMS Approved  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19951010  
Action: CA200 - RFI Approved  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19940315  
Action: CA150 - RFI Workplan Approved  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19960516  
Action: CA400 - Date For Remedy Selection (CM Imposed)  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19960516  
Action: CA400 - Date For Remedy Selection (CM Imposed)  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: 19960516  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19900720  
Action: CA049SI  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19940523  
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: 19940523  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19940523  
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19940523  
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980330  
Action: CA050RF - RFA Completed, Assessment was an RFA  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19901231  
Action: CA650 - Stabilization Construction Completed  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD073134777  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: Not reported  
Action: CA03192  
NAICS Code(s): 61131  
Colleges, Universities, and Professional Schools  
Original schedule date: 19921001  
Schedule end date: Not reported

**RCRA-TSDF:**

Date form received by agency: 02/22/2016  
Facility name: UNIVERSITY OF CALIFORNIA, RIVERSIDE  
Facility address: 900 UNIVERSITY AVENUE  
RIVERSIDE, CA 92521  
EPA ID: CAD073134777  
Mailing address: UNIVERSITY AVENUE  
RIVERSIDE, CA 92521  
Contact: AMANDA E GREY  
Contact address: UNIVERSITY AVENUE  
RIVERSIDE, CA 92521  
Contact country: US  
Contact telephone: 951-827-2416  
Contact email: AMANDA.GREY@UCR.EDU  
EPA Region: 09  
Land type: State  
Classification: TSDF  
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1

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1000431600

kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: REGENTS OF THE UNIVERSITY OF CALIFORNIA  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: State  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1948  
Owner/Op end date: Not reported

Owner/operator name: REGENTS OF THE UNIVERSITY OF CALIFORNIA  
Owner/operator address: FRANKLIN STREET  
OAKLAND, CA 94607  
Owner/operator country: US  
Owner/operator telephone: 510-987-9200  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: State  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1948  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Universal Waste Summary:

Waste type: Batteries  
Accumulated waste on-site: Yes  
Generated waste on-site: No  
Waste type: Lamps

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Accumulated waste on-site: Yes  
Generated waste on-site: No

Waste type: Pesticides  
Accumulated waste on-site: Yes  
Generated waste on-site: No

Waste type: Thermostats  
Accumulated waste on-site: Yes  
Generated waste on-site: No

. Waste code: 121  
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122  
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 141  
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181  
. Waste name: Other inorganic solid waste

. Waste code: 213  
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214  
. Waste name: Unspecified solvent mixture

. Waste code: 221  
. Waste name: Waste oil and mixed oil

. Waste code: 223  
. Waste name: Unspecified oil-containing waste

. Waste code: 261  
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331  
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352  
. Waste name: Other organic solids

. Waste code: 512  
. Waste name: Other empty containers 30 gallons or more

. Waste code: 513  
. Waste name: Empty containers less than 30 gallons

. Waste code: 541  
. Waste name: Photochemicals / photo processing waste

. Waste code: 551  
. Waste name: Laboratory waste chemicals



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MAP FINDINGS

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

- . Waste code: 611
- . Waste name: Contaminated soil from site clean-ups
  
- . Waste code: 725
- . Waste name: Liquids with mercury > 20 mg/l
  
- . Waste code: 792
- . Waste name: Liquids with pH < 2 with metals
  
- . Waste code: D001
- . Waste name: IGNITABLE WASTE
  
- . Waste code: D002
- . Waste name: CORROSIVE WASTE
  
- . Waste code: D003
- . Waste name: REACTIVE WASTE
  
- . Waste code: D004
- . Waste name: ARSENIC
  
- . Waste code: D005
- . Waste name: BARIUM
  
- . Waste code: D006
- . Waste name: CADMIUM
  
- . Waste code: D007
- . Waste name: CHROMIUM
  
- . Waste code: D008
- . Waste name: LEAD
  
- . Waste code: D009
- . Waste name: MERCURY
  
- . Waste code: D011
- . Waste name: SILVER
  
- . Waste code: D018
- . Waste name: BENZENE
  
- . Waste code: D022
- . Waste name: CHLOROFORM
  
- . Waste code: D027
- . Waste name: 1,4-DICHLOROBENZENE
  
- . Waste code: D038
- . Waste name: PYRIDINE
  
- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: P005
- . Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL
  
- . Waste code: P012
- . Waste name: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE
  
- . Waste code: P063
- . Waste name: HYDROCYANIC ACID (OR) HYDROGEN CYANIDE
  
- . Waste code: P087
- . Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE
  
- . Waste code: P094
- . Waste name: PHORATE (OR) PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-[(ETHYLTHIO)METHYL] ESTER
  
- . Waste code: P095
- . Waste name: CARBONIC DICHLORIDE (OR) PHOSGENE
  
- . Waste code: P098
- . Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
  
- . Waste code: P105
- . Waste name: SODIUM AZIDE
  
- . Waste code: P106
- . Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)
  
- . Waste code: P108
- . Waste name: STRYCHNIDIN-10-ONE, & SALTS (OR) STRYCHNINE, & SALTS

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MAP FINDINGS

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Database(s)

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

- . Waste code: U007
- . Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE
  
- . Waste code: U046
- . Waste name: CHLOROMETHYL METHYL ETHER (OR) METHANE, CHLOROMETHOXY-
  
- . Waste code: U108
- . Waste name: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE
  
- . Waste code: U117
- . Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)
  
- . Waste code: U122
- . Waste name: FORMALDEHYDE
  
- . Waste code: U133
- . Waste name: HYDRAZINE (R,T)
  
- . Waste code: U134
- . Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
  
- . Waste code: U144
- . Waste name: ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE
  
- . Waste code: U151
- . Waste name: MERCURY
  
- . Waste code: U188
- . Waste name: PHENOL
  
- . Waste code: U213
- . Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Historical Generators:

Date form received by agency: 03/19/2013  
Site name: UNIVERISTY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

- . Waste code: D001
- . Waste name: IGNITABLE WASTE
  
- . Waste code: D002
- . Waste name: CORROSIVE WASTE
  
- . Waste code: D003
- . Waste name: REACTIVE WASTE
  
- . Waste code: D004
- . Waste name: ARSENIC
  
- . Waste code: D005
- . Waste name: BARIUM
  
- . Waste code: D006
- . Waste name: CADMIUM
  
- . Waste code: D007

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

. Waste name: CHROMIUM

. Waste code: D008  
. Waste name: LEAD

. Waste code: D009  
. Waste name: MERCURY

. Waste code: D011  
. Waste name: SILVER

. Waste code: D022  
. Waste name: CHLOROFORM

. Waste code: D027  
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: F002  
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003  
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005  
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P087  
. Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

. Waste code: P105  
. Waste name: SODIUM AZIDE

. Waste code: P106  
. Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

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MAP FINDINGS

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

- . Waste code: U007
- . Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE
  
- . Waste code: U053
- . Waste name: 2-BUTENAL (OR) CROTONALDEHYDE
  
- . Waste code: U080
- . Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE
  
- . Waste code: U117
- . Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)
  
- . Waste code: U124
- . Waste name: FURAN (I) (OR) FURFURAN (I)
  
- . Waste code: U134
- . Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
  
- . Waste code: U146
- . Waste name: LEAD SUBACETATE (OR) LEAD, BIS(ACETATO-O)TETRAHYDROXYTRI-
  
- . Waste code: U177
- . Waste name: N-NITROSO-N-METHYLUREA (OR) UREA, N-METHYL-N-NITROSO-
  
- . Waste code: U188
- . Waste name: PHENOL

Date form received by agency: 03/01/2010

Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE

Classification: Large Quantity Generator

- . Waste code: 122
- . Waste name: Alkaline solution without metals (pH > 12.5)
  
- . Waste code: 123
- . Waste name: Unspecified alkaline solution
  
- . Waste code: 135
- . Waste name: Unspecified aqueous solution
  
- . Waste code: 141
- . Waste name: Off-specification, aged, or surplus inorganics
  
- . Waste code: 212
- . Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
  
- . Waste code: 213
- . Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
  
- . Waste code: 214
- . Waste name: Unspecified solvent mixture
  
- . Waste code: 221
- . Waste name: Waste oil and mixed oil
  
- . Waste code: 261
- . Waste name: Polychlorinated biphenyls and material containing PCB's

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

- . Waste code: 331
- . Waste name: Off-specification, aged, or surplus organics
  
- . Waste code: 341
- . Waste name: Organic liquids (nonsolvents) with halogens
  
- . Waste code: 343
- . Waste name: Unspecified organic liquid mixture
  
- . Waste code: 352
- . Waste name: Other organic solids
  
- . Waste code: 461
- . Waste name: Degreasing sludge
  
- . Waste code: 512
- . Waste name: Other empty containers 30 gallons or more
  
- . Waste code: 541
- . Waste name: Photochemicals / photo processing waste
  
- . Waste code: 551
- . Waste name: Laboratory waste chemicals
  
- . Waste code: 611
- . Waste name: Contaminated soil from site clean-ups
  
- . Waste code: 725
- . Waste name: Liquids with mercury > 20 mg/l
  
- . Waste code: 791
- . Waste name: Liquids with pH < 2
  
- . Waste code: 792
- . Waste name: Liquids with pH < 2 with metals
  
- . Waste code: D001
- . Waste name: IGNITABLE WASTE
  
- . Waste code: D002
- . Waste name: CORROSIVE WASTE
  
- . Waste code: D003
- . Waste name: REACTIVE WASTE
  
- . Waste code: D004
- . Waste name: ARSENIC
  
- . Waste code: D005
- . Waste name: BARIUM
  
- . Waste code: D006
- . Waste name: CADMIUM
  
- . Waste code: D007
- . Waste name: CHROMIUM

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

- . Waste code: D008
- . Waste name: LEAD
  
- . Waste code: D009
- . Waste name: MERCURY
  
- . Waste code: D010
- . Waste name: SELENIUM
  
- . Waste code: D011
- . Waste name: SILVER
  
- . Waste code: D018
- . Waste name: BENZENE
  
- . Waste code: D019
- . Waste name: CARBON TETRACHLORIDE
  
- . Waste code: D022
- . Waste name: CHLOROFORM
  
- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F027
- . Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT

Map ID  
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MAP FINDINGS

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM  
PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

- . Waste code: P087
- . Waste name: OSMIUM OXIDE OSO<sub>4</sub>, (T-4)- (OR) OSMIUM TETROXIDE
  
- . Waste code: P098
- . Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
  
- . Waste code: P105
- . Waste name: SODIUM AZIDE
  
- . Waste code: P106
- . Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)
  
- . Waste code: U134
- . Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
  
- . Waste code: U138
- . Waste name: METHANE, IODO- (OR) METHYL IODIDE
  
- . Waste code: U188
- . Waste name: PHENOL
  
- . Waste code: U236
- . Waste name: 2,7-NAPHTHALENEDISULFONIC  
ACID,3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO  
-4-HYDROXY]-, TETRASODIUM SALT (OR) TRYPAN BLUE

Date form received by agency: 02/27/2008

Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE

Classification: Large Quantity Generator

- . Waste code: D001
- . Waste name: IGNITABLE WASTE
  
- . Waste code: D002
- . Waste name: CORROSIVE WASTE
  
- . Waste code: D003
- . Waste name: REACTIVE WASTE
  
- . Waste code: D004
- . Waste name: ARSENIC
  
- . Waste code: D005
- . Waste name: BARIUM
  
- . Waste code: D006
- . Waste name: CADMIUM
  
- . Waste code: D007
- . Waste name: CHROMIUM
  
- . Waste code: D008
- . Waste name: LEAD



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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

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- . Waste code: D009
- . Waste name: MERCURY
  
- . Waste code: D010
- . Waste name: SELENIUM
  
- . Waste code: D011
- . Waste name: SILVER
  
- . Waste code: D018
- . Waste name: BENZENE
  
- . Waste code: D022
- . Waste name: CHLOROFORM
  
- . Waste code: D023
- . Waste name: O-CRESOL
  
- . Waste code: D024
- . Waste name: M-CRESOL
  
- . Waste code: D027
- . Waste name: 1,4-DICHLOROBENZENE
  
- . Waste code: D028
- . Waste name: 1,2-DICHLOROETHANE
  
- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P001  
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P020  
. Waste name: DINOSEB (OR) PHENOL, 2-(1-METHYLPROPYL)-4,6-DINITRO-

. Waste code: P022  
. Waste name: CARBON DISULFIDE

. Waste code: P087  
. Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

. Waste code: P098  
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: P105  
. Waste name: SODIUM AZIDE

. Waste code: P106  
. Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

. Waste code: P120  
. Waste name: VANADIUM OXIDE V2O5 (OR) VANADIUM PENTOXIDE

. Waste code: U002  
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U006  
. Waste name: ACETYL CHLORIDE (C,R,T)

. Waste code: U007  
. Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE

. Waste code: U019  
. Waste name: BENZENE (I,T)

. Waste code: U031  
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U044  
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U052  
. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U072  
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U078  
. Waste name: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

. Waste code: U080  
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

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**1000431600**

. Waste code: U081  
. Waste name: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

. Waste code: U103  
. Waste name: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

. Waste code: U112  
. Waste name: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

. Waste code: U130  
. Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO- (OR) HEXACHLOROCYCLOPENTADIENE

. Waste code: U133  
. Waste name: HYDRAZINE (R,T)

. Waste code: U134  
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U138  
. Waste name: METHANE, IODO- (OR) METHYL IODIDE

. Waste code: U140  
. Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

. Waste code: U154  
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U161  
. Waste name: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

. Waste code: U169  
. Waste name: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

. Waste code: U188  
. Waste name: PHENOL

. Waste code: U210  
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U211  
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: U217  
. Waste name: NITRIC ACID, THALLIUM(1+) SALT (OR) THALLIUM(I) NITRATE

. Waste code: U220  
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239  
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

. Waste code: U353  
. Waste name: BENZENAMINE, 4-METHYL- (OR) P-TOLUIDINE

Date form received by agency: 02/27/2006

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

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Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

. Waste code: D002  
. Waste name: CORROSIVE WASTE

. Waste code: D003  
. Waste name: REACTIVE WASTE

. Waste code: D004  
. Waste name: ARSENIC

. Waste code: D005  
. Waste name: BARIUM

. Waste code: D006  
. Waste name: CADMIUM

. Waste code: D007  
. Waste name: CHROMIUM

. Waste code: D008  
. Waste name: LEAD

. Waste code: D009  
. Waste name: MERCURY

. Waste code: D010  
. Waste name: SELENIUM

. Waste code: D011  
. Waste name: SILVER

. Waste code: D018  
. Waste name: BENZENE

. Waste code: D019  
. Waste name: CARBON TETRACHLORIDE

. Waste code: D022  
. Waste name: CHLOROFORM

. Waste code: D025  
. Waste name: P-CRESOL

. Waste code: F002  
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

SPENT SOLVENT MIXTURES.

- . Waste code: F003
  - . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
  - . Waste code: F005
  - . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
  - . Waste code: P005
  - . Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL
  
  - . Waste code: P087
  - . Waste name: OSMIUM OXIDE OSO<sub>4</sub>, (T-4)- (OR) OSMIUM TETROXIDE
  
  - . Waste code: P098
  - . Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
  
  - . Waste code: P105
  - . Waste name: SODIUM AZIDE
  
  - . Waste code: U007
  - . Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE
  
  - . Waste code: U043
  - . Waste name: ETHENE, CHLORO- (OR) VINYL CHLORIDE
  
  - . Waste code: U133
  - . Waste name: HYDRAZINE (R,T)
  
  - . Waste code: U188
  - . Waste name: PHENOL
  
  - . Waste code: U189
  - . Waste name: PHOSPHORUS SULFIDE (R) (OR) SULFUR PHOSPHIDE (R)
- Date form received by agency: 03/24/2004  
Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator
- . Waste code: D001
  - . Waste name: IGNITABLE WASTE

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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

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- . Waste code: D002
- . Waste name: CORROSIVE WASTE
  
- . Waste code: D003
- . Waste name: REACTIVE WASTE
  
- . Waste code: D005
- . Waste name: BARIUM
  
- . Waste code: D006
- . Waste name: CADMIUM
  
- . Waste code: D008
- . Waste name: LEAD
  
- . Waste code: D009
- . Waste name: MERCURY
  
- . Waste code: D011
- . Waste name: SILVER
  
- . Waste code: D012
- . Waste name: ENDRIN  
(1,2,3,4,10,10-HEXACHLORO-1,7-EPOXY-1,4,4A,5,6,7,8,8A-OCTAHYDRO-1,4-EN  
DO, ENDO-5,8-DIMETH-ANO-NAPHTHALENE)
  
- . Waste code: D013
- . Waste name: LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)
  
- . Waste code: D014
- . Waste name: METHOXYCHLOR (1,1,1-TRICHLORO-2,2-BIS [P-METHOXYPHENYL] ETHANE)
  
- . Waste code: D015
- . Waste name: TOXAPHENE (C10 H10 CL8, TECHNICAL CHLORINATED CAMPHERE, 67-69 PERCENT  
CHLORINE)
  
- . Waste code: D016
- . Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
  
- . Waste code: D022
- . Waste name: CHLOROFORM
  
- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL  
ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL  
ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT  
MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT  
NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS  
CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED  
SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR  
MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL  
BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT  
MIXTURES.
  
- . Waste code: LABP
- . Waste name: LAB PACK

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

- . Waste code: P037
- . Waste name: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE,  
3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA,  
2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN
  
- . Waste code: P071
- . Waste name: METHYL PARATHION (OR) PHOSPHOROTHIOIC ACID, O,O,-DIMETHYL  
O-(4-NITROPHENYL) ESTER
  
- . Waste code: P075
- . Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, &  
SALTS
  
- . Waste code: P087
- . Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE
  
- . Waste code: P105
- . Waste name: SODIUM AZIDE

Date form received by agency: 02/26/2002

Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE

Classification: Large Quantity Generator

- . Waste code: 122
- . Waste name: Alkaline solution without metals (pH > 12.5)
  
- . Waste code: 141
- . Waste name: Off-specification, aged, or surplus inorganics
  
- . Waste code: 212
- . Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
  
- . Waste code: 213
- . Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
  
- . Waste code: 214
- . Waste name: Unspecified solvent mixture
  
- . Waste code: 221
- . Waste name: Waste oil and mixed oil
  
- . Waste code: 223
- . Waste name: Unspecified oil-containing waste
  
- . Waste code: 261
- . Waste name: Polychlorinated biphenyls and material containing PCB's
  
- . Waste code: 331
- . Waste name: Off-specification, aged, or surplus organics
  
- . Waste code: 343
- . Waste name: Unspecified organic liquid mixture
  
- . Waste code: 352
- . Waste name: Other organic solids
  
- . Waste code: 541

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

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. Waste name:	Photochemicals / photo processing waste
. Waste code:	551
. Waste name:	Laboratory waste chemicals
. Waste code:	611
. Waste name:	Contaminated soil from site clean-ups
. Waste code:	792
. Waste name:	Liquids with pH < 2 with metals
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D004
. Waste name:	ARSENIC
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D012
. Waste name:	ENDRIN (1,2,3,4,10,10-HEXACHLORO-1,7-EPOXY-1,4,4A,5,6,7,8,8A-OCTAHYDRO-1,4-EN DO, ENDO-5,8-DIMETH-ANO-NAPHTHALENE)
. Waste code:	D013
. Waste name:	LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)
. Waste code:	D014
. Waste name:	METHOXYCHLOR (1,1,1-TRICHLORO-2,2-BIS [P-METHOXYPHENYL] ETHANE)
. Waste code:	D015
. Waste name:	TOXAPHENE (C10 H10 CL8, TECHNICAL CHLORINATED CAMPHENE, 67-69 PERCENT



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UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

1000431600

CHLORINE)

- . Waste code: D016
- . Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
  
- . Waste code: D017
- . Waste name: 2,4,5-TP SILVEX (2,4,5-TRICHLOROPHENOXYPROPIONIC ACID)
  
- . Waste code: D018
- . Waste name: BENZENE
  
- . Waste code: D019
- . Waste name: CARBON TETRACHLORIDE
  
- . Waste code: D022
- . Waste name: CHLOROFORM
  
- . Waste code: D027
- . Waste name: 1,4-DICHLOROBENZENE
  
- . Waste code: D028
- . Waste name: 1,2-DICHLOROETHANE
  
- . Waste code: D031
- . Waste name: HEPTACHLOR (AND ITS EPOXIDE)
  
- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F004
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

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- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
  
- . Waste code: F027
- . Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)
  
- . Waste code: P001
- . Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
  
- . Waste code: P003
- . Waste name: 2-PROPENAL (OR) ACROLEIN
  
- . Waste code: P004
- . Waste name: 1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXA-CHLORO-1,4,4A,5,8,8A,-HEXAHYDRO-, (1ALPHA, 4ALPHA, 4ABETA, 5ALPHA, 8ALPHA, 8ABETA)- (OR) ALDRIN
  
- . Waste code: P005
- . Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL
  
- . Waste code: P010
- . Waste name: ARSENIC ACID H3ASO4
  
- . Waste code: P012
- . Waste name: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE
  
- . Waste code: P014
- . Waste name: BENZENETHIOL (OR) THIOPHENOL
  
- . Waste code: P018
- . Waste name: BRUCINE (OR) STRYCHNIDIN-10-ONE, 2,3-DIMETHOXY-
  
- . Waste code: P022
- . Waste name: CARBON DISULFIDE
  
- . Waste code: P023
- . Waste name: ACETALDEHYDE, CHLORO- (OR) CHLOROACETALDEHYDE
  
- . Waste code: P024
- . Waste name: BENZENAMINE, 4-CHLORO- (OR) P-CHLORANILINE
  
- . Waste code: P030
- . Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
  
- . Waste code: P037

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- . Waste name: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE,  
3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA,  
2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN
- . Waste code: P041
- . Waste name: DIETHYL-P-NITROPHENYL PHOSPHATE (OR) PHOSPHORIC ACID, DIETHYL  
4-NITROPHENYL ESTER
- . Waste code: P042
- . Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR)  
EPINEPHRINE
- . Waste code: P044
- . Waste name: DIMETHOATE (OR) PHOSPHORODITHIOIC ACID, O,O-DIMETHYL  
S-[2-(METHYLAMINO)-2-OXOETHYL] ESTER
- . Waste code: P048
- . Waste name: 2,4-DINITROPHENOL (OR) PHENOL, 2,4-DINITRO-
- . Waste code: P066
- . Waste name: ETHANIMIDOTHIOIC ACID, N-[[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER  
(OR) METHOMYL
- . Waste code: P070
- . Waste name: ALDICARB (OR) PROPANAL, 2-METHYL-2-(METHYLTHIO)-,  
O-[(METHYLAMINO)CARBONYL]OXIME
- . Waste code: P071
- . Waste name: METHYL PARATHION (OR) PHOSPHOROTHIOIC ACID, O,O,-DIMETHYL  
O-(4-NITROPHENYL) ESTER
- . Waste code: P075
- . Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, &  
SALTS
- . Waste code: P076
- . Waste name: NITRIC OXIDE (OR) NITROGEN OXIDE NO
- . Waste code: P077
- . Waste name: BENZENAMINE, 4-NITRO- (OR) P-NITROANILINE
- . Waste code: P078
- . Waste name: NITROGEN DIOXIDE (OR) NITROGEN OXIDE NO2
- . Waste code: P087
- . Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE
- . Waste code: P088
- . Waste name: 7-OXABICYCLO[2.2.1]HEPTANE-2,3-DICARBOXYLIC ACID (OR) ENDOTHALL
- . Waste code: P089
- . Waste name: PARATHION (OR) PHOSPHOROTHIOIC ACID, O,O-DIETHYL-O-(4-NITROPHENYL)  
ESTER
- . Waste code: P101
- . Waste name: ETHYL CYANIDE (OR) PROPANENITRILE

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- . Waste code: P102
- . Waste name: 2-PROPYN-1-OL (OR) PROPARGYL ALCOHOL
  
- . Waste code: P105
- . Waste name: SODIUM AZIDE
  
- . Waste code: P106
- . Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)
  
- . Waste code: P108
- . Waste name: STRYCHNIDIN-10-ONE, & SALTS (OR) STRYCHNINE, & SALTS
  
- . Waste code: P109
- . Waste name: TETRAETHYLDITHIOPYROPHOSPHATE (OR) THIODIPHOSPHORIC ACID, TETRAETHYL ESTER
  
- . Waste code: P111
- . Waste name: DIPHOSPHORIC ACID, TETRAETHYL ESTER (OR) TETRAETHYL PYROPHOSPHATE
  
- . Waste code: P113
- . Waste name: THALLIC OXIDE (OR) THALLIUM OXIDE TL2O3
  
- . Waste code: P115
- . Waste name: SULFURIC ACID, DITHALLIUM (1+) SALT (OR) THALLIUM(I) SULFATE
  
- . Waste code: P120
- . Waste name: VANADIUM OXIDE V2O5 (OR) VANADIUM PENTOXIDE
  
- . Waste code: P194
- . Waste name: ETHANIMIDOTHIOC ACID, 2-(DIMETHYLAMINO)-N-[[METHYLAMINO) CARBONYL]OXY]-2-OXO-, METHYL ESTER (OR) OXAMYL
  
- . Waste code: U001
- . Waste name: ACETALDEHYDE (I) (OR) ETHANAL (I)
  
- . Waste code: U002
- . Waste name: 2-PROPANONE (I) (OR) ACETONE (I)
  
- . Waste code: U003
- . Waste name: ACETONITRILE (I,T)
  
- . Waste code: U007
- . Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE
  
- . Waste code: U009
- . Waste name: 2-PROPENENITRILE (OR) ACRYLONITRILE
  
- . Waste code: U019
- . Waste name: BENZENE (I,T)
  
- . Waste code: U029
- . Waste name: METHANE, BROMO- (OR) METHYL BROMIDE
  
- . Waste code: U031
- . Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)
  
- . Waste code: U038

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. Waste name: BENZENEACETIC ACID, 4-CHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA-HYDROXY-, ETHYL ESTER (OR) CHLOROBENZILATE

. Waste code: U044

. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U052

. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U053

. Waste name: 2-BUTENAL (OR) CROTONALDEHYDE

. Waste code: U056

. Waste name: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

. Waste code: U057

. Waste name: CYCLOHEXANONE (I)

. Waste code: U061

. Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

. Waste code: U069

. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

. Waste code: U076

. Waste name: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

. Waste code: U077

. Waste name: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

. Waste code: U080

. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U103

. Waste name: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

. Waste code: U108

. Waste name: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

. Waste code: U115

. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U117

. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U122

. Waste name: FORMALDEHYDE

. Waste code: U123

. Waste name: FORMIC ACID (C,T)

. Waste code: U124

. Waste name: FURAN (I) (OR) FURFURAN (I)

. Waste code: U135

. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

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. Waste code:	U140
. Waste name:	1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)
. Waste code:	U144
. Waste name:	ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE
. Waste code:	U149
. Waste name:	MALONONITRILE (OR) PROPANEDINITRILE
. Waste code:	U151
. Waste name:	MERCURY
. Waste code:	U154
. Waste name:	METHANOL (I) (OR) METHYL ALCOHOL (I)
. Waste code:	U162
. Waste name:	2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)
. Waste code:	U165
. Waste name:	NAPHTHALENE
. Waste code:	U186
. Waste name:	1,3-PENTADIENE (I) (OR) 1-METHYLBUTADIENE (I)
. Waste code:	U188
. Waste name:	PHENOL
. Waste code:	U196
. Waste name:	PYRIDINE
. Waste code:	U211
. Waste name:	CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-
. Waste code:	U220
. Waste name:	BENZENE, METHYL- (OR) TOLUENE
. Waste code:	U226
. Waste name:	ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM
. Waste code:	U238
. Waste name:	CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)
. Waste code:	U239
. Waste name:	BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)
. Waste code:	U271
. Waste name:	BENOMYL (OR) CARBAMIC ACID, [1-[(BUTYLAMINO)CARBONYL]-1H-BENZIMIDAZOL-2-YL]-, METHYL ESTER
. Waste code:	U278
. Waste name:	BENDIOCARB (OR) 1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-, METHYL CARBAMATE
. Waste code:	U279
. Waste name:	CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE
. Waste code:	U328

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- . Waste name: BENZENAMINE, 2-METHYL- (OR) O-TOLUIDINE
- . Waste code: U404
- . Waste name: ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE
- . Waste code: U411
- . Waste name: PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR

Date form received by agency: 10/12/2000  
Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999  
Site name: UNIVERSITY OF CALIFORNIA, RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996  
Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 04/01/1996  
Site name: UNIVERSITY OF CALIFORNIA, RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 03/31/1994  
Site name: UNIVERSITY OF CALIFORNIA, RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 02/26/1992  
Site name: UNIVERSITY OF CALIFORNIA RIVER  
Classification: Large Quantity Generator

Date form received by agency: 04/13/1990  
Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980  
Site name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 55197

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A

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CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Amount (Lbs): 34643

Waste code: D003  
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Amount (Lbs): 790

Waste code: D004  
Waste name: ARSENIC  
Amount (Lbs): 13324

Waste code: D005  
Waste name: BARIUM  
Amount (Lbs): 14808

Waste code: D006  
Waste name: CADMIUM  
Amount (Lbs): 27019

Waste code: D007  
Waste name: CHROMIUM  
Amount (Lbs): 27388

Waste code: D008  
Waste name: LEAD  
Amount (Lbs): 29931

Waste code: D009  
Waste name: MERCURY  
Amount (Lbs): 308

Waste code: D011  
Waste name: SILVER  
Amount (Lbs): 26231

Waste code: D018  
Waste name: BENZENE  
Amount (Lbs): 428

Waste code: D022  
Waste name: CHLOROFORM  
Amount (Lbs): 59694

Waste code: D027  
Waste name: 1,4-DICHLOROBENZENE  
Amount (Lbs): 13324

Waste code: D038  
Waste name: PYRIDINE



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Amount (Lbs): 23847

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROETHYLENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 45543

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 46202

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 36550

Waste code: P005

Waste name: ALLYL ALCOHOL

Amount (Lbs): 100

Waste code: P012

Waste name: ARSENIC OXIDE AS2O3

Amount (Lbs): 15

Waste code: P087

Waste name: OSMIUM OXIDE OSO4, (T-4)-

Amount (Lbs): 8993

Waste code: P095

Waste name: CARBONIC DICHLORIDE

Amount (Lbs): 100

Waste code: P098

Waste name: POTASSIUM CYANIDE

Amount (Lbs): 108

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Waste code:	P105
Waste name:	SODIUM AZIDE
Amount (Lbs):	108
Waste code:	P106
Waste name:	SODIUM CYANIDE
Amount (Lbs):	108
Waste code:	P108
Waste name:	STRYCHNIDIN-10-ONE, & SALTS
Amount (Lbs):	8993
Waste code:	U046
Waste name:	CHLOROMETHYL METHYL ETHER
Amount (Lbs):	100
Waste code:	U108
Waste name:	1,4-DIETHYLENEOXIDE
Amount (Lbs):	12907
Waste code:	U117
Waste name:	ETHANE, 1,1'-OXYBIS-(I)
Amount (Lbs):	12703
Waste code:	U122
Waste name:	FORMALDEHYDE
Amount (Lbs):	12703
Waste code:	U133
Waste name:	HYDRAZINE (R,T)
Amount (Lbs):	108
Waste code:	U134
Waste name:	HYDROFLUORIC ACID (C,T)
Amount (Lbs):	3263
Waste code:	U151
Waste name:	MERCURY
Amount (Lbs):	152
Waste code:	U188
Waste name:	PHENOL
Amount (Lbs):	13472
Waste code:	U213
Waste name:	FURAN, TETRAHYDRO-(I)
Amount (Lbs):	12703

Corrective Action Summary:

Event date:	07/01/1985
Event:	LEAD AGENCY DETERMINATION
Event date:	07/01/1985
Event:	PA OR CERCLA INSPECTION
Event date:	07/01/1985

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Event:	NCAPS RANKING/PRIORITY
Event date:	07/01/1985
Event:	CA PRIORITIZATION-MEDIUM CA PRIORITY
Event date:	01/06/1989
Event:	CMS IMPOSITION
Event date:	01/06/1989
Event:	INVESTIGATION IMPOSITION
Event date:	07/20/1990
Event:	PA OR CERCLA INSPECTION
Event date:	12/01/1990
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS EXPOSURE CONTROL
Event date:	12/31/1990
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	03/15/1994
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	05/23/1994
Event:	CA PRIORITIZATION-LOW CA PRIORITY
Event date:	05/23/1994
Event:	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION
Event date:	05/23/1994
Event:	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION
Event date:	10/10/1995
Event:	CMS COMPLETE
Event date:	10/10/1995
Event:	CMS WORKPLAN APPROVED
Event date:	10/10/1995
Event:	INVESTIGATION COMPLETE
Event date:	05/16/1996
Event:	REMEDY DECISION
Event date:	05/16/1996
Event:	REMEDY DECISION
Event date:	09/06/1996
Event:	CORRECTIVE MEASURES DESIGN APPROVED
Event date:	09/06/1996
Event:	CMI WORKPLAN APPROVED
Event date:	03/30/1998

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: 06/03/1998  
Event: STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION

Event date: 06/03/1998  
Event: REFERRED TO A NON-RCRA AUTHORITY

Event date: 06/03/1998  
Event: RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 06/03/1998  
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 06/03/1998  
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 06/03/1998  
Event: RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: Not reported  
Event: REEVALUATE IN FY

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 11/13/2014  
Date achieved compliance: Not reported  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/13/2014  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 10/06/2010  
Date achieved compliance: 10/06/2010  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD IS-General Facility Standards

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Date violation determined: 10/06/2010  
Date achieved compliance: 11/01/2010  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD IS-Contingency Plan and Emergency Procedures  
Date violation determined: 10/06/2010  
Date achieved compliance: 11/01/2010  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: - 262.30-34.C  
Area of violation: Generators - General  
Date violation determined: 07/30/2002  
Date achieved compliance: 07/30/2002  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: 07/30/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: - 262.10-12.A  
Area of violation: Generators - General  
Date violation determined: 07/30/2002  
Date achieved compliance: 07/30/2002  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: 07/30/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: - 262.30-34.C  
Area of violation: Generators - General  
Date violation determined: 07/30/2002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Date achieved compliance: 07/30/2002  
Violation lead agency: EPA  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 09/30/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: - 262.10-12.A  
Area of violation: Generators - General  
Date violation determined: 07/30/2002  
Date achieved compliance: 07/30/2002  
Violation lead agency: EPA  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 09/30/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.30-37.C  
Area of violation: TSD - General  
Date violation determined: 06/22/1991  
Date achieved compliance: 10/21/1991  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/10/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 06/22/1991  
Date achieved compliance: 10/21/1991  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/10/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 06/22/1991  
Date achieved compliance: 10/21/1991

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/10/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.30-34.C  
Area of violation: Generators - General  
Date violation determined: 06/22/1991  
Date achieved compliance: 10/21/1991  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/10/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: F - 270  
Area of violation: TSD - General  
Date violation determined: 06/27/1990  
Date achieved compliance: 04/30/1991  
Violation lead agency: EPA  
Enforcement action: INITIAL 3008(A) COMPLIANCE  
Enforcement action date: 11/09/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: 76800  
Final penalty amount: 76800  
Paid penalty amount: Not reported

Regulation violated: F - 270  
Area of violation: TSD - General  
Date violation determined: 06/27/1990  
Date achieved compliance: 04/30/1991  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/15/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: F - 270  
Area of violation: TSD - General  
Date violation determined: 09/11/1989  
Date achieved compliance: 04/30/1991  
Violation lead agency: EPA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Enforcement action: INITIAL 3008(A) COMPLIANCE  
Enforcement action date: 11/09/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: 76800  
Final penalty amount: 76800  
Paid penalty amount: Not reported

Regulation violated: F - 270  
Area of violation: TSD - General  
Date violation determined: 09/11/1989  
Date achieved compliance: 04/30/1991  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: F - 270  
Area of violation: TSD - General  
Date violation determined: 09/11/1989  
Date achieved compliance: 04/30/1991  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/13/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.110-120.G  
Area of violation: TSD - Closure/Post-Closure  
Date violation determined: 09/15/1988  
Date achieved compliance: 05/20/1989  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/14/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 09/15/1988  
Date achieved compliance: 05/20/1989  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Enforcement action date: 04/14/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 11/20/2014  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/19/2014  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/13/2014  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/13/2014  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 10/06/2010  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD IS-Contingency Plan and Emergency Procedures  
Date achieved compliance: 11/01/2010  
Evaluation lead agency: EPA

Evaluation date: 10/06/2010  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD IS-General Facility Standards  
Date achieved compliance: 11/01/2010  
Evaluation lead agency: EPA

Evaluation date: 10/06/2010  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 10/06/2010  
Evaluation lead agency: EPA

Evaluation date: 04/05/2005  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Evaluation date: 04/01/2004  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 04/01/2004  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 07/30/2002  
Evaluation: NON-FINANCIAL RECORD REVIEW  
Area of violation: Generators - General  
Date achieved compliance: 07/30/2002  
Evaluation lead agency: EPA

Evaluation date: 04/30/1991  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 10/21/1991  
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 04/30/1991  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 10/21/1991  
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 04/30/1991  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 06/27/1990  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 04/30/1991  
Evaluation lead agency: EPA

Evaluation date: 09/11/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 04/30/1991  
Evaluation lead agency: EPA

Evaluation date: 09/15/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Closure/Post-Closure  
Date achieved compliance: 05/20/1989  
Evaluation lead agency: EPA

Evaluation date: 09/15/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)**

**1000431600**

Date achieved compliance: 05/20/1989  
 Evaluation lead agency: EPA

**E21**  
**ENE**  
**1/8-1/4**  
**0.159 mi.**  
**838 ft.**

**UC RIVERSIDE CENTRAL STEAM PLA**  
**3401 WATKINS DR**  
**RIVERSIDE, CA 92521**

**HIST UST**    **U001576689**  
**N/A**

**Site 1 of 5 in cluster E**

**Relative:**  
**Higher**

HIST UST:

**Actual:**  
**1128 ft.**

File Number: Not reported  
 URL: Not reported  
 Region: STATE  
 Facility ID: 00000019668  
 Facility Type: Other  
 Other Type: UNIVERSITY  
 Contact Name: BILLY L. MAY  
 Telephone: 7147874677  
 Owner Name: THE REGENTS OF THE UNIVERSITY  
 Owner Address: 650 UNIVERSITY HALL  
 Owner City,St,Zip: BERKELEY, CA 94720  
 Total Tanks: 0002

Tank Num: 001  
 Container Num: UCR-2 SP  
 Year Installed: 1958  
 Tank Capacity: 00010068  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 001  
 Container Num: 1CR-4 SP  
 Year Installed: 1968  
 Tank Capacity: 00010068  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 002  
 Container Num: UCR-1 SP  
 Year Installed: 1958  
 Tank Capacity: 00010068  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 002  
 Container Num: UCR-3 SP  
 Year Installed: 1948  
 Tank Capacity: 00010068  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**E22** UC RIVERSIDE CENTRAL STEAM PAL  
**ENE** 3401 WATKINS DRIVE  
**1/8-1/4** RIVERSIDE, CA 92521  
**0.159 mi.**  
**838 ft.** Site 2 of 5 in cluster E

**HIST UST** S109038649  
**CHMIRS** N/A

**Relative:**  
**Higher**

HIST UST:

File Number: 0001FA06  
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FA06.pdf>  
Region: Not reported  
Facility ID: Not reported  
Facility Type: Not reported  
Other Type: Not reported  
Contact Name: Not reported  
Telephone: Not reported  
Owner Name: Not reported  
Owner Address: Not reported  
Owner City,St,Zip: Not reported  
Total Tanks: Not reported

**Actual:**  
**1128 ft.**

Tank Num: Not reported  
Container Num: Not reported  
Year Installed: Not reported  
Tank Capacity: Not reported  
Tank Used for: Not reported  
Type of Fuel: Not reported  
Container Construction Thickness: Not reported  
Leak Detection: Not reported

Tank Num: Not reported  
Container Num: Not reported  
Year Installed: Not reported  
Tank Capacity: Not reported  
Tank Used for: Not reported  
Type of Fuel: Not reported  
Container Construction Thickness: Not reported  
Leak Detection: Not reported

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CHMIRS:

OES Incident Number: 6-5667  
OES notification: 09/22/2006  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UC RIVERSIDE CENTRAL STEAM PAL (Continued)

S109038649

Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Pepsi
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2006
Agency:	CEMS Environmental
Incident Date:	9/22/2006 12:00:00 AM
Admin Agency:	Riverside City Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	School
E Date:	Not reported
Substance:	Hydraulic Oil
Gallons:	1
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	2
Number of Injuries:	2
Number of Fatalities:	2
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Calling for Pepsi Bottling Co. Hydraulic line on the trailers lift tore causing the release.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**E23** UC RIVERSIDE CENTRAL STEAM PLA  
**ENE** 3401 WATKINS DR  
**1/8-1/4** RIVERSIDE, CA 92521  
**0.159 mi.**  
**838 ft.** Site 3 of 5 in cluster E

**HIST UST** U001576691  
 N/A

**Relative:**  
**Higher**

HIST UST:

**Actual:**  
**1128 ft.**

File Number:	0001FA04
URL:	<a href="http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FA04.pdf">http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FA04.pdf</a>
Region:	STATE
Facility ID:	00000012224
Facility Type:	Other
Other Type:	UNIVERSITY
Contact Name:	BILLY L. MAY
Telephone:	7147871677
Owner Name:	THE REGENTS OF THE UNIVERSITY
Owner Address:	650 UNIVERSITY HALL
Owner City,St,Zip:	BERKELEY, CA 94720
Total Tanks:	0009
Tank Num:	001
Container Num:	UCR - 5 SP
Year Installed:	1971
Tank Capacity:	00021298
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	UCR - 6 SP
Year Installed:	1973
Tank Capacity:	00018676
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	UCR - 7SP
Year Installed:	1973
Tank Capacity:	00018676
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	UCR B-1 SP
Year Installed:	1980
Tank Capacity:	00020000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	UCR B-2 SP
Year Installed:	1980

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UC RIVERSIDE CENTRAL STEAM PLA (Continued)**

**U001576691**

Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 006  
Container Num: UCR B-3 SP  
Year Installed: 1980  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 007  
Container Num: UCR B-4 SP  
Year Installed: 1980  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 008  
Container Num: UCR B-5 SP  
Year Installed: 1980  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 009  
Container Num: UCR-1GR  
Year Installed: 1974  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: Visual

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**E24**  
**ENE**  
**1/8-1/4**  
**0.159 mi.**  
**838 ft.**

**UCR FLEET SERVICES**  
**3401 WATKINS DR**  
**RIVERSIDE, CA 92507**

**Site 4 of 5 in cluster E**

**UST U001576688**  
**HIST UST N/A**

**Relative:**  
**Higher**

UST:  
Facility ID: 784  
Permitting Agency: RIVERSIDE COUNTY  
Latitude: 33.9808128  
Longitude: -117.317745

**Actual:**  
**1128 ft.**

Facility ID: FA0014750  
Permitting Agency: Riverside County Department of Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UCR FLEET SERVICES (Continued)**

**U001576688**

Latitude: 33.98113  
Longitude: -117.32381

RIVERSIDE CO. UST:  
Region: RIVERSIDE  
Total Tanks: 1

HIST UST:  
File Number: 0001FAC7  
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FAC7.pdf>  
Region: STATE  
Facility ID: 00000009250  
Facility Type: Gas Station  
Other Type: GARAGE  
Contact Name: MANAGER MAURICE YARNO  
Telephone: 7147875422  
Owner Name: UNIVERISTY OF CALIFORNIA  
Owner Address: 3401 WATKINS DR.  
Owner City,St,Zip: RIVERSIDE, CA 92521  
Total Tanks: 0003

Tank Num: 001  
Container Num: NO 3  
Year Installed: 1958  
Tank Capacity: 00000500  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 002  
Container Num: NO 1  
Year Installed: 1958  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 003  
Container Num: NO 2  
Year Installed: 1978  
Tank Capacity: 00006000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: None

[Click here for Geo Tracker PDF:](#)



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**E25** U C RIVERSIDE FLEET SERVICES  
**ENE** 3401 WATKINS DR  
**1/8-1/4** RIVERSIDE, CA 92507  
**0.159 mi.**  
**838 ft.** Site 5 of 5 in cluster E

**LUST** S103249180  
N/A

**Relative:**  
**Higher**

LUST:

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500425](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500425)  
Global Id: T0606500425  
Latitude: 33.9714397296556  
Longitude: -117.327086593319  
Status: Completed - Case Closed  
Status Date: 07/29/1998  
Case Worker: RIV  
RB Case Number: 083302681T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 95454  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Heating Oil / Fuel Oil  
Site History: Not reported

**Actual:**  
**1128 ft.**

LUST:

Global Id: T0606500425  
Contact Type: Local Agency Caseworker  
Contact Name: Riverside County LOP  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: Not reported  
Phone Number: 9519558980  
  
Global Id: T0606500425  
Contact Type: Regional Board Caseworker  
Contact Name: TOM E. MBEKE-EKANEM  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: [tmbeke-ekanem@waterboards.ca.gov](mailto:tmbeke-ekanem@waterboards.ca.gov)  
Phone Number: 9513202007

LUST:

Global Id: T0606500425  
Action Type: Other  
Date: 05/23/1995  
Action: Leak Discovery  
  
Global Id: T0606500425  
Action Type: ENFORCEMENT  
Date: 12/14/2008  
Action: File review - #RCDEH Upload Site File 10/20/2015  
  
Global Id: T0606500425  
Action Type: ENFORCEMENT  
Date: 12/15/2008  
Action: Closure/No Further Action Letter - #Site Closure

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE FLEET SERVICES (Continued)**

**S103249180**

Global Id: T0606500425  
Action Type: Other  
Date: 04/04/1995  
Action: Leak Stopped

Global Id: T0606500425  
Action Type: Other  
Date: 05/24/1995  
Action: Leak Reported

LUST:

Global Id: T0606500425  
Status: Open - Case Begin Date  
Status Date: 08/23/1994

Global Id: T0606500425  
Status: Open - Site Assessment  
Status Date: 08/23/1994

Global Id: T0606500425  
Status: Open - Site Assessment  
Status Date: 07/11/1995

Global Id: T0606500425  
Status: Completed - Case Closed  
Status Date: 07/29/1998

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500519](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500519)  
Global Id: T0606500519  
Latitude: 33.9797433118767  
Longitude: -117.322419776521  
Status: Completed - Case Closed  
Status Date: 10/06/2000  
Case Worker: SCB  
RB Case Number: 083303140T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 980244  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST:

Global Id: T0606500519  
Contact Type: Local Agency Caseworker  
Contact Name: SHARON BOLTINGHOUSE  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: sbolting@rivco.org  
Phone Number: 9519558980

Global Id: T0606500519  
Contact Type: Regional Board Caseworker

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE FLEET SERVICES (Continued)**

**S103249180**

Contact Name: TOM E. MBEKE-EKANEM  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: tmbeke-ekanem@waterboards.ca.gov  
Phone Number: 9513202007

LUST:

Global Id: T0606500519  
Action Type: Other  
Date: 03/17/1998  
Action: Leak Discovery

Global Id: T0606500519  
Action Type: ENFORCEMENT  
Date: 10/05/2000  
Action: File review - #RCDEH Upload Site File 10/20/2015

Global Id: T0606500519  
Action Type: ENFORCEMENT  
Date: 10/06/2000  
Action: Closure/No Further Action Letter - #Riv Co Closure

Global Id: T0606500519  
Action Type: Other  
Date: 03/17/1998  
Action: Leak Stopped

Global Id: T0606500519  
Action Type: Other  
Date: 03/18/1998  
Action: Leak Reported

LUST:

Global Id: T0606500519  
Status: Open - Case Begin Date  
Status Date: 03/17/1998

Global Id: T0606500519  
Status: Open - Site Assessment  
Status Date: 03/17/1998

Global Id: T0606500519  
Status: Completed - Case Closed  
Status Date: 10/06/2000

LUST REG 8:

Region: 8  
County: Riverside  
Regional Board: Santa Ana Region  
Facility Status: Case Closed  
Case Number: 083303140T  
Local Case Num: 980244  
Case Type: Soil only  
Substance: Gasoline

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**U C RIVERSIDE FLEET SERVICES (Continued)**

**S103249180**

Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0606500519
How Stopped Date:	Not reported
Enter Date:	3/31/1998
Date Confirmation of Leak Began:	3/17/1998
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/17/1998
Enforcement Date:	Not reported
Close Date:	10/6/2000
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/31/1998
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9754056
Longitude:	-117.3311906
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**RIVERSIDE CO. LUST:**

Region:	RIVERSIDE
Facility ID:	95454
Employee:	Boltinghous-LOP
Site Closed:	Yes
Case Type:	Soil only
Facility Status:	closed/action completed
Casetype Decode:	Soil only is impacted

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE FLEET SERVICES (Continued)**

**S103249180**

Fstatus Decode: Closed/Action completed  
  
Region: RIVERSIDE  
Facility ID: 980244  
Employee: Boltinghous-LOP  
Site Closed: Yes  
Case Type: Soil only  
Facility Status: closed/action completed  
Casetype Decode: Soil only is impacted  
Fstatus Decode: Closed/Action completed

**F26**  
**South**  
**1/4-1/2**  
**0.284 mi.**  
**1499 ft.**

**WEST CAMPUS SOLAR FARM**  
**900 UNIVERSITY AVENUE**  
**RIVERSIDE, CA 92507**

**ENVIROSTOR**  
**CHMIRS**  
**HWP**  
**NPDES**

**S100221282**  
**N/A**

**Site 1 of 2 in cluster F**

**Relative:**  
**Higher**

ENVIROSTOR:  
Facility ID: 80001663  
Status: Refer: SMBRP  
Status Date: 06/03/1998  
Site Code: Not reported  
Site Type: Corrective Action  
Site Type Detailed: Corrective Action  
Acres: 0  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: MBR  
Program Manager: Not reported  
Supervisor: Eileen Mananian  
Division Branch: Cleanup Cypress  
Assembly: 61  
Senate: 31  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 33.9754  
Longitude: -117.3239  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: NONE SPECIFIED  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: CAD073134777  
Alias Type: EPA Identification Number  
Alias Name: 110000609761  
Alias Type: EPA (FRS #)  
Alias Name: 80001663  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Groundwater Migration Controlled  
Completed Date: 06/03/1998  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Remedy Selected  
Completed Date: 05/16/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 07/01/1985  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 09/06/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Corrective Measures Study Report  
Completed Date: 10/10/1995  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RFI Report  
Completed Date: 10/10/1995  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RFI Workplan  
Completed Date: 03/15/1994  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Corrective Measure Implementation Workplan  
Completed Date: 09/06/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 07/20/1990  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Corrective Measures Study Workplan  
Completed Date: 10/10/1995  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Interim Measures Implementation Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

Completed Date: 12/31/1990  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Interim Measures Workplan  
Completed Date: 12/01/1990  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Human Exposure Controlled  
Completed Date: 06/03/1998  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Interim Measures Questionnaire  
Completed Date: 06/03/1998  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Interim Measures Questionnaire  
Completed Date: 05/23/1994  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RCRA Facility Assessment Report  
Completed Date: 03/30/1998  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedy Selection and Statement of Basis  
Completed Date: 05/16/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Agreement  
Completed Date: 11/06/1989  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

CHMIRS:

OES Incident Number: 099262

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

WEST CAMPUS SOLAR FARM (Continued)

S100221282

OES notification:	Not reported
OES Date:	Not reported
OES Time:	Not reported
<b>Date Completed:</b>	<b>11-JUN-90</b>
Property Use:	200
Agency Id Number:	33075
Agency Incident Number:	9007873
Time Notified:	905
Time Completed:	933
Surrounding Area:	400
Estimated Temperature:	70
Property Management:	S
More Than Two Substances Involved?:	N
Resp Agency Personel # Of Decontaminated:	0
Responding Agency Personel # Of Injuries:	0
Responding Agency Personel # Of Fatalities:	0
Others Number Of Decontaminated:	0
Others Number Of Injuries:	1
Others Number Of Fatalities:	0
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	STEVE EARLEY
Report Date:	13-JUN-90
Facility Telephone:	714 782-5331
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Not reported
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	88-92
Agency:	Not reported
Incident Date:	11-JUN-90
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Not reported
Site Type:	Not reported
E Date:	20-MAY-91
Substance:	Not reported
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
Fatals: Not reported  
Comments: N  
Description: Not reported

**HWP:**

EPA Id: CAD073134777  
Cleanup Status: UNDERGOING CLOSURE  
Latitude: 33.9754  
Longitude: -117.3239  
Facility Type: Historical - Non-Operating  
Facility Size: Not reported  
Team: Not reported  
Supervisor: Not reported  
Site Code: Not reported  
Assembly District: 61  
Senate District: 31  
Public Information Officer: Not reported  
Public Information Officer: Not reported

**Activities:**

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1, WASTPILE1  
Event Description: New Operating Permit - APPLICATION PART B RECEIVED  
Actual Date: 05/24/1983

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1, WASTPILE1  
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED  
Actual Date: 12/14/1990

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1, WASTPILE1  
Event Description: New Operating Permit - CALL-IN LETTER ISSUED  
Actual Date: 11/15/1982

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1, WASTPILE1  
Event Description: New Operating Permit - APPLICATION PART A RECEIVED  
Actual Date: 11/17/1980

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1, WASTPILE1  
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED  
Actual Date: 02/23/1989

**Closure:**

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

Unit Names: CONTAIN1  
Event Description: Closure - CLOSURE PLAN RECEIVED  
Actual Date: 10/06/1989

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1  
Event Description: Closure - RECEIVE CLOSURE CERTIFICATION  
Actual Date: 06/12/1991

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1  
Event Description: Closure - CLOSURE PLAN APPROVED  
Actual Date: 12/14/1990

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1  
Event Description: Closure - 1ST NOTICE OF DEFICIENCY ISSUED  
Actual Date: 02/06/1990

EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1  
Event Description: Closure - ISSUE CLOSURE VERIFICATION  
Actual Date: 02/04/1992

Alias:  
EPA Id: CAD073134777  
Facility Type: Historical - Non-Operating  
Alias Type: FRS  
Alias: 110000609761

NPDES:  
Npdes Number: Not reported  
Facility Status: Not reported  
Agency Id: Not reported  
Region: 8  
Regulatory Measure Id: 482995  
Order No: Not reported  
Regulatory Measure Type: Construction  
Place Id: Not reported  
WDID: 8 33C378946  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Not reported  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
RECEIVED DATE: 01/30/2017

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

PROCESSED DATE: 02/14/2017  
STATUS CODE NAME: Active  
STATUS DATE: 02/14/2017  
PLACE SIZE: 1.56  
PLACE SIZE UNIT: Acres  
FACILITY CONTACT NAME: Robert Williams  
FACILITY CONTACT TITLE: Director of Quality Assurance and Compliance  
FACILITY CONTACT PHONE: 951-827-1382  
FACILITY CONTACT PHONE EXT: Not reported  
FACILITY CONTACT EMAIL: robert.williams@ucr.edu  
OPERATOR NAME: University of California Riverside  
OPERATOR ADDRESS: 900 University Avenue  
OPERATOR CITY: Riverside  
OPERATOR STATE: California  
OPERATOR ZIP: 92507  
OPERATOR CONTACT NAME: Robert Williams  
OPERATOR CONTACT TITLE: Director of Quality Assurance and Compliance  
OPERATOR CONTACT PHONE: 951-827-1382  
OPERATOR CONTACT PHONE EXT: Not reported  
OPERATOR CONTACT EMAIL: robert.williams@ucr.edu  
OPERATOR TYPE: Other  
DEVELOPER NAME: University of California Riverside  
DEVELOPER ADDRESS: 1223 Univeristy Avenue  
DEVELOPER CITY: Riverside  
DEVELOPER STATE: California  
DEVELOPER ZIP: 92521  
DEVELOPER CONTACT NAME: Robert Williams  
DEVELOPER CONTACT TITLE: Director of Quality Assurance and Compliance  
CONSTYPE LINEAR UTILITY IND: N  
EMERGENCY PHONE NO: Not reported  
EMERGENCY PHONE EXT: Not reported  
CONSTYPE ABOVE GROUND IND: N  
CONSTYPE BELOW GROUND IND: N  
CONSTYPE CABLE LINE IND: N  
CONSTYPE COMM LINE IND: N  
CONSTYPE COMMERTIAL IND: N  
CONSTYPE ELECTRICAL LINE IND: N  
CONSTYPE GAS LINE IND: N  
CONSTYPE INDUSTRIAL IND: N  
CONSTYPE OTHER DESRIPTION: institutional  
CONSTYPE OTHER IND: Y  
CONSTYPE RECONS IND: N  
CONSTYPE RESIDENTIAL IND: N  
CONSTYPE TRANSPORT IND: N  
CONSTYPE UTILITY DESCRIPTION: Not reported  
CONSTYPE UTILITY IND: N  
CONSTYPE WATER SEWER IND: N  
DIR DISCHARGE USWATER IND: N  
RECEIVING WATER NAME: Sycamore Canyon  
CERTIFIER NAME: John Casey  
CERTIFIER TITLE: Director of Inspection and Quality Assurance  
CERTIFICATION DATE: 14-SEP-17  
PRIMARY SIC: Not reported  
SECONDARY SIC: Not reported  
TERTIARY SIC: Not reported  
  
Npdes Number: CAS000002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

Facility Status:	Terminated
Agency Id:	0
Region:	8
Regulatory Measure Id:	442991
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 33C369765
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	05/15/2014
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/07/2016
Discharge Name:	University of California Riverside
Discharge Address:	900 University Avenue
Discharge City:	Riverside
Discharge State:	California
Discharge Zip:	92507
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESCRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	482995
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 33C378946
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/14/2017
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	University of California Riverside
Discharge Address:	900 University Avenue
Discharge City:	Riverside
Discharge State:	California
Discharge Zip:	92507
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	442991
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	8 33C369765
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/07/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	05/02/2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

PROCESSED DATE: 05/15/2014  
STATUS CODE NAME: Terminated  
STATUS DATE: 11/03/2016  
PLACE SIZE: 3.91  
PLACE SIZE UNIT: Acres  
FACILITY CONTACT NAME: Tricia Thrasher  
FACILITY CONTACT TITLE: Principal Environmental Project Manager  
FACILITY CONTACT PHONE: 951-827-1484  
FACILITY CONTACT PHONE EXT: Not reported  
FACILITY CONTACT EMAIL: tricia.thrasher@ucr.edu  
OPERATOR NAME: University of California Riverside  
OPERATOR ADDRESS: 900 University Avenue  
OPERATOR CITY: Riverside  
OPERATOR STATE: California  
OPERATOR ZIP: 92507  
OPERATOR CONTACT NAME: Tricia Thrasher  
OPERATOR CONTACT TITLE: Principal Environmental Project Manager  
OPERATOR CONTACT PHONE: 951-827-1484  
OPERATOR CONTACT PHONE EXT: Not reported  
OPERATOR CONTACT EMAIL: tricia.thrasher@ucr.edu  
OPERATOR TYPE: Other  
DEVELOPER NAME: University of California Riverside  
DEVELOPER ADDRESS: 900 University Avenue  
DEVELOPER CITY: Riverside  
DEVELOPER STATE: California  
DEVELOPER ZIP: 92507  
DEVELOPER CONTACT NAME: Blythe Wilson  
DEVELOPER CONTACT TITLE: Project Manager  
CONSTYPE LINEAR UTILITY IND: N  
EMERGENCY PHONE NO: Not reported  
EMERGENCY PHONE EXT: Not reported  
CONSTYPE ABOVE GROUND IND: N  
CONSTYPE BELOW GROUND IND: N  
CONSTYPE CABLE LINE IND: N  
CONSTYPE COMM LINE IND: N  
CONSTYPE COMMERTIAL IND: Y  
CONSTYPE ELECTRICAL LINE IND: N  
CONSTYPE GAS LINE IND: N  
CONSTYPE INDUSTRIAL IND: N  
CONSTYPE OTHER DESRIPTION: Not reported  
CONSTYPE OTHER IND: N  
CONSTYPE RECONS IND: N  
CONSTYPE RESIDENTIAL IND: N  
CONSTYPE TRANSPORT IND: N  
CONSTYPE UTILITY DESCRIPTION: Not reported  
CONSTYPE UTILITY IND: N  
CONSTYPE WATER SEWER IND: N  
DIR DISCHARGE USWATER IND: N  
RECEIVING WATER NAME: Lake Evans, Santa Ana River  
CERTIFIER NAME: George MacMullin  
CERTIFIER TITLE: Principal Environmental Project Manager  
CERTIFICATION DATE: 29-AUG-16  
PRIMARY SIC: Not reported  
SECONDARY SIC: Not reported  
TERTIARY SIC: Not reported  
  
Npdes Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	431055
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	8 33C365538
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	06/16/2015
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	01/18/2013
PROCESSED DATE:	01/30/2013
STATUS CODE NAME:	Terminated
STATUS DATE:	07/01/2015
PLACE SIZE:	7.3
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Robert Williamson
FACILITY CONTACT TITLE:	QSP
FACILITY CONTACT PHONE:	858-673-0966
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	bwilliamson@whitsoncm.com
OPERATOR NAME:	University of California Riverside
OPERATOR ADDRESS:	900 University Avenue
OPERATOR CITY:	Riverside
OPERATOR STATE:	California
OPERATOR ZIP:	92507
OPERATOR CONTACT NAME:	Tricia Thrasher
OPERATOR CONTACT TITLE:	Principal Environmental Project Manager
OPERATOR CONTACT PHONE:	951-827-1484
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	tricia.thrasher@ucr.edu
OPERATOR TYPE:	Other
DEVELOPER NAME:	University of California Riverside
DEVELOPER ADDRESS:	900 University Avenue
DEVELOPER CITY:	Riverside
DEVELOPER STATE:	California
DEVELOPER ZIP:	92507
DEVELOPER CONTACT NAME:	Jacqueline Norman
DEVELOPER CONTACT TITLE:	Project Manager
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	858-213-9902
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	N
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESCRIPTION:	University Recreation Center
CONSTYPE OTHER IND:	Y
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	N
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Tricia Thrasher
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	18-JAN-13
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	443199
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	8 33C368555
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/24/2014
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	12/18/2013
PROCESSED DATE:	12/20/2013
STATUS CODE NAME:	Terminated
STATUS DATE:	10/31/2014
PLACE SIZE:	13.7
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Manuel Andrade
FACILITY CONTACT TITLE:	Project Manager
FACILITY CONTACT PHONE:	951-653-1155
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	solconst@sbcglobal.net
OPERATOR NAME:	University of California Riverside
OPERATOR ADDRESS:	900 University Avenue
OPERATOR CITY:	Riverside
OPERATOR STATE:	California
OPERATOR ZIP:	92507
OPERATOR CONTACT NAME:	Tricia Thrasher
OPERATOR CONTACT TITLE:	Principal Environmental Project Manager
OPERATOR CONTACT PHONE:	951-827-1484
OPERATOR CONTACT PHONE EXT:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

OPERATOR CONTACT EMAIL: tricia.thrasher@ucr.edu  
OPERATOR TYPE: Other  
DEVELOPER NAME: Sol Construction  
DEVELOPER ADDRESS: 231 E Alessandro Blvd  
DEVELOPER CITY: Riverside  
DEVELOPER STATE: California  
DEVELOPER ZIP: 92508  
DEVELOPER CONTACT NAME: Manuel Andrade  
DEVELOPER CONTACT TITLE: Project Manager  
CONSTYPE LINEAR UTILITY IND: N  
EMERGENCY PHONE NO: 714-349-7007  
EMERGENCY PHONE EXT: Not reported  
CONSTYPE ABOVE GROUND IND: N  
CONSTYPE BELOW GROUND IND: N  
CONSTYPE CABLE LINE IND: N  
CONSTYPE COMM LINE IND: N  
CONSTYPE COMMERTIAL IND: N  
CONSTYPE ELECTRICAL LINE IND: N  
CONSTYPE GAS LINE IND: N  
CONSTYPE INDUSTRIAL IND: N  
CONSTYPE OTHER DESCRIPTION: Special District  
CONSTYPE OTHER IND: Y  
CONSTYPE RECONS IND: N  
CONSTYPE RESIDENTIAL IND: N  
CONSTYPE TRANSPORT IND: N  
CONSTYPE UTILITY DESCRIPTION: Not reported  
CONSTYPE UTILITY IND: N  
CONSTYPE WATER SEWER IND: N  
DIR DISCHARGE USWATER IND: N  
RECEIVING WATER NAME: Not reported  
CERTIFIER NAME: Tricia Thrasher  
CERTIFIER TITLE: Principal Environmental Project Manager  
CERTIFICATION DATE: 18-DEC-13  
PRIMARY SIC: Not reported  
SECONDARY SIC: Not reported  
TERTIARY SIC: Not reported  
  
Npdes Number: CAS000002  
Facility Status: Terminated  
Agency Id: 0  
Region: 8  
Regulatory Measure Id: 431055  
Order No: 2009-0009-DWQ  
Regulatory Measure Type: Enrollee  
Place Id: Not reported  
WDID: 8 33C365538  
Program Type: Construction  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 01/30/2013  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: 06/16/2015  
Discharge Name: University of California Riverside  
Discharge Address: 900 University Avenue  
Discharge City: Riverside  
Discharge State: California  
Discharge Zip: 92507  
RECEIVED DATE: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEST CAMPUS SOLAR FARM (Continued)**

**S100221282**

PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**F27**            **UNIV CAL, RIVERSIDE**  
**South**        **3401 WATKINS DR**  
**1/4-1/2**        **RIVERSIDE, CA 92521**  
**0.284 mi.**  
**1499 ft.**        **Site 2 of 2 in cluster F**

**LUST**        **S101619625**  
**SWEEPS UST**        **N/A**  
**CA FID UST**  
**EMI**  
**HIST CORTESE**  
**NPDES**

**Relative:**  
**Higher**

LUST REG 8:

**Actual:**  
**1085 ft.**

Region: 8  
 County: Riverside  
 Regional Board: Santa Ana Region  
 Facility Status: Pollution Characterization  
 Case Number: 083302681T  
 Local Case Num: 950454  
 Case Type: Soil only  
 Substance: Heater Fuel  
 Qty Leaked: Not reported  
 Abate Method: Not reported  
 Cross Street: Not reported  
 Enf Type: Not reported  
 Funding: Not reported  
 How Discovered: Tank Closure  
 How Stopped: Not reported  
 Leak Cause: UNK  
 Leak Source: UNK  
 Global ID: T0606500425  
 How Stopped Date: 4/4/1995  
 Enter Date: 9/20/1995  
 Date Confirmation of Leak Began: Not reported  
 Date Preliminary Assessment Began: 8/23/1994  
 Discover Date: 5/23/1995  
 Enforcement Date: Not reported  
 Close Date: Not reported  
 Date Prelim Assessment Workplan Submitted: Not reported  
 Date Pollution Characterization Began: 7/11/1995  
 Date Remediation Plan Submitted: Not reported  
 Date Remedial Action Underway: Not reported  
 Date Post Remedial Action Monitoring: Not reported  
 Enter Date: 9/20/1995  
 GW Qualifies: Not reported  
 Soil Qualifies: Not reported  
 Operator: Not reported  
 Facility Contact: Not reported  
 Interim: Not reported  
 Oversight Program: LUST  
 Latitude: 33.9803827  
 Longitude: -117.3227964  
 MTBE Date: Not reported  
 Max MTBE GW: Not reported  
 MTBE Concentration: 0  
 Max MTBE Soil: Not reported  
 MTBE Fuel: 0  
 MTBE Tested: Not Required to be Tested.  
 MTBE Class: \*  
 Staff: TME  
 Staff Initials: UNK  
 Lead Agency: Local Agency  
 Local Agency: 33000L  
 Hydr Basin #: UPPER SANTA ANA VALL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIV CAL, RIVERSIDE (Continued)

S101619625

Beneficial: Not reported  
Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Summary: Not reported

SWEEPS UST:

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 3SP  
SWRCB Tank Id: 33-000-019667-000008  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: PETROLEUM  
STG: P  
Content: FUEL OIL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 4SP  
SWRCB Tank Id: 33-000-019667-000009  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: PETROLEUM  
STG: P  
Content: FUEL OIL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 5SP  
SWRCB Tank Id: 33-000-019667-000010  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIV CAL, RIVERSIDE (Continued)

S101619625

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 6SP  
SWRCB Tank Id: 33-000-019667-000011  
Tank Status: A  
Capacity: 20000  
Active Date: 06-25-90  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 7SP  
SWRCB Tank Id: 33-000-019667-000012  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 1GR  
SWRCB Tank Id: 33-000-019667-000013  
Tank Status: A  
Capacity: 1000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Created Date: 02-29-88  
Owner Tank Id: LOTHIAN  
SWRCB Tank Id: 33-000-019667-000014  
Tank Status: A  
Capacity: 7500  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: A&1  
SWRCB Tank Id: 33-000-019667-000015  
Tank Status: A  
Capacity: 7500  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 12224  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: T-1  
SWRCB Tank Id: 33-000-012224-000001  
Tank Status: A  
Capacity: 500  
Active Date: 11-19-92  
Tank Use: OIL  
STG: W  
Content: WASTE OIL  
Number Of Tanks: 3

Status: Active  
Comp Number: 12224  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: T-2  
SWRCB Tank Id: 33-000-012224-000002  
Tank Status: A  
Capacity: 6000  
Active Date: 11-19-92

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIV CAL, RIVERSIDE (Continued)

S101619625

Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 12224  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: T-3  
SWRCB Tank Id: 33-000-012224-000003  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: B-1  
SWRCB Tank Id: 33-000-019667-000001  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 15

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: B-2  
SWRCB Tank Id: 33-000-019667-000002  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIV CAL, RIVERSIDE (Continued)

S101619625

Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: B-3  
SWRCB Tank Id: 33-000-019667-000003  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: B-4  
SWRCB Tank Id: 33-000-019667-000004  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: B-5  
SWRCB Tank Id: 33-000-019667-000005  
Tank Status: A  
Capacity: 20000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Owner Tank Id: 1SP  
SWRCB Tank Id: 33-000-019667-000006  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: PETROLEUM  
STG: P  
Content: FUEL OIL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19667  
Number: 4  
Board Of Equalization: 44-017955  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 2SP  
SWRCB Tank Id: 33-000-019667-000007  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: PETROLEUM  
STG: P  
Content: FUEL OIL  
Number Of Tanks: Not reported

**CA FID UST:**

Facility ID: 33006882  
Regulated By: UTNKA  
Regulated ID: 00012224  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 7147871677  
Mail To: Not reported  
Mailing Address: 3401 WATKINS DR  
Mailing Address 2: Not reported  
Mailing City,St,Zip: RIVERSIDE 92521  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

Facility ID: 33006882  
Regulated By: UTNKA  
Regulated ID: 00019667  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 7147874677  
Mail To: Not reported  
Mailing Address: 3401 WATKINS DR  
Mailing Address 2: Not reported  
Mailing City,St,Zip: RIVERSIDE 92521  
Contact: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**EMI:**

Year: 1987  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2002  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 4  
Reactive Organic Gases Tons/Yr: 3  
Carbon Monoxide Emissions Tons/Yr: 7  
NOX - Oxides of Nitrogen Tons/Yr: 5  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 1  
Part. Matter 10 Micrometers and Smlr Tons/Yr:1

Year: 2003  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 4  
Reactive Organic Gases Tons/Yr: 3  
Carbon Monoxide Emissions Tons/Yr: 7  
NOX - Oxides of Nitrogen Tons/Yr: 5  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIV CAL, RIVERSIDE (Continued)

S101619625

Part. Matter 10 Micrometers and Smlr Tons/Yr:1

Year: 2004  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Y  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 3.842257  
Reactive Organic Gases Tons/Yr: 2.71  
Carbon Monoxide Emissions Tons/Yr: 6.89298  
NOX - Oxides of Nitrogen Tons/Yr: 5.1586  
SOX - Oxides of Sulphur Tons/Yr: 0.0995372  
Particulate Matter Tons/Yr: 0.562318  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.57

Year: 2005  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.65392  
Reactive Organic Gases Tons/Yr: 1.838204407  
Carbon Monoxide Emissions Tons/Yr: 1.86405  
NOX - Oxides of Nitrogen Tons/Yr: 5.9427  
SOX - Oxides of Sulphur Tons/Yr: .09563  
Particulate Matter Tons/Yr: .596875  
Part. Matter 10 Micrometers and Smlr Tons/Yr:.5943166

Year: 2006  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.809168916284990835  
Reactive Organic Gases Tons/Yr: 1.684  
Carbon Monoxide Emissions Tons/Yr: 2.082  
NOX - Oxides of Nitrogen Tons/Yr: 6.365  
SOX - Oxides of Sulphur Tons/Yr: .102  
Particulate Matter Tons/Yr: .62  
Part. Matter 10 Micrometers and Smlr Tons/Yr:.61932

Year: 2007  
County Code: 33  
Air Basin: SC  
Facility ID: 49387

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.748432597286890822  
Reactive Organic Gases Tons/Yr: 1.684  
Carbon Monoxide Emissions Tons/Yr: 2.082  
NOX - Oxides of Nitrogen Tons/Yr: 6.365  
SOX - Oxides of Sulphur Tons/Yr: .102  
Particulate Matter Tons/Yr: .62  
Part. Matter 10 Micrometers and Smllr Tons/Yr: 61932

Year: 2008  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.829514992342626977  
Reactive Organic Gases Tons/Yr: 1.2968825  
Carbon Monoxide Emissions Tons/Yr: 15.26605  
NOX - Oxides of Nitrogen Tons/Yr: 6.62174  
SOX - Oxides of Sulphur Tons/Yr: .09942688  
Particulate Matter Tons/Yr: 1.3755673  
Part. Matter 10 Micrometers and Smllr Tons/Yr: 1.3755671122

Year: 2012  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.8189939687  
Reactive Organic Gases Tons/Yr: 1.44203  
Carbon Monoxide Emissions Tons/Yr: 15.71327  
NOX - Oxides of Nitrogen Tons/Yr: 4.58808  
SOX - Oxides of Sulphur Tons/Yr: 0.14289936  
Particulate Matter Tons/Yr: 1.4732  
Part. Matter 10 Micrometers and Smllr Tons/Yr: 1.47126674

Year: 2013  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 3.3412029552

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Reactive Organic Gases Tons/Yr: 1.78898741  
Carbon Monoxide Emissions Tons/Yr: 17.04217  
NOX - Oxides of Nitrogen Tons/Yr: 9.71989  
SOX - Oxides of Sulphur Tons/Yr: 1.468659  
Particulate Matter Tons/Yr: 4.45306  
Part. Matter 10 Micrometers and Smllr Tons/Yr:3.61578152

Year: 2014  
County Code: 33  
Air Basin: SC  
Facility ID: 49387  
Air District Name: SC  
SIC Code: 8221  
Air District Name: SOUTH COAST AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 4.3620291366  
Reactive Organic Gases Tons/Yr: 2.901415  
Carbon Monoxide Emissions Tons/Yr: 13.52861  
NOX - Oxides of Nitrogen Tons/Yr: 3.92417  
SOX - Oxides of Sulphur Tons/Yr: 0.095935  
Particulate Matter Tons/Yr: 6.14088  
Part. Matter 10 Micrometers and Smllr Tons/Yr:4.67543804

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083303140T

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083303638T

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083302681T

**NPDES:**

Npdes Number: Not reported  
Facility Status: Active  
Agency Id: 0  
Region: 8  
Regulatory Measure Id: 439006  
Order No: Not reported  
Regulatory Measure Type: Enrollee  
Place Id: Not reported  
WDID: 8 33M2000123  
Program Type: Phase II Small MS4  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 08/05/2013  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: University of California Riverside

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

Discharge Address:	900 University Avenue
Discharge City:	Riverside
Discharge State:	California
Discharge Zip:	92521
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	439006
Order No:	Not reported
Regulatory Measure Type:	Phase II Small MS4
Place Id:	Not reported
WDID:	8 33M2000123
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	06/25/2013
PROCESSED DATE:	08/05/2013
STATUS CODE NAME:	Active
STATUS DATE:	08/05/2013
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Amanda Grey
FACILITY CONTACT TITLE:	Environmental Programs Manager
FACILITY CONTACT PHONE:	951-827-2416
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	amanda.grey@ucr.edu
OPERATOR NAME:	University of California Riverside
OPERATOR ADDRESS:	900 University Avenue
OPERATOR CITY:	Riverside
OPERATOR STATE:	California
OPERATOR ZIP:	92521
OPERATOR CONTACT NAME:	Amanda Grey
OPERATOR CONTACT TITLE:	Environmental Programs Manager
OPERATOR CONTACT PHONE:	951-827-2416
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	amanda.grey@ucr.edu
OPERATOR TYPE:	College/University
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIV CAL, RIVERSIDE (Continued)**

**S101619625**

CONSTYPE CABLE LINE IND: Not reported  
CONSTYPE COMM LINE IND: Not reported  
CONSTYPE COMMERCIAL IND: Not reported  
CONSTYPE ELECTRICAL LINE IND: Not reported  
CONSTYPE GAS LINE IND: Not reported  
CONSTYPE INDUSTRIAL IND: Not reported  
CONSTYPE OTHER DESCRIPTION: Not reported  
CONSTYPE OTHER IND: Not reported  
CONSTYPE RECONS IND: Not reported  
CONSTYPE RESIDENTIAL IND: Not reported  
CONSTYPE TRANSPORT IND: Not reported  
CONSTYPE UTILITY DESCRIPTION: Not reported  
CONSTYPE UTILITY IND: Not reported  
CONSTYPE WATER SEWER IND: Not reported  
DIR DISCHARGE USWATER IND: Not reported  
RECEIVING WATER NAME: Not reported  
CERTIFIER NAME: Albert Vasquez  
CERTIFIER TITLE: Associate Vice Chancellor, Facilities  
CERTIFICATION DATE: 29-AUG-17  
PRIMARY SIC: Not reported  
SECONDARY SIC: Not reported  
TERTIARY SIC: Not reported

**28**  
**WSW**  
**1/4-1/2**  
**0.287 mi.**  
**1514 ft.**

**CHEVRON #9-8260**  
**1011 UNIVERSITY AVE**  
**RIVERSIDE, CA 92507**

**LUST S103620375**  
**HIST CORTESE N/A**

**Relative:**  
**Lower**

**LUST:**

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500089](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500089)  
Global Id: T0606500089  
Latitude: 33.9759004861213  
Longitude: -117.334090754631  
Status: Completed - Case Closed  
Status Date: 05/01/1992  
Case Worker: RIV  
RB Case Number: 083300839T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 91776  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST:**

Global Id: T0606500089  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: [rose.scott@waterboards.ca.gov](mailto:rose.scott@waterboards.ca.gov)  
Phone Number: 9513206375

Global Id: T0606500089

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHEVRON #9-8260 (Continued)**

**S103620375**

Contact Type: Local Agency Caseworker  
Contact Name: Riverside County LOP  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: Not reported  
Phone Number: 9519558980

LUST:

Global Id: T0606500089  
Action Type: REMEDIATION  
Date: 08/20/1991  
Action: Soil Vapor Extraction (SVE)

Global Id: T0606500089  
Action Type: ENFORCEMENT  
Date: 04/30/1992  
Action: File review - #RCDEH upload site file 1/16/2015

Global Id: T0606500089  
Action Type: ENFORCEMENT  
Date: 05/01/1992  
Action: Closure/No Further Action Letter - #RCDEH5192

Global Id: T0606500089  
Action Type: Other  
Date: 08/16/1991  
Action: Leak Began

Global Id: T0606500089  
Action Type: Other  
Date: 08/16/1991  
Action: Leak Discovery

Global Id: T0606500089  
Action Type: Other  
Date: 08/16/1991  
Action: Leak Stopped

Global Id: T0606500089  
Action Type: Other  
Date: 08/20/1991  
Action: Leak Reported

LUST:

Global Id: T0606500089  
Status: Open - Case Begin Date  
Status Date: 08/16/1991

Global Id: T0606500089  
Status: Open - Site Assessment  
Status Date: 08/16/1991

Global Id: T0606500089  
Status: Open - Remediation  
Status Date: 08/19/1991

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHEVRON #9-8260 (Continued)**

**S103620375**

Global Id: T0606500089  
Status: Open - Site Assessment  
Status Date: 08/20/1991  
  
Global Id: T0606500089  
Status: Completed - Case Closed  
Status Date: 05/01/1992

**LUST REG 8:**

Region: 8  
County: Riverside  
Regional Board: Santa Ana Region  
Facility Status: Case Closed  
Case Number: 083300839T  
Local Case Num: 91776  
Case Type: Soil only  
Substance: Gasoline  
Qty Leaked: Not reported  
Abate Method: Not reported  
Cross Street: 60 FWY  
Enf Type: CLOS  
Funding: Not reported  
How Discovered: Tank Closure  
How Stopped: Not reported  
Leak Cause: UNK  
Leak Source: Piping  
Global ID: T0606500089  
How Stopped Date: 8/16/1991  
Enter Date: 7/24/1991  
Date Confirmation of Leak Began: Not reported  
Date Preliminary Assessment Began: Not reported  
Discover Date: 8/16/1991  
Enforcement Date: Not reported  
Close Date: 5/1/1992  
Date Prelim Assessment Workplan Submitted: 8/20/1991  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring: Not reported  
Enter Date: 7/24/1991  
GW Qualifies: Not reported  
Soil Qualifies: Not reported  
Operator: Not reported  
Facility Contact: Not reported  
Interim: Not reported  
Oversite Program: LUST  
Latitude: 33.9757296  
Longitude: -117.3328987  
MTBE Date: Not reported  
Max MTBE GW: Not reported  
MTBE Concentration: 0  
Max MTBE Soil: Not reported  
MTBE Fuel: 1  
MTBE Tested: Site NOT Tested for MTBE. Includes Unknown and Not Analyzed.  
MTBE Class: \*  
Staff: RS

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CHEVRON #9-8260 (Continued)**

**S103620375**

Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**RIVERSIDE CO. LUST:**

Region:	RIVERSIDE
Facility ID:	91776
Employee:	Boltinghous-LOP
Site Closed:	Yes
Case Type:	Soil only
Facility Status:	closed/action completed
Casetype Decode:	Soil only is impacted
Fstatus Decode:	Closed/Action completed

**HIST CORTESE:**

Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	083300839T

**29**  
**South**  
**1/4-1/2**  
**0.329 mi.**  
**1738 ft.**

**U C RIVERSIDE PARKING LOT #6**  
**PARKING LOT #6**  
**RIVERSIDE, CA 92521**

**LUST** **S103249176**  
**HIST CORTESE** **N/A**

**Relative:**  
**Higher**

**LUST REG 8:**

**Actual:**  
**1096 ft.**

Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083301865T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	CITRUS DR
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500239
How Stopped Date:	3/28/1991
Enter Date:	6/11/1991
Date Confirmation of Leak Began:	3/28/1991
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/28/1991
Enforcement Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE PARKING LOT #6 (Continued)**

**S103249176**

Close Date: 9/23/1996  
Date Prelim Assessment Workplan Submitted: Not reported  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring: Not reported  
Enter Date: 6/11/1991  
GW Qualifies: Not reported  
Soil Qualifies: Not reported  
Operator: Not reported  
Facility Contact: Not reported  
Interim: Not reported  
Oversite Program: LUST  
Latitude: 33.9754056  
Longitude: -117.3311906  
MTBE Date: Not reported  
Max MTBE GW: Not reported  
MTBE Concentration: 0  
Max MTBE Soil: Not reported  
MTBE Fuel: 0  
MTBE Tested: Not Required to be Tested.  
MTBE Class: \*  
Staff: RS  
Staff Initials: UNK  
Lead Agency: Local Agency  
Local Agency: 33000L  
Hydr Basin #: UPPER SANTA ANA VALL  
Beneficial: Not reported  
Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Summary: Not reported

HIST CORTESE:  
Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083301865T

**30**  
**South**  
**1/4-1/2**  
**0.394 mi.**  
**2078 ft.**

**U C RIVERSIDE PARKING LOT #6**  
**UNIVERSITY OF CA, RIVERSIDE**  
**RIVERSIDE, CA 92507**

**LUST S110654911**  
**N/A**

**Relative:**  
**Higher**

LUST:  
Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500239](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500239)  
Global Id: T0606500239  
Latitude: 33.9693563751802  
Longitude: -117.327012773572  
Status: Completed - Case Closed  
Status Date: 04/21/1998  
Case Worker: SCB  
RB Case Number: 083301865T  
Local Agency: RIVERSIDE COUNTY LOP

**Actual:**  
**1123 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE PARKING LOT #6 (Continued)**

**S110654911**

File Location: Local Agency Warehouse  
Local Case Number: 91353  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:

Global Id: T0606500239  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rose.scott@waterboards.ca.gov  
Phone Number: 9513206375

Global Id: T0606500239  
Contact Type: Local Agency Caseworker  
Contact Name: SHARON BOLTINGHOUSE  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: sbolting@rivco.org  
Phone Number: 9519558980

LUST:

Global Id: T0606500239  
Action Type: ENFORCEMENT  
Date: 04/21/1998  
Action: Closure/No Further Action Letter - #RCDEH0421

Global Id: T0606500239  
Action Type: Other  
Date: 03/28/1991  
Action: Leak Discovery

Global Id: T0606500239  
Action Type: Other  
Date: 03/28/1991  
Action: Leak Stopped

Global Id: T0606500239  
Action Type: ENFORCEMENT  
Date: 04/20/1998  
Action: File review - #RCDEH Upload Site File 10/20/2015

Global Id: T0606500239  
Action Type: Other  
Date: 04/25/1991  
Action: Leak Reported

LUST:

Global Id: T0606500239  
Status: Open - Case Begin Date  
Status Date: 03/28/1991

Global Id: T0606500239

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**U C RIVERSIDE PARKING LOT #6 (Continued)**

**S110654911**

Status: Open - Site Assessment  
Status Date: 04/25/1991  
  
Global Id: T0606500239  
Status: Open - Site Assessment  
Status Date: 04/26/1991  
  
Global Id: T0606500239  
Status: Completed - Case Closed  
Status Date: 04/21/1998

**G31**  
**West**  
**1/4-1/2**  
**0.411 mi.**  
**2169 ft.**

**EXXON SERVICE STATION #36**  
**1295 UNIVERSITY**  
**RIVERSIDE, CA 92713**

**LUST** **S103627553**  
**HIST CORTESE** **N/A**

**Site 1 of 7 in cluster G**

**Relative:**  
**Lower**

**LUST:**

Lead Agency: RIVERSIDE COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500058](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500058)  
Global Id: T0606500058  
Latitude: 33.9757959  
Longitude: -117.339721  
Status: Completed - Case Closed  
Status Date: 06/08/2005  
Case Worker: BER  
RB Case Number: 083300510T  
Local Agency: RIVERSIDE COUNTY  
File Location: Not reported  
Local Case Number: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**Actual:**  
**1012 ft.**

**LUST:**

Global Id: T0606500058  
Contact Type: Local Agency Caseworker  
Contact Name: BERNIE SCHLEICHER  
Organization Name: RIVERSIDE COUNTY  
Address: 2275 S. Main St #204  
City: Corona  
Email: bschleic@rivcocha.org  
Phone Number: Not reported  
  
Global Id: T0606500058  
Contact Type: Regional Board Caseworker  
Contact Name: CARL BERNHARDT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: cbernhardt@waterboards.ca.gov  
Phone Number: 9517824495

**LUST:**

Global Id: T0606500058  
Action Type: ENFORCEMENT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXXON SERVICE STATION #36 (Continued)**

**S103627553**

Date: 06/08/2005  
Action: Closure/No Further Action Letter

Global Id: T0606500058  
Action Type: Other  
Date: 05/17/1990  
Action: Leak Stopped

Global Id: T0606500058  
Action Type: Other  
Date: 11/05/1987  
Action: Leak Reported

LUST:

Global Id: T0606500058  
Status: Open - Case Begin Date  
Status Date: 07/21/1987

Global Id: T0606500058  
Status: Open - Site Assessment  
Status Date: 07/21/1987

Global Id: T0606500058  
Status: Completed - Case Closed  
Status Date: 09/24/1987

Global Id: T0606500058  
Status: Completed - Case Closed  
Status Date: 06/08/2005

HIST CORTESE:

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083300510T

**G32** **TEXACO**  
**West** **1221 UNIVERSITY AVE**  
**1/4-1/2** **RIVERSIDE, CA 92507**  
**0.411 mi.**  
**2169 ft.** **Site 2 of 7 in cluster G**

**LUST** **S103625973**  
**N/A**

**Relative:**  
**Lower**

LUST:

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500471](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500471)  
Global Id: T0606500471  
Latitude: 33.9759457437572  
Longitude: -117.338538053165  
Status: Completed - Case Closed  
Status Date: 07/28/1997  
Case Worker: SCB  
RB Case Number: 083302877T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 960698

**Actual:**  
**1012 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TEXACO (Continued)**

**S103625973**

Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST:

Global Id: T0606500471  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rose.scott@waterboards.ca.gov  
Phone Number: 9513206375

Global Id: T0606500471  
Contact Type: Local Agency Caseworker  
Contact Name: SHARON BOLTINGHOUSE  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: sbolting@rivco.org  
Phone Number: 9519558980

LUST:

Global Id: T0606500471  
Action Type: ENFORCEMENT  
Date: 07/28/1997  
Action: Closure/No Further Action Letter - #RCDEH0728

Global Id: T0606500471  
Action Type: Other  
Date: 07/03/1996  
Action: Leak Discovery

Global Id: T0606500471  
Action Type: RESPONSE  
Date: 05/12/1997  
Action: Other Report / Document

Global Id: T0606500471  
Action Type: RESPONSE  
Date: 02/10/1997  
Action: Tank Removal Report / UST Sampling Report

Global Id: T0606500471  
Action Type: RESPONSE  
Date: 08/01/1996  
Action: Soil and Water Investigation Report

Global Id: T0606500471  
Action Type: RESPONSE  
Date: 07/05/1996  
Action: Unauthorized Release Form

Global Id: T0606500471  
Action Type: REMEDIATION  
Date: 07/18/1996

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TEXACO (Continued)**

**S103625973**

Action: Excavation

Global Id: T0606500471  
Action Type: ENFORCEMENT  
Date: 07/27/1997  
Action: File review - #RCDEH Upload Site File 10/29/2015

Global Id: T0606500471  
Action Type: Other  
Date: 10/16/1986  
Action: Leak Stopped

Global Id: T0606500471  
Action Type: Other  
Date: 07/05/1996  
Action: Leak Reported

**LUST:**

Global Id: T0606500471  
Status: Open - Case Begin Date  
Status Date: 10/16/1986

Global Id: T0606500471  
Status: Open - Site Assessment  
Status Date: 07/05/1996

Global Id: T0606500471  
Status: Open - Site Assessment  
Status Date: 07/08/1996

Global Id: T0606500471  
Status: Open - Remediation  
Status Date: 08/20/1996

Global Id: T0606500471  
Status: Completed - Case Closed  
Status Date: 07/28/1997

**RIVERSIDE CO. LUST:**

Region: RIVERSIDE  
Facility ID: 960698  
Employee: Boltinghous-LOP  
Site Closed: Yes  
Case Type: Soil only  
Facility Status: closed/action completed  
Casetype Decode: Soil only is impacted  
Fstatus Decode: Closed/Action completed

Region: RIVERSIDE  
Facility ID: 200117614  
Employee: Boltinghous-LOP  
Site Closed: Yes  
Case Type: Soil only  
Facility Status: closed/action completed  
Casetype Decode: Soil only is impacted

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TEXACO (Continued)**

**S103625973**

Fstatus Decode: Closed/Action completed

Region: RIVERSIDE  
 Facility ID: 200218406  
 Employee: Boltinghous-LOP  
 Site Closed: Referred to Water Board  
 Case Type: Drinking Water Aquifer affected  
 Facility Status: 0  
 Casetype Decode: An Aquifer used for Drinking Water supply has been contaminated.  
 Fstatus Decode: Not reported

**G33**  
**West**  
**1/4-1/2**  
**0.411 mi.**  
**2169 ft.**

**THRIFTY OIL #344/ ARCO #9714**  
**1294 UNIVERSITY AVE**  
**RIVERSIDE, CA 92507**  
**Site 3 of 7 in cluster G**

**LUST S103943693**  
**N/A**

**Relative:**  
**Lower**

LUST REG 8:

**Actual:**  
**1012 ft.**

Region: 8  
 County: Riverside  
 Regional Board: Santa Ana Region  
 Facility Status: Preliminary site assessment workplan submitted  
 Case Number: 083303277T  
 Local Case Num: 980441  
 Case Type: Soil only  
 Substance: Gasoline  
 Qty Leaked: Not reported  
 Abate Method: Not reported  
 Cross Street: IOWA  
 Enf Type: Not reported  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Global ID: T0606500545  
 How Stopped Date: Not reported  
 Enter Date: 11/6/1998  
 Date Confirmation of Leak Began: Not reported  
 Date Preliminary Assessment Began: Not reported  
 Discover Date: 12/29/1997  
 Enforcement Date: Not reported  
 Close Date: Not reported  
 Date Prelim Assessment Workplan Submitted: 1/1/1965  
 Date Pollution Characterization Began: Not reported  
 Date Remediation Plan Submitted: Not reported  
 Date Remedial Action Underway: Not reported  
 Date Post Remedial Action Monitoring: Not reported  
 Enter Date: 11/6/1998  
 GW Qualifies: =  
 Soil Qualifies: Not reported  
 Operator: Not reported  
 Facility Contact: Not reported  
 Interim: Not reported  
 Oversight Program: LUST  
 Latitude: 33.9757246  
 Longitude: -117.3397409  
 MTBE Date: 9/1/2004

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**THRIFTY OIL #344/ ARCO #9714 (Continued)**

**S103943693**

Max MTBE GW:	3.8
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	USTS REPLACED MARCH/APRIL1998. REMOVED 842 TONS OF CONTAMINATED SOIL.

**G34**  
**West**  
**1/4-1/2**  
**0.411 mi.**  
**2169 ft.**

**EXXON SERVICE STATION #3645**  
**1295 UNIVERSITY AVE**  
**RIVERSIDE, CA 92507**  
**Site 4 of 7 in cluster G**

**LUST S102429527**  
**N/A**

**Relative:**  
**Lower**

<b>Relative:</b>	LUST REG 8:	
<b>Lower</b>	Region:	8
	County:	Riverside
	Regional Board:	Santa Ana Region
<b>Actual:</b>	Facility Status:	Case Closed
<b>1012 ft.</b>	Case Number:	083300510T
	Local Case Num:	Not reported
	Case Type:	Soil only
	Substance:	Gasoline
	Qty Leaked:	Not reported
	Abate Method:	Not reported
	Cross Street:	IOWA
	Enf Type:	Not reported
	Funding:	Not reported
	How Discovered:	Not reported
	How Stopped:	Not reported
	Leak Cause:	Not reported
	Leak Source:	Not reported
	Global ID:	T0606500058
	How Stopped Date:	Not reported
	Enter Date:	7/21/1987
	Date Confirmation of Leak Began:	Not reported
	Date Preliminary Assessment Began:	Not reported
	Discover Date:	Not reported
	Enforcement Date:	Not reported
	Close Date:	9/24/1987
	Date Prelim Assessment Workplan Submitted:	Not reported
	Date Pollution Characterization Began:	7/21/1987
	Date Remediation Plan Submitted:	Not reported
	Date Remedial Action Underway:	Not reported
	Date Post Remedial Action Monitoring:	Not reported
	Enter Date:	7/21/1987
	GW Qualifies:	Not reported
	Soil Qualifies:	Not reported
	Operator:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**EXXON SERVICE STATION #3645 (Continued)**

**S102429527**

Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9757526
Longitude:	-117.3396869
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE. Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	THE NAME OF THIS SITE IS: MARV'S EXXON SERVICE.

**G35**  
**West**  
**1/4-1/2**  
**0.411 mi.**  
**2169 ft.**

**UNOCAL #3779**  
**1490 UNIVERSITY AVE**  
**RIVERSIDE, CA 92507**  
**Site 5 of 7 in cluster G**

**SLIC S102440279**  
**N/A**

**Relative:**  
**Lower**

SLIC:	
Region:	STATE
<b>Facility Status:</b>	<b>Completed - Case Closed</b>
Status Date:	05/20/1993
Global Id:	T0606500397
Lead Agency:	RIVERSIDE COUNTY
Lead Agency Case Number:	Not reported
Latitude:	33.9754575
Longitude:	-117.3439821
Case Type:	Cleanup Program Site
Case Worker:	BER
Local Agency:	RIVERSIDE COUNTY
RB Case Number:	083302540T
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

**Actual:**  
**1012 ft.**

Click here to access the California GeoTracker records for this facility:

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**G36**            **TEXACO SERVICE STATION**  
**West**         **1221 UNIVERSITY AVE**  
**1/4-1/2**       **RIVERSIDE, CA 92504**  
**0.411 mi.**  
**2169 ft.**       **Site 6 of 7 in cluster G**

**LUST**    **S101590154**  
**SWEEPS UST**  
**CA FID UST**  
**HIST CORTESE**  
**N/A**

**Relative:**  
**Lower**

LUST REG 8:

**Actual:**  
**1012 ft.**

Region: County: Regional Board: Facility Status: Case Number: Local Case Num: Case Type: Substance: Qty Leaked: Abate Method:  Cross Street: Enf Type: Funding: How Discovered: How Stopped: Leak Cause: Leak Source: Global ID: How Stopped Date: Enter Date: Date Confirmation of Leak Began: Date Preliminary Assessment Began: Discover Date: Enforcement Date: Close Date: Date Prelim Assessment Workplan Submitted: Date Pollution Characterization Began: Date Remediation Plan Submitted: Date Remedial Action Underway: Date Post Remedial Action Monitoring: Enter Date: GW Qualifies: Soil Qualifies: Operator: Facility Contact: Interim: Oversight Program: Latitude: Longitude: MTBE Date: Max MTBE GW: MTBE Concentration: Max MTBE Soil: MTBE Fuel: MTBE Tested: MTBE Class: Staff: Staff Initials: Lead Agency: Local Agency: Hydr Basin #:	8 Riverside Santa Ana Region Case Closed 083302877T 960698 Soil only Gasoline Not reported Excavate and Dispose - remove contaminated soil and dispose in approved site  IOWA CLOS Not reported Tank Closure Not reported UNK UNK T0606500471 10/16/1986 9/16/1996 7/3/1996 Not reported 7/3/1996 Not reported 7/28/1997 Not reported 6/21/1996 8/20/1996 10/11/1996 4/30/1997 9/16/1996 Not reported Not reported Not reported Not reported Not reported LUST 33.9757476 -117.3379649 Not reported Not reported 0 Not reported 1 Site NOT Tested for MTBE.Includes Unknown and Not Analyzed. * RS UNK Local Agency 33000L UPPER SANTA ANA VALL
--	--

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TEXACO SERVICE STATION (Continued)**

**S101590154**

Beneficial: Not reported  
Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Summary: Not reported

**SWEEPS UST:**

Status: Active  
Comp Number: 7317  
Number: 1  
Board Of Equalization: 44-000217  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 001008  
SWRCB Tank Id: 33-000-007317-000002  
Tank Status: A  
Capacity: 12000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: 4

Status: Active  
Comp Number: 7317  
Number: 1  
Board Of Equalization: 44-000217  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 001008  
SWRCB Tank Id: 33-000-007317-000003  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 7317  
Number: 1  
Board Of Equalization: 44-000217  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 001008  
SWRCB Tank Id: 33-000-007317-000004  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TEXACO SERVICE STATION (Continued)**

**S101590154**

Status: Active  
Comp Number: 7317  
Number: 1  
Board Of Equalization: 44-000217  
Referral Date: 11-19-92  
Action Date: 11-19-92  
Created Date: 02-29-88  
Owner Tank Id: 001008  
SWRCB Tank Id: 33-000-007317-000005  
Tank Status: A  
Capacity: 10000  
Active Date: 11-19-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

**CA FID UST:**

Facility ID: 33004934  
Regulated By: UTNKA  
Regulated ID: 00007317  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 7147885275  
Mail To: Not reported  
Mailing Address: 299 W FOOTHILL BLVD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: RIVERSIDE 92504  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083302877T

**G37 UNOCAL #3779**  
**West 1490 UNIVERSITY AVE**  
**1/4-1/2 RIVERSIDE, CA 92507**  
**0.411 mi.**  
**2169 ft. Site 7 of 7 in cluster G**

**LUST S103943694**  
**N/A**

**Relative:**  
**Lower**

**LUST REG 8:**

Region: 8  
County: Riverside  
Regional Board: Santa Ana Region  
Facility Status: Preliminary site assessment workplan submitted  
Case Number: 083302540T  
Local Case Num: Not reported  
Case Type: Soil only  
Substance: Unleaded Gasoline

**Actual:**  
**1012 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNOCAL #3779 (Continued)**

**S103943694**

Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	CRANFORD
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500397
How Stopped Date:	6/22/1994
Enter Date:	12/13/1994
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	6/20/1994
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/1/1965
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	12/13/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9754575
Longitude:	-117.3439821
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**H38**  
**WSW**  
**1/4-1/2**  
**0.411 mi.**  
**2169 ft.**

**MOBIL #18-402**  
**1147 UNIVERSITY AVE**  
**RIVERSIDE, CA 92507**

**Site 1 of 2 in cluster H**

**LUST**  
**SWEEPS UST**  
**CA FID UST**  
**HIST CORTESE**

**S101589937**  
**N/A**

**Relative:**  
**Lower**

LUST REG 8:

**Actual:**  
**1014 ft.**

Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083303453T
Local Case Num:	9914834
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	I-215
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Subsurface Monitoring
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500586
How Stopped Date:	10/22/1998
Enter Date:	5/12/1999
Date Confirmation of Leak Began:	12/30/1998
Date Preliminary Assessment Began:	12/5/2000
Discover Date:	1/7/1999
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	3/13/2001
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	5/12/1999
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9757296
Longitude:	-117.3358158
MTBE Date:	11/28/2001
Max MTBE GW:	9.4
MTBE Concentration:	1
Max MTBE Soil:	330
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S101589937**

Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Summary: Not reported

**SWEEPS UST:**

Status: Active  
Comp Number: 39266  
Number: 1  
Board Of Equalization: 44-000400  
Referral Date: 11-17-92  
Action Date: 11-17-92  
Created Date: 02-29-88  
Owner Tank Id: 000727  
SWRCB Tank Id: 33-000-039266-000001  
Tank Status: A  
Capacity: 12000  
Active Date: 11-17-92  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: 4

Status: Active  
Comp Number: 39266  
Number: 1  
Board Of Equalization: 44-000400  
Referral Date: 11-17-92  
Action Date: 11-17-92  
Created Date: 02-29-88  
Owner Tank Id: 000727  
SWRCB Tank Id: 33-000-039266-000002  
Tank Status: A  
Capacity: 8000  
Active Date: 11-17-92  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 39266  
Number: 1  
Board Of Equalization: 44-000400  
Referral Date: 11-17-92  
Action Date: 11-17-92  
Created Date: 02-29-88  
Owner Tank Id: 000727  
SWRCB Tank Id: 33-000-039266-000003  
Tank Status: A  
Capacity: 6000  
Active Date: 11-17-92  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S101589937**

Status: Active  
Comp Number: 39266  
Number: 1  
Board Of Equalization: 44-000400  
Referral Date: 11-17-92  
Action Date: 11-17-92  
Created Date: 02-29-88  
Owner Tank Id: 000727  
SWRCB Tank Id: 33-000-039266-000004  
Tank Status: A  
Capacity: 1000  
Active Date: 11-17-92  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

CA FID UST:

Facility ID: 33001427  
Regulated By: UTNKA  
Regulated ID: 00039266  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 7146839434  
Mail To: Not reported  
Mailing Address: 3225 GALLOWS RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: RIVERSIDE 92507  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

HIST CORTESE:

Region: CORTESE  
Facility County Code: 33  
Reg By: LTNKA  
Reg Id: 083303453T

**H39**      **MOBIL #18-402**  
**WSW**      **1147 UNIVERSITY AVE**  
**1/4-1/2**      **RIVERSIDE, CA 92507**  
**0.411 mi.**  
**2169 ft.**      **Site 2 of 2 in cluster H**

**LUST**      **S100275475**  
**CHMIRS**      **N/A**  
**HAZNET**

**Relative:**  
**Lower**

LUST:

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500586](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500586)  
Global Id: T0606500586  
Latitude: 33.9760321025203  
Longitude: -117.336867225934  
Status: Completed - Case Closed  
Status Date: 01/13/2011

**Actual:**  
**1014 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

Case Worker: YR  
RB Case Number: 083303453T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 9914834  
Potential Media Affect: Aquifer used for drinking water supply  
Potential Contaminants of Concern: Gasoline  
Site History:

The station currently maintains five double-walled, fiberglass gasoline underground storage tanks (USTs). There are two 8,000-gallon capacity tanks, one 12,000-gallon capacity tank, one 10,000-gallon capacity tank, and one 6,000-gallon capacity tank. Several phases of investigations and remediation have been conducted at the Site since October 1998. In October 1998, compliance soil sampling (D1 through D8) was performed at the Site during piping upgrades (Kleinfelder, 1998). Hydrocarbon-affected soil was encountered adjacent to the western (D7 and D8) and east-central (D3) dispenser islands. In November 1999 to January 2000, five soil borings (B-1 through B-5) were drilled at the Site to total depths ranging between 65 feet below ground surface (bgs) and 85 feet bgs (Kleinfelder, 2000). Benzene was detected at concentrations above the laboratory reporting limit in soil samples collected from borings B-1, B-3 and B-4. Methyl tertiarybutyl ether (MtBE) was detected at concentrations above the laboratory reporting limit in soil samples collected from borings B-1, B-3, B-4, and B-5, located in the area surrounding the western-most dispenser island and near the east-central dispenser island. Fuel oxygenates, including diisopropyl ether (DIPE), ethyl tertiary-butyl ether (EtBE), tertiary-amyl methyl ether (tAME), and tertiary-butyl alcohol (tBA) were not detected above laboratory reporting limits in soil samples collected from the borings. In June 2001, one groundwater monitoring well (MW-4), three SVE wells (SVE-1 [B-7], SVE-2 [B-6], and SVE-3 [B-8]), and three soil borings (B-9, B-10, and B-11), were completed at the Site (Kleinfelder, 2001). Soil borings and SVE wells were drilled to total depths ranging from 95 feet bgs to 195 feet bgs. Total petroleum hydrocarbons as gasoline (TPH-g) was reported at a maximum concentration of 17 milligrams per kilogram (mg/kg) in a sample from MW-4 at 20 feet bgs. Benzene was reported in one soil sample, collected from MW-4 at 70 feet bgs, at a concentration of 26 micrograms per kilogram ("g/kg). MtBE was reported above the laboratory reporting limit in soil samples collected from borings SVE-1, SVE-3, B-9, and MW-4, with a maximum concentration of 820 "g/kg (MW-4 at 70 feet bgs). Fuel oxygenates DIPE, EtBE, tAME, and tBA were not detected above laboratory reporting limits in the soil samples analyzed. From May to July 2002, Kleinfelder supervised the completion of one SVE well (SVE-4), two groundwater monitoring wells (MW-1 and MW-2), and one soil boring (B-13) (Kleinfelder, 2002b). The soil boring and wells were drilled to total depths ranging from 150 feet bgs to 197 feet bgs. The maximum TPH-g concentration was 12,000 mg/kg in the sample collected from boring SVE-4 at 10 feet bgs. Benzene was detected in only one soil sample, SVE-4 at 15 feet bgs, at a concentration of 540 "g/kg. MtBE was reported in soil samples collected from borings SVE-4, MW-1, MW-2, and B-13, with a maximum concentration of 330 mg/kg (SVE-4 at 50 feet bgs). In April 2002, Kleinfelder performed a soil remediation feasibility evaluation for the Site (Kleinfelder, 2002a). For this evaluation, the primary constituents of concern at the Site were identified as benzene and MtBE. Hydrocarbon-affected soil was located in two areas: the vicinity of the western dispenser island (Area

MAP FINDINGS

**MOBIL #18-402 (Continued)**

**S100275475**

One); and the vicinity of the east-central dispenser island (Area Two). It was estimated that Area One had approximately 4,187 cubic yards (yd<sup>3</sup>) of soil containing hydrocarbons. Based on the average TPH-g concentrations, it was estimated that soil within Area One contained approximately 19,000 pounds (lbs) of hydrocarbons, of which MtBE represented an estimated 19 lbs, and benzene represented an estimated 4 lbs. It was estimated that Area Two had approximately 1,832 yd<sup>3</sup> of hydrocarbon-affected soil. Based on the average TPH-g concentrations, it was estimated that soil within Area Two contained approximately 430 lbs of hydrocarbons, of which MtBE represented an estimated 0.2 lbs. The mass of benzene in the soil could not be calculated since benzene concentrations in soil samples collected in Area Two have historically been below laboratory reporting limits. In July 2002, Kleinfelder began groundwater monitoring and sampling from three on-Site groundwater monitoring wells (MW-1, MW-2, and MW-4). Following a decline in hydrocarbon groundwater concentrations during Fourth Quarter 2003, Kleinfelder proposed that groundwater monitoring frequency be reduced from quarterly to semiannually (Kleinfelder, 2004). In a letter dated February 26, 2004, RCDEH approved the semi-annual groundwater monitoring schedule (RCDEH, 2004). Concentrations of dissolved-phase TPH-g and benzene have been below laboratory reporting limits since January 2002. Dissolved-phase MtBE was last reported in October 2007 at a concentration of 0.69 J (J = estimated value) micrograms per liter ("g/L) in a sample collected from MW-2 (Kleinfelder, 2010). On August 2002, Kleinfelder performed SVE feasibility testing at the Site (Kleinfelder, 2002c). Based on the results of SVE step testing, performed as part of the feasibility testing, high vapor flow appeared to be attainable at the Site with relatively low vacuum and an SVE radius of influence (ROI) for the Site was approximately 65 feet. Based on results of the feasibility testing, Kleinfelder proposed that SVE be performed on well SVE-4. It was proposed that a SVE system operate until vapor concentrations display asymptotic conditions (diminishing returns), after which the SVE system effectiveness would be evaluated by pulse testing the system for vapor rebound concentrations. Additional details of the soil remediation feasibility study and the feasibility testing are described in Kleinfelders Corrective Action Plan, dated September 30, 2002 (Kleinfelder, 2002c), and Addendum to Corrective Action Plan, dated January 15, 2003 (Kleinfelder, 2003). A SVE system was installed at the Site and began operation on October 14, 2003. The SVE system was a VR Systems Internal Combustion Engine (ICE) that extracted soil vapors from vapor extraction well SVE-4. By June 1, 2005, the system had extracted and treated approximately 10,086 lbs of hydrocarbons, and influent vapor concentrations displayed asymptotic reductions in hydrocarbon concentrations (diminishing returns). To confirm asymptotic levels had been achieved, Kleinfelder requested that pulsing of the system, for one month on and one month off cycles, be initiated and continued for a four month period, as part of a vapor rebound test (Kleinfelder, 2005a). The RCDEH approved the request to begin pulsing of the SVE system (RCDEH, 2005). A summary of system operation data and a request to cease remediation at the Site was presented in Kleinfelders Soil Vapor Extraction Rebound Test Report and Site Closure Request (Kleinfelder, 2005b). The RCDEH approved the request to cease SVE operations in February 2006 (RCDEH, 2006). In March and April 2006, Kleinfelder supervised the advancement of four confirmation soil borings (CB-1 through CB-4) at the Site as part of a post remediation assessment for support of

MAP FINDINGS

**MOBIL #18-402 (Continued)**

**S100275475**

case closure (Kleinfelder, 2006). Borings CB-1 through CB-3 were drilled and sampled to 140 feet bgs, and boring CB-4 was advanced to 126.5 feet bgs. Boring CB-4 could not be advanced deeper than 126.5 feet bgs due to refusal at that depth. Concentrations of TPH-g were reported in three soil borings and ranged from 0.095 J mg/kg (CB-3 at 10 feet bgs) to 1,200 mg/kg (CB-4 at 25 feet bgs). Benzene was reported in one soil sample (CB-1 at 90 feet bgs) at a concentration of 0.55 J "g/kg. Toluene was reported at concentrations ranging from 0.61 J "g/kg to 81 "g/kg. In March and April 2006, Kleinfelder supervised the advancement of four confirmation soil borings (CB-1 through CB-4) at the Site as part of a post remediation assessment for support of case closure (Kleinfelder, 2006). Borings CB-1 through CB-3 were drilled and sampled to 140 feet bgs, and boring CB-4 was advanced to 126.5 feet bgs. Boring CB-4 could not be advanced deeper than 126.5 feet bgs due to refusal at that depth. Concentrations of TPH-g were reported in three soil borings and ranged from 0.095 J mg/kg (CB-3 at 10 feet bgs) to 1,200 mg/kg (CB-4 at 25 feet bgs). Benzene was reported in one soil sample (CB-1 at 90 feet bgs) at a concentration of 0.55 J "g/kg. Toluene was reported at concentrations ranging from 0.61 J "g/kg to 81 "g/kg. In March and April 2006, Kleinfelder supervised the advancement of four confirmation soil borings (CB-1 through CB-4) at the Site as part of a post remediation assessment for support of case closure (Kleinfelder, 2006). Borings CB-1 through CB-3 were drilled and sampled to 140 feet bgs, and boring CB-4 was advanced to 126.5 feet bgs. Boring CB-4 could not be advanced deeper than 126.5 feet bgs due to refusal at that depth. Concentrations of TPH-g were reported in three soil borings and ranged from 0.095 J mg/kg (CB-3 at 10 feet bgs) to 1,200 mg/kg (CB-4 at 25 feet bgs). benzene was reported in one soil sample (CB-1 at 90 feet bgs) at a concentration of 0.55 J "g/kg. Toluene was reported at concentrations ranging from 0.61 J "g/kg to 81 "g/kg. Ethylbenzene was reported at concentrations ranging from 0.78 J "g/kg to 3,000 "g/kg, and total xylenes were reported at concentrations ranging from 0.56 J "g/kg to 103,000 B "g/kg (B = analyte was detected in an associated method blank). The reported concentrations of toluene, ethylbenzene, and total xylenes were predominantly located in samples collected from CB-4, drilled in the vicinity of the eastern dispenser island. Concentrations of MtBE were reported to range from 1.0 J "g/kg to 33 "g/kg, with the maximum concentration of MtBE reported in the sample collected from CB-3 at 75 feet bgs. On February 8, 2007, Kleinfelder met with the RCDEH to discuss case closure. The attendees present were Ms. Sharon Boltinghouse from RCDEH, and Mssrs. Brad McCardell, Jeremy Whitcomb, and Hiram Garcia from Kleinfelder. The proposed scope of work as agreed to at the meeting included drilling three additional soil confirmation borings (CB-5, CB-6, and CB-7) to assess the effectiveness of SVE near previous borings CB-2, CB-3, and CB-4 in support of case closure with the RCDEH. Each proposed soil confirmation boring was to be advanced to approximately 40 feet bgs. The RCDEH prepared a letter dated March 1, 2007 confirming the scope of work (RCDEH, 2007). The details of this investigation are presented below. In March 2007, three soil confirmation borings (CB-5, CB-6, and CB-7) were advanced to 40 feet bgs to assess the effectiveness of SVE near previous borings CB-2, CB-3, and CB-4 in support of case closure with the RCDEH (Kleinfelder, 2007a). Soil encountered during drilling generally consisted of silty sand with intermittent lenses of well-graded sand to the total depth explored (40 feet bgs). Soil samples collected from boring CB-7, near the

MAP FINDINGS

**MOBIL #18-402 (Continued)**

**S100275475**

eastern dispenser island, were reported to contain detectable concentrations of petroleum hydrocarbons and oxygenates. TPH-g concentrations were reported in samples collected from boring CB-7, ranging from 2.3 mg/kg (30 feet bgs) to 740 mg/kg (25 feet bgs). Benzene and toluene concentrations were below laboratory reporting limits in soil samples collected from borings CB-5, CB-6, and CB-7. Ethylbenzene was reported at concentrations ranging from 280 J "g/kg to 1,800 "g/kg, and total xylenes were reported at concentrations ranging from 19,000 "g/kg to 99,000 "g/kg. Concentrations of ethylbenzene and total xylenes were reported in samples collected from CB-7 at depths of 20 and 25 feet bgs in the vicinity of the eastern dispenser island. MtBE concentrations were below laboratory reporting limits in the soil samples collected from borings CB-5, CB-6, and CB-7. In August 2007, two SVE wells (SVE-5 and SVE-6) were installed at depths of 30 and 35 feet bgs, respectively (Kleinfelder, 2007b). TPH-g was detected in soil samples collected from boring SVE-6, at a maximum concentration of 1,200 mg/kg (25 feet bgs). TPH-g was not detected in soil samples collected from boring SVE-5. Benzene, toluene, MtBE, DIPE, EtBE, tAME, and tBA were not detected above laboratory reporting limits in soil samples collected from borings SVE-5 and SVE-6. Ethylbenzene and total xylenes were detected in soil samples collected from boring SVE-6 at maximum concentrations of 510 "g/kg (25 feet bgs) and 30,000 "g/kg (25 feet bgs), respectively. Ethylbenzene and total xylenes were not detected above laboratory reporting limits in soil samples collected from boring SVE-5. Between February 29, 2008 and May 22, 2009, SVE operations were initiated on SVE-5 and SVE-6 for the purpose of primarily recovering trimethylbenzene concentrations (detected in soil confirmation boring CB-7). An estimated 270 pounds of VOCs as hexane, an estimated 1,292 pounds of VOC based on FID readings, an estimated 15.1 pounds of 1,2,4-TMB, and an estimated 9.8 pounds of 1,3,5-TMB were extracted from the subsurface. Due to low mass recovery rates (less than one pound per day) and the SCAQMD permit moratorium, the system was shut down on May 22, 2009. During the three SVE events, the system operated for a total of 21,600 hours and an estimated 10,407 pounds VOCF, 10,538 pounds of VOCs as hexane, 3.2 pounds benzene, 404 pounds toluene, 113 pounds ethylbenzene, 744 pounds xylenes, 29.2 pounds 1,2,4-TMB, and 17.9 pounds 1,3,4-TMB were removed from the subsurface. Vapor concentrations were reduced from 10,500 to 66 ppmV for VOCs as hexane, from 990 to 0.09 ppmV for toluene, from 570 to 1.2 ppmV for xylenes, from 120 to 0.012 ppmV for ethylbenzene, from 20 ppmV to non-detect for MTBE, and from 31 to 2.7 ppmV for 1,2,4-TMB. Other VOCs were less than 20 ppm at the beginning of operations and decreased to below 2 ppm prior to shutdown. On May 20, 2010, two confirmation borings (CB-8 and CB-9) were advanced in the vicinity of well SVE-6 to assess the effectiveness of remedial activities at the Site. Based upon laboratory analytical results of soil samples collected from boring SVE-6 in 2007 and CB-8 and CB-9 in 2010, constituent concentrations in soil near SVE-6 appear to have been reduced by SVE operations. Maximum TPH-g concentrations in soil have been reduced from 1,200 mg/kg (SVE-6 at 25 feet bgs) to 47 mg/kg (CB-9 at 30 feet bgs). BTEX constituents and MtBE were not detected above laboratory reporting limits in soil samples collected from borings CB-8 and CB-9. Groundwater monitoring and sampling commenced in July 2002, utilizing three on-site groundwater monitoring wells (MW-1, MW-2, and MW-4). Following a decline in groundwater hydrocarbon concentrations the RCDEH approved a reduced, semi-annual,



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

groundwater monitoring schedule. Concentrations of dissolved-phase TPH-g and benzene have been below laboratory reporting limits since January 2002. Dissolved-phase MTBE was last reported in December 2007 in a sample collected from MW-2 at an estimated concentration of 0.69 J a%g/L. During First Quarter 2010, TPH-g, benzene, toluene, ethylbenzene, and fuel oxygenates are no longer present in samples above laboratory reporting limits. A low concentration of xylenes (1.3 a%g/L) was reported in the February 3, 2010 groundwater sample collected from monitoring well MW-4. RWQCB and RCDEH concur with closure. 01/13/2011 NFA/closure letter issued by RCDEH.

LUST:

Global Id: T0606500586  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rose.scott@waterboards.ca.gov  
Phone Number: 9513206375

Global Id: T0606500586  
Contact Type: Local Agency Caseworker  
Contact Name: YVONNE REYES  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: ayreyes@rivco.org  
Phone Number: 9519558982

LUST:

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 07/15/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 07/15/2010  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 04/15/2010  
Action: Monitoring Report - Annually

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 10/15/2009  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 01/15/2010  
Action: Monitoring Report - Quarterly

Global Id: T0606500586

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

Action Type: RESPONSE  
Date: 10/15/2010  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 10/15/2007  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: REMEDIATION  
Date: 10/14/2003  
Action: Soil Vapor Extraction (SVE)

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 08/13/2009  
Action: Staff Letter - #RCDEH081309

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 01/15/2009  
Action: Other Report / Document

Global Id: T0606500586  
Action Type: Other  
Date: 01/07/1999  
Action: Leak Discovery

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 04/15/2009  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 10/12/2010  
Action: Staff Letter - #RCDEH101210

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 08/24/2007  
Action: Staff Letter - #RCDEH 082407

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 10/31/2007  
Action: Other Report / Document

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 05/04/2010  
Action: Staff Letter - #RCDEH050410

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 03/03/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

Action: Technical Correspondence / Assistance / Other - #RCDEH 030308

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 07/05/2010  
Action: Other Report / Document

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 10/01/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 07/15/2009  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 12/16/2010  
Action: Well Destruction Report

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 12/23/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 10/07/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 01/15/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: RESPONSE  
Date: 04/15/2008  
Action: Monitoring Report - Quarterly

Global Id: T0606500586  
Action Type: Other  
Date: 10/22/1998  
Action: Leak Stopped

Global Id: T0606500586  
Action Type: Other  
Date: 01/11/1999  
Action: Leak Reported

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 11/19/2007  
Action: File review

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 01/12/2011  
Action: File review - #RCDEH uploaded site file

Global Id: T0606500586  
Action Type: ENFORCEMENT  
Date: 01/13/2011  
Action: Closure/No Further Action Letter - #RCDEH closure

**LUST:**

Global Id: T0606500586  
Status: Open - Case Begin Date  
Status Date: 10/22/1998

Global Id: T0606500586  
Status: Open - Site Assessment  
Status Date: 12/13/1999

Global Id: T0606500586  
Status: Open - Remediation  
Status Date: 10/14/2003

Global Id: T0606500586  
Status: Open - Verification Monitoring  
Status Date: 03/27/2007

Global Id: T0606500586  
Status: Completed - Case Closed  
Status Date: 01/13/2011

**RIVERSIDE CO. LUST:**

Region: RIVERSIDE  
Facility ID: 9914834  
Employee: Reyes-LOP  
Site Closed: Yes  
Case Type: Drinking Water Aquifer affected  
Facility Status: closed/action completed  
Casetype Decode: An Aquifer used for Drinking Water supply has been contaminated.  
Fstatus Decode: Closed/Action completed

**CHMIRS:**

OES Incident Number: 12-1972  
OES notification: 04/03/2012  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Responsible Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Cup(s)
Other:	Not reported
Date/Time:	1600
Year:	2012
Agency:	Veeder Root
Incident Date:	4/3/2012
Admin Agency:	Riverside City Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	2
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	RP states that an automatic shutoff failed resulting in the release of 2 cups of gasoline onto the concrete at an Exxon Mobile gas station. The release is contained and cleanup is complete. No waterways have been impacted.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

OES Incident Number:	910917
OES notification:	Not reported
OES Date:	Not reported
OES Time:	Not reported
<b>Date Completed:</b>	<b>28-NOV-89</b>
Property Use:	500
Agency Id Number:	33075
Agency Incident Number:	8916261
Time Notified:	1927
Time Completed:	1949
Surrounding Area:	500
Estimated Temperature:	Not reported
Property Management:	P
More Than Two Substances Involved?:	N
Resp Agncy Personel # Of Decontaminated:	0
Responding Agency Personel # Of Injuries:	0
Responding Agency Personel # Of Fatalities:	0
Others Number Of Decontaminated:	0
Others Number Of Injuries:	0
Others Number Of Fatalities:	0
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	CAPTAIN FISHER / 29732
Report Date:	02-JAN-90
Facility Telephone:	714 782-5679
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Not reported
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	88-92
Agency:	Not reported
Incident Date:	28-NOV-89
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Not reported
Site Type:	Not reported
E Date:	23-MAY-90
Substance:	Not reported
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL #18-402 (Continued)**

**S100275475**

#1 Vessel >= 300 Tons: Not reported  
#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
Fatals: Not reported  
Comments: Not reported  
Description: Not reported

**HAZNET:**

envid: S100275475  
Year: 2015  
GEPaid: CAC002820688  
Contact: JC CORTEZ  
Telephone: 9514537524  
Mailing Name: Not reported  
Mailing Address: 3900 MAIN ST FL 6  
Mailing City,St,Zip: RIVERSIDE, CA 92502  
Gen County: Riverside  
TSD EPA ID: CAD008364432  
TSD County: Los Angeles  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site  
Tons: 0.495  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Riverside

**I40**  
**West**  
**1/4-1/2**  
**0.499 mi.**  
**2635 ft.**

**GROVE 186**  
**COLE ST**  
**RIVERSIDE, CA 92507**

**LUST S110654903**  
**N/A**

**Site 1 of 2 in cluster I**

**Relative:**  
**Lower**

**LUST:**

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500130](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500130)  
Global Id: T0606500130  
Latitude: 33.9793165  
Longitude: -117.339662  
Status: Completed - Case Closed  
Status Date: 12/11/1989  
Case Worker: RIV  
RB Case Number: 083301228T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Not reported  
Local Case Number: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

**Actual:**  
**986 ft.**

**LUST:**

Global Id: T0606500130  
Contact Type: Regional Board Caseworker  
Contact Name: PATRICIA HANNON  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GROVE 186 (Continued)**

**S110654903**

City: RIVERSIDE  
Email: phannon@waterboards.ca.gov  
Phone Number: Not reported

Global Id: T0606500130  
Contact Type: Local Agency Caseworker  
Contact Name: Riverside County LOP  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: Not reported  
Phone Number: 9519558980

LUST:

Global Id: T0606500130  
Action Type: ENFORCEMENT  
Date: 12/11/1989  
Action: Closure/No Further Action Letter

Global Id: T0606500130  
Action Type: Other  
Date: 08/05/1988  
Action: Leak Discovery

Global Id: T0606500130  
Action Type: Other  
Date: 08/05/1988  
Action: Leak Stopped

Global Id: T0606500130  
Action Type: Other  
Date: 08/10/1988  
Action: Leak Reported

LUST:

Global Id: T0606500130  
Status: Open - Case Begin Date  
Status Date: 08/05/1988

Global Id: T0606500130  
Status: Open - Site Assessment  
Status Date: 07/21/1989

Global Id: T0606500130  
Status: Completed - Case Closed  
Status Date: 12/11/1989



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

I41  
West  
1/4-1/2  
0.499 mi.  
2635 ft.

**SMITH PROPERTY**  
4088 MISSION INN AVE (7TH & BROCKTON)  
RIVERSIDE, CA 92501

LUST S110654910  
N/A

Site 2 of 2 in cluster I

Relative:  
Lower

LUST:

Lead Agency: RIVERSIDE COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606500220](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500220)  
Global Id: T0606500220  
Latitude: 33.984844809086  
Longitude: -117.378425284683  
Status: Completed - Case Closed  
Status Date: 02/27/1991  
Case Worker: RIV  
RB Case Number: 083301735T  
Local Agency: RIVERSIDE COUNTY LOP  
File Location: Local Agency Warehouse  
Local Case Number: 891011  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

Actual:  
986 ft.

LUST:

Global Id: T0606500220  
Contact Type: Regional Board Caseworker  
Contact Name: NANCY OLSON-MARTIN  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: [nolson-martin@waterboards.ca.gov](mailto:nolson-martin@waterboards.ca.gov)  
Phone Number: Not reported

Global Id: T0606500220  
Contact Type: Local Agency Caseworker  
Contact Name: Riverside County LOP  
Organization Name: RIVERSIDE COUNTY LOP  
Address: 3880 LEMON ST SUITE 200  
City: RIVERSIDE  
Email: Not reported  
Phone Number: 9519558980

LUST:

Global Id: T0606500220  
Action Type: RESPONSE  
Date: 12/07/1990  
Action: Soil and Water Investigation Report

Global Id: T0606500220  
Action Type: ENFORCEMENT  
Date: 02/27/1991  
Action: Closure/No Further Action Letter - #Riv Co Closure

Global Id: T0606500220  
Action Type: Other  
Date: 07/01/1990  
Action: Leak Discovery

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SMITH PROPERTY (Continued)**

**S110654910**

Global Id: T0606500220  
Action Type: Other  
Date: 07/01/1990  
Action: Leak Stopped

Global Id: T0606500220  
Action Type: ENFORCEMENT  
Date: 02/26/1991  
Action: File review - #RCDEH Site File

Global Id: T0606500220  
Action Type: Other  
Date: 10/31/1989  
Action: Leak Reported

Global Id: T0606500220  
Action Type: ENFORCEMENT  
Date: 02/27/1991  
Action: Closure/No Further Action Letter

**LUST:**

Global Id: T0606500220  
Status: Open - Case Begin Date  
Status Date: 10/31/1989

Global Id: T0606500220  
Status: Open - Site Assessment  
Status Date: 07/01/1990

Global Id: T0606500220  
Status: Open - Site Assessment  
Status Date: 08/01/1990

Global Id: T0606500220  
Status: Open - Site Assessment  
Status Date: 12/07/1990

Global Id: T0606500220  
Status: Completed - Case Closed  
Status Date: 02/27/1991

**42  
NW  
1/2-1  
0.704 mi.  
3718 ft.**

**VALERION CORPORATION  
2280 IOWA AVENUE  
RIVERSIDE, CA 92507**

**ENVIROSTOR S100201826  
HIST CORTESE N/A**

**Relative:  
Lower**

ENVIROSTOR:  
Facility ID: 33280139  
Status: Refer: Other Agency  
Status Date: 08/12/1988  
Site Code: Not reported  
Site Type: Historical  
Site Type Detailed: \* Historical  
Acres: Not reported  
NPL: NO

**Actual:  
965 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALERION CORPORATION (Continued)**

**S100201826**

Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Not reported  
Supervisor: \* Mmonroy  
Division Branch: Cleanup Cypress  
Assembly: 61  
Senate: 31  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 33.99083  
Longitude: -117.3394  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: \* Metals - Other Inorganic Solid Waste \* UNSPECIFIED OIL CONTAINING WASTE \* UNSPECIFIED SLUDGE WASTE \* UNSPECIFIED SOLVENT MIXTURES  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: GTE-VALERION.  
Alias Type: Alternate Name  
Alias Name: CAD980884415  
Alias Type: EPA Identification Number  
Alias Name: 33280139  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 10/25/1994  
Comments: CALSITES VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 08/12/1988  
Comments: SITE SCREENING DONE NFA UNDER CERCLA RECOMMENDED BY FIT NFA UNDER SITE MITIGATION

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 06/01/1984  
Comments: SOURCE ACT: T/C W/ E.SANTIMAW,GTE-VALERI (714)781-4382, 6/26/84 - MFG TUNGSTEN CARBIDE TOOLING. WASTE: METAL FILING, HEPTANE, OIL GRINDING SLUDGE,GRAPHITE. FAC TYPE: CTY OF RIVERSIDE INTER OFFICE MEMO, 1/15/81 - ILLEGAL DUMP OF OIL IN 2 AREAS. SUBMIT TO EPA PRELIM ASSESS DONE RCRA 3012

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 03/22/1983  
Comments: FACILITY IDENTIFIED ID FROM RWQCB COMPLAINTS 1980 FILE. CHEM BEING DISPOSED OF IN A PIT BEHIND PLANT. NOT KNOWN IF THE PIT IS LINED OR SPECIFIC CHEM USED. INSPECTOR REP: NO PROB EVIDENT AT SITE. COMPLAINT APPEARS TO BE UNFOUND.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**VALERION CORPORATION (Continued)**

**S100201826**

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

**HIST CORTESE:**

Region: CORTESE  
 Facility County Code: 33  
 Reg By: CALSI  
 Reg Id: 33280139

**43**  
**WNW**  
**1/2-1**  
**0.756 mi.**  
**3993 ft.**

**ARCO STATION #1841**  
**1505 THIRD**  
**RIVERSIDE, CA 90040**

**Notify 65** **S100179165**  
**N/A**

**Relative:**  
**Lower**

**NOTIFY 65:**

Date Reported: Not reported  
 Staff Initials: Not reported  
 Board File Number: Not reported  
 Facility Type: Not reported  
 Discharge Date: Not reported  
 Issue Date: Not reported  
 Incident Description: Not reported

**Actual:**  
**952 ft.**

**44**  
**West**  
**1/2-1**  
**0.839 mi.**  
**4432 ft.**

**THERMOCLAD COMPANY**  
**1541 7TH ST**  
**RIVERSIDE, CA 92507**

**ENVIROSTOR** **S109422434**  
**N/A**

**Relative:**  
**Lower**

**ENVIROSTOR:**

Facility ID: 60000209  
 Status: Inactive - Needs Evaluation  
 Status Date: 03/06/2006  
 Site Code: Not reported  
 Site Type: Evaluation  
 Site Type Detailed: Evaluation  
 Acres: Not reported  
 NPL: NO  
 Regulatory Agencies: SMBRP, US EPA  
 Lead Agency: SMBRP  
 Program Manager: Not reported  
 Supervisor: \* Greg Holmes  
 Division Branch: Cleanup Cypress  
 Assembly: 61  
 Senate: 31  
 Special Program: EPA - PASI  
 Restricted Use: NO  
 Site Mgmt Req: NONE SPECIFIED

**Actual:**  
**968 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**THERMOCLAD COMPANY (Continued)**

**S109422434**

Funding: EPA Grant  
 Latitude: 33.97850  
 Longitude: -117.3455  
 APN: 250-161-009  
 Past Use: MANUFACTURING - CHEMICALS  
 Potential COC: Vinyl chloride  
 Confirmed COC: 30028-NO  
 Potential Description: NONE SPECIFIED  
 Alias Name: 250-161-009  
 Alias Type: APN  
 Alias Name: CAD981978539  
 Alias Type: EPA Identification Number  
 Alias Name: 110002762626  
 Alias Type: EPA (FRS #)  
 Alias Name: 14835  
 Alias Type: RB-PCA  
 Alias Name: 60000209  
 Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Screening  
 Completed Date: 04/12/2006  
 Comments: EPA determined the site is not eligible for CERCLA.

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

45  
 SW  
 1/2-1  
 0.942 mi.  
 4976 ft.

**UNIVERSITY OF CALIFORNIA RIVERSIDE**  
**1060 PENNSYLVANIA AVENUE**  
**RIVERSIDE, CA 92521**

**RESPONSE S100833324**  
**ENVIROSTOR N/A**  
**HIST Cal-Sites**  
**DEED**  
**CA BOND EXP. PLAN**  
**HIST CORTESE**

Relative:  
 Lower

AWP:

Actual:  
 997 ft.

AWP Facility ID: 33890001  
 Region Code: 4  
 Region: CYPRESS  
 SMBR Branch Code: SB  
 SMBR Branch Unit: SO CAL - CYPRESS  
 Site Name.: Not reported  
 Current Status Date: 01011985  
 Current Status: ANNUAL WORKPLAN - ACTIVE SITE  
 Lead Agency Code: DTSC  
 Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
 Facility Type: responsible party  
 Awp Site Type: RESPONSIBLE PARTY  
 NPL: Not Listed  
 Tier Of AWP Site: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Source Of Funding: C  
Responsible Staff Member: GHOLMES  
Supervisor Responsible: Not reported  
SIC Code: 89  
Facility SIC: MISCELLANEOUS SERVICES  
RWQCB Code: SA  
RWQCB Associated With Site: SANTA ANA  
Site Access Controlled: Not reported  
Site Listed HWS List: Not reported  
Hazard Ranking Score: Not reported  
Date Site Hazard Ranked: Not reported  
Groundwater Contamination: Suspected  
# Of Contamination Sources: 1  
Lat/Long: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Description Of Entity: Not reported  
State Assembly Distt Code: 64  
State Senate District: 31

RESPONSE:

Facility ID: 33890001  
Site Type: State Response  
Site Type Detail: State Response or NPL  
Acres: 3.25  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Gregory Shaffer  
Supervisor: Robert Senga  
Division Branch: Cleanup Cypress  
Site Code: 400161  
Site Mgmt. Req.: REM, DAY, HOS, LUC, MON, EX, GW, OIL, NUSE, NSUB, EXT, FOOD  
Assembly: 61  
Senate: 31  
Special Program Status: Not reported  
Status: Certified O&M - Land Use Restrictions Only  
Status Date: 12/15/2010  
Restricted Use: YES  
Funding: Responsible Party  
Latitude: 33.96321  
Longitude: -117.3356  
APN: 253-090-008-5  
Past Use: AGRICULTURAL - ORCHARD, LABORATORIES- CHEMICAL,  
PESTICIDE/INSECTIDE/RODENTICIDE STORAGE

Potential COC : Benzene Chlordane DDD DDE DDT Endrin Polychlorinated biphenyls (PCBs)  
Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE  
Toxaphene 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Acetone  
Aldrin Baygon Benzoic acid Bis(2-ethylhexyl)phthalate (DEHP) Butyl  
benzyl phthalate Carbaryl Carbofuran Chloroethane Chloroform  
Chlorpropham Cumene (isopropylbenzene Dacthal Dalapon Diazinon  
Dibenzofuran Dicamba 1,2-Dichlorobenzene 1,3-Dichlorobenzene  
1,4-Dichlorobenzene 1,2-Dichloroethane (EDC 1,1-Dichloroethylene  
2,4-Dichlorophenol 1,2-Dichloropropane Dieldrin Dinoseb Diuron  
Endosulfan Ethion Ethylbenzene Heptachlor Heptachlor epoxide  
Hexachlorobenzene Hexachlorobutadiene Isophorone Linuron Methomyl  
Methoxychlor Methylene chloride Napropamide Parathion Pendimethalin

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Confirmed COC: Pentachlorophenol Phorate Acenaphthene Anthracene Benz[a]anthracene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Chrysene Dibenz[ah]anthracene Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene Naphthalene Pyrene Propanil Isopropylbenzene (see Cumene n-Propylbenzene 1,1,1,2-Tetrachloroethane Toluene 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,3,5-Trimethylbenzene Xylenes Phorate Acenaphthene Anthracene Benz[a]anthracene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Chrysene Dibenz[ah]anthracene Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene Naphthalene Pyrene Propanil Isopropylbenzene (see Cumene n-Propylbenzene 1,1,1,2-Tetrachloroethane Toluene 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,3,5-Trimethylbenzene Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE Toxaphene 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Acetone Aldrin Baygon Benzoic acid Bis(2-ethylhexyl)phthalate (DEHP) Butyl benzyl phthalate Carbaryl Carbofuran Chloroethane Chloroform Chlorpropham Cumene (isopropylbenzene Dacthal Dalapon Diazinon Dibenzofuran Dicamba 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichloroethane (EDC 1,1-Dichloroethylene 2,4-Dichlorophenol 1,2-Dichloropropane Dieldrin Dinoseb Diuron Endosulfan Ethion Ethylbenzene Heptachlor Heptachlor epoxide Hexachlorobenzene Hexachlorobutadiene Isophorone Linuron Methomyl Methoxychlor Methylene chloride Napropamide Parathion Pendimethalin Pentachlorophenol Benzene Chlordane DDD DDE DDT Endrin Xylenes OTH, SOIL

Potential Description:  
Alias Name: 253-090-008-5  
Alias Type: APN  
Alias Name: CAD073134777  
Alias Type: EPA Identification Number  
Alias Name: 110000609761  
Alias Type: EPA (FRS #)  
Alias Name: 110033620277  
Alias Type: EPA (FRS #)  
Alias Name: SLT8R0363921  
Alias Type: GeoTracker Global ID  
Alias Name: P41050  
Alias Type: PCode  
Alias Name: 400161  
Alias Type: Project Code (Site Code)  
Alias Name: 33890001  
Alias Type: Envirostor ID Number

Completed Info:  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Order  
Completed Date: 11/30/1989  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction  
Completed Date: 07/26/2006  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

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EPA ID Number

**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 02/07/2006  
Comments: The Groundwater Monitoring Operation and Maintenance Plan was approved.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 02/06/2006  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Remedial or Removal Design  
Completed Date: 09/06/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/16/1996  
Comments: DTSC approved the Draft Remedial Action Plan for the site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 10/10/1995  
Comments: Site is adjacent to the University of California, Riverside research facility. Contaminants include pesticides, chlorinated herbicides, PCBs, and solvents.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 12/30/1987  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 06/01/1984  
Comments: Preliminary Assessment Done: Agricultural & scientific research operations. Three pits and one landfill. Pits were filled-in. 15,000 cubic feet of materials are buried in the landfill. Currently, wastes are packed with vermiculite in 55-gallon drums, stored in paved/fenced/covered storage area, and hauled under manifest to a Class I disposal area (Hauler: Findly Chemical Disposal Co). No mark fence around landfill. Pits were active from 1959 to 1969. Preliminary Assessment submitted to EPA.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Remedial or Removal Design  
Completed Date: 06/19/2000  
Comments: Remedial Design for pesticides contaminated soil clean-up using low



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MAP FINDINGS

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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

temperature thermal degradation unit (Transporable Treatment Unit ITTU)) at site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 05/12/2006  
Comments: Operation and Maintenance Agreement for Pesticide Pits.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/24/2007  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 01/09/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/20/2009  
Comments: Comments need to be addressed.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/20/2009  
Comments: Comments need to be addressed.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/09/2009  
Comments: Combined 31st Semiannual Groundwater Monitoring and 2008 Annual Monitoring Report approved.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/01/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/23/2010  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/12/2010  
Comments: Letter of approval sent to RP

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/07/2011  
Comments: Approval letter mailed out

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/08/2011  
Comments: 36th Semi-Annual GW Monitoring Report for UCR's Pits site was approved on 7/8/2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Deed/LUR Enforcement & Implementation Plan  
Completed Date: 01/09/2012  
Comments: none

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/31/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/14/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/17/2007  
Comments: Deed restriction inspection.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Soils Management Plan  
Completed Date: 11/05/2015  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 01/30/2015  
Comments: None

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 05/10/2017  
Comments: Completed pending tech memo concerning one-time groundwater sampling event

Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Sub Area Name: Not reported  
Completed Document Type: Soils Management Plan  
Completed Date: 07/01/2005  
Comments: Document received by DTSC.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 04/07/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 02/08/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 08/21/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 02/18/2010  
Comments: Completed and uploaded the copy of the Deed Restrictions Annual Inspection Report on EnviroStor

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/01/2012  
Comments: None

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/08/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/20/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Amended Order/Agreement, Chapter 6.5 transition  
Completed Date: 12/21/1998  
Comments: Transition to Chapter 6.5 - Amendment to the existing Site Investigation Agreement, Docket No. HSA 89/90-005 signed by the RP.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 02/18/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 07/16/2010  
Comments: Letter was mailed on July 16, 2010

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/09/2010  
Comments: Annual Cost Estmailes for UCR Pts Site for 2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Triage Meeting  
Completed Date: 07/21/2015  
Comments: Conference call held and no action due to statue of limitation

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/04/2014  
Comments: 2014-15 Cost Estimate and Letter to RP mailed

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 03/21/2011  
Comments: Annual Deed Restriction Inspection for year 2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 08/21/2015  
Comments: 2015-16 Cost Estimate Letter and REW Sheet mailed to RP

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 03/02/2009  
Comments: ComPLETED Deed Restriction Inspection Report

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/18/2011  
Comments: 2012 Cost Estimates and Letter to RP was sent out.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 12/18/2006  
Comments: Not reported

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UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: PROJECT WIDE  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Public Notice  
Schedule Due Date: 03/28/2018  
Schedule Revised Date: Not reported  
Schedule Area Name: PROJECT WIDE  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Fact Sheets  
Schedule Due Date: 05/13/2018  
Schedule Revised Date: Not reported

ENVIROSTOR:

Facility ID: 33890001  
Status: Certified O&M - Land Use Restrictions Only  
Status Date: 12/15/2010  
Site Code: 400161  
Site Type: State Response  
Site Type Detailed: State Response or NPL  
Acres: 3.25  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Gregory Shaffer  
Supervisor: Robert Senga  
Division Branch: Cleanup Cypress  
Assembly: 61  
Senate: 31  
Special Program: Not reported  
Restricted Use: YES  
Site Mgmt Req: REM, DAY, HOS, LUC, MON, EX, GW, OIL, NUSE, NSUB, EXT, FOOD  
Funding: Responsible Party  
Latitude: 33.96321  
Longitude: -117.3356  
APN: 253-090-008-5  
Past Use: AGRICULTURAL - ORCHARD, LABORATORIES- CHEMICAL,  
PESTICIDE/INSECTIDE/RODENTICIDE STORAGE

Potential COC:

Benzene Chlordane DDD DDE DDT Endrin Polychlorinated biphenyls (PCBs)  
Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE  
Toxaphene 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Acetone  
Aldrin Baygon Benzoic acid Bis(2-ethylhexyl)phthalate (DEHP) Butyl  
benzyl phthalate Carbaryl Carbofuran Chloroethane Chloroform  
Chlorpropham Cumene (isopropylbenzene Dacthal Dalapon Diazinon  
Dibenzofuran Dicamba 1,2-Dichlorobenzene 1,3-Dichlorobenzene  
1,4-Dichlorobenzene 1,2-Dichloroethane (EDC 1,1-Dichloroethylene  
2,4-Dichlorophenol 1,2-Dichloropropane Dieldrin Dinoseb Diuron  
Endosulfan Ethion Ethylbenzene Heptachlor Heptachlor epoxide  
Hexachlorobenzene Hexachlorobutadiene Isophorone Linuron Methomyl  
Methoxychlor Methylene chloride Napropamide Parathion Pendimethalin  
Pentachlorophenol Phorate Acenaphthene Anthracene Benzo[a]anthracene  
Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Chrysene  
Dibenz[ah]anthracene Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene  
Naphthalene Pyrene Propanil Isopropylbenzene (see Cumene  
n-Propylbenzene 1,1,1,2-Tetrachloroethane Toluene

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UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Confirmed COC: 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane  
1,2,3-Trichloropropane 1,3,5-Trimethylbenzene Xylenes  
Phorate Acenaphthene Anthracene Benz[a]anthracene  
Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Chrysene  
Dibenz[ah]anthracene Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene  
Naphthalene Pyrene Propanil Isopropylbenzene (see Cumene  
n-Propylbenzene 1,1,1,2-Tetrachloroethane Toluene  
1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane  
1,2,3-Trichloropropane 1,3,5-Trimethylbenzene Polychlorinated  
biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs  
Tetrachloroethylene (PCE Toxaphene 1,1,1-Trichloroethane (TCA  
Trichloroethylene (TCE Acetone Aldrin Baygon Benzoic acid  
Bis(2-ethylhexyl)phthalate (DEHP) Butyl benzyl phthalate Carbaryl  
Carbofuran Chloroethane Chloroform Chlorpropham Cumene  
(isopropylbenzene Dacthal Dalapon Diazinon Dibenzofuran Dicamba  
1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene  
1,2-Dichloroethane (EDC 1,1-Dichloroethylene 2,4-Dichlorophenol  
1,2-Dichloropropane Dieldrin Dinoseb Diuron Endosulfan Ethion  
Ethylbenzene Heptachlor Heptachlor epoxide Hexachlorobenzene  
Hexachlorobutadiene Isophorone Linuron Methomyl Methoxychlor  
Methylene chloride Napropamide Parathion Pendimethalin  
Pentachlorophenol Benzene Chlordane DDD DDE DDT Endrin Xylenes

Potential Description: OTH, SOIL  
Alias Name: 253-090-008-5  
Alias Type: APN  
Alias Name: CAD073134777  
Alias Type: EPA Identification Number  
Alias Name: 110000609761  
Alias Type: EPA (FRS #)  
Alias Name: 110033620277  
Alias Type: EPA (FRS #)  
Alias Name: SLT8R0363921  
Alias Type: GeoTracker Global ID  
Alias Name: P41050  
Alias Type: PCode  
Alias Name: 400161  
Alias Type: Project Code (Site Code)  
Alias Name: 33890001  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Order  
Completed Date: 11/30/1989  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction  
Completed Date: 07/26/2006  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 02/07/2006  
Comments: The Groundwater Monitoring Operation and Maintenance Plan was

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MAP FINDINGS

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UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

approved.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 02/06/2006  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Remedial or Removal Design  
Completed Date: 09/06/1996  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/16/1996  
Comments: DTSC approved the Draft Remedial Action Plan for the site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 10/10/1995  
Comments: Site is adjacent to the University of California, Riverside research facility. Contaminants include pesticides, chlorinated herbicides, PCBs, and solvents.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 12/30/1987  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 06/01/1984  
Comments: Preliminary Assessment Done: Agricultural & scientific research operations. Three pits and one landfill. Pits were filled-in. 15,000 cubic feet of materials are buried in the landfill. Currently, wastes are packed with vermiculite in 55-gallon drums, stored in paved/fenced/covered storage area, and hauled under manifest to a Class I disposal area (Hauler: Findly Chemical Disposal Co). No mark fence around landfill. Pits were active from 1959 to 1969. Preliminary Assessment submitted to EPA.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Remedial or Removal Design  
Completed Date: 06/19/2000  
Comments: Remedial Design for pesticides contaminated soil clean-up using low temperature thermal degradation unit (Transportable Treatment Unit ITTU)) at site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Document Type: Operations and Maintenance Plan  
Completed Date: 05/12/2006  
Comments: Operation and Maintenance Agreement for Pesticide Pits.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/24/2007  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 01/09/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/20/2009  
Comments: Comments need to be addressed.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/20/2009  
Comments: Comments need to be addressed.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/09/2009  
Comments: Combined 31st Semiannual Groundwater Monitoring and 2008 Annual Monitoring Report approved.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/01/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/23/2010  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/12/2010  
Comments: Letter of approval sent to RP

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/07/2011



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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Comments: Approval letter mailed out

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/08/2011  
Comments: 36th Semi-Annual GW Monitoring Report for UCR's Pits site was approved on 7/8/2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Deed/LUR Enforcement & Implementation Plan  
Completed Date: 01/09/2012  
Comments: none

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/31/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/14/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/17/2007  
Comments: Deed restriction inspection.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Soils Management Plan  
Completed Date: 11/05/2015  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 01/30/2015  
Comments: None

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 05/10/2017  
Comments: Completed pending tech memo concerning one-time groundwater sampling event

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Soils Management Plan  
Completed Date: 07/01/2005  
Comments: Document received by DTSC.

Map ID  
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**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 04/07/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction Monitoring Report  
Completed Date: 02/08/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 08/21/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 02/18/2010  
Comments: Completed and uploaded the copy of the Deed Restrictions Annual Inspection Report on EnviroStor

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/01/2012  
Comments: None

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/08/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/20/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Amended Order/Agreement, Chapter 6.5 transition  
Completed Date: 12/21/1998  
Comments: Transition to Chapter 6.5 - Amendment to the existing Site Investigation Agreement, Docket No. HSA 89/90-005 signed by the RP.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 02/18/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 07/16/2010  
Comments: Letter was mailed on July 16, 2010

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/09/2010  
Comments: Annual Cost Estmailes for UCR Pts Site for 2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Triage Meeting  
Completed Date: 07/21/2015  
Comments: Conference call held and no action due to statue of limitation

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/04/2014  
Comments: 2014-15 Cost Estimate and Letter to RP mailed

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 03/21/2011  
Comments: Annual Deed Restriction Inspection for year 2011

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 08/21/2015  
Comments: 2015-16 Cost Estimate Letter and REW Sheet mailed to RP

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 03/02/2009  
Comments: ComPLETED Deed Restriction Inspection Report

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/18/2011  
Comments: 2012 Cost Estimates and Letter to RP was sent out.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 12/18/2006  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Schedule Area Name: PROJECT WIDE  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Public Notice  
Schedule Due Date: 03/28/2018  
Schedule Revised Date: Not reported  
Schedule Area Name: PROJECT WIDE  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Fact Sheets  
Schedule Due Date: 05/13/2018  
Schedule Revised Date: Not reported

**Calsite:**

Region: CYPRESS  
Facility ID: 33890001  
Facility Type: RP  
Type: RESPONSIBLE PARTY  
Branch: SB  
Branch Name: SO CAL - CYPRESS  
File Name: Not reported  
State Senate District: 01011985  
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE  
Status Name: ANNUAL WORKPLAN - ACTIVE SITE  
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
NPL: Not Listed  
SIC Code: 89  
SIC Name: MISCELLANEOUS SERVICES  
Access: Not reported  
Cortese: Not reported  
Hazardous Ranking Score: Not reported  
Date Site Hazard Ranked: Not reported  
Groundwater Contamination: Suspected  
Staff Member Responsible for Site: GHOLMES  
Supervisor Responsible for Site: Not reported  
Region Water Control Board: SA  
Region Water Control Board Name: SANTA ANA  
Lat/Long Direction: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Lat/Long Description: Not reported  
State Assembly District Code: 64  
State Senate District Code: 31  
Facility ID: 33890001  
Activity: PPP  
Activity Name: PUBLIC PARTICIPATION PLAN  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12301987  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: ORDER  
Activity Name: I/SE, IORSE, FFA, FFSRA, VCA, EA  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 11301989  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 10101995  
Est Person-Yrs to complete: 0  
Estimated Size: L  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05161996  
Est Person-Yrs to complete: 0.17000  
Estimated Size: L  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: DES  
Activity Name: DESIGN  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09061996  
Est Person-Yrs to complete: 0  
Estimated Size: L  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: RMDL  
Activity Name: REMEDIAL ACTION (RAP REQUIRED)  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 09302004  
Revised Due Date: 03012005  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: L

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: CERT  
Activity Name: CERTIFICATION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 06302005  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: L  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: CHP65  
Activity Name: AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION  
AWP Code: ORDER  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12211998  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: OM  
Activity Name: OPERATION & MAINTENANCE  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 06302030  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: DES  
Activity Name: DESIGN  
AWP Code: PEST.  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06192000  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 33890001  
Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Proposed Budget: 0  
AWP Completion Date: 12312004  
Revised Due Date: 04302005  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Alternate Address: 900 UNIVERSITY AVENUE  
Alternate City,St,Zip: RIVERSIDE, CA  
Alternate Address: 1060 PENNSYLVANIA AVENUE  
Alternate City,St,Zip: RIVERSIDE, CA 92521  
Background Info: The site consists of seven pits located in the Agricultural Operations yard of the University of California,Riverside campus. A wide diversity of organic chemicals including organichlorine pesticides, chlorinated herbicides, solvents, hydrocarbons, and polychlorinated biphenyls (PCBs) have been identified in the pits. The pits were used from the mid-1950s, to the late 1960s, for the disposal of agricultural wastes and containers which presumably contained residual waste generated during research into various experimental pesticides. The disposal pits are not lined and there is potential for contamination of groundwater which is used for domestic supply. The pits are covered and there is little potential direct exposure.  
The first stage of a two stage RI/FS has been completed. The first stage identified the types of soil contamination and location of the pits.  
Comments Date: 01141991  
Comments: DHS received EPA FIT SSI Reassessment. EPA is taking no  
Comments Date: 01141991  
Comments: further action due to DHS lead (07/20/90).  
Comments Date: 02101981  
Comments: DHS ISD Permit issued.  
Comments Date: 03261997  
Comments: Field work to start Spring 1997.  
Comments Date: 03261997  
Comments: Not reported  
Comments Date: 05161996  
Comments: DTSC approved the Draft Remedial Action Plan for the site.  
Comments Date: 05161996  
Comments: Not reported  
Comments Date: 06011984  
Comments: Preliminary Assessment Done: Agricultural & scientific  
Comments Date: 06011984  
Comments: research operations. Three pits and one landfill. Pits were

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

Comments Date: 06011984  
Comments: filled-in. 15,000 cubic feet of materials are buried in the  
Comments Date: 06011984  
Comments: landfill. Currently, wastes are packed with vermiculite in  
Comments Date: 06011984  
Comments: 55-gallon drums, stored in paved/fenced/covered storage  
Comments Date: 06011984  
Comments: area, and hauled under manifest to a Class I disposal area  
Comments Date: 06011984  
Comments: (Hauler: Findly Chemical Disposal Co). No mark fence around  
Comments Date: 06011984  
Comments: landfill. Pits were active from 1959 to 1969.  
Comments Date: 06011984  
Comments: Preliminary Assessment submitted to EPA.  
Comments Date: 06061983  
Comments: DHS ISD Inspection: No violations observed.  
Comments Date: 06192000  
Comments: Remedial Design for pesticides contaminated soil clean-up using  
Comments Date: 07102003  
Comments: DTSC provided comments on site closure report.  
Comments Date: 07102003  
Comments: Not reported  
Comments Date: 07251991  
Comments: Site is adjacent to the University of California, Riverside  
Comments Date: 07251991  
Comments: research facility. Contaminants include pesticides, chlori-  
Comments Date: 07251991  
Comments: nated herbicides, PCBs, and solvents.  
Comments Date: 09041985  
Comments: DHS received EPA E&E FIT Inspection Report (E&E REP NO C(85)  
Comments Date: 09041985  
Comments: C338): Confirm DHS PA information. Underlying aquifer is not  
Comments Date: 09041985  
Comments: used for drinking. DHS has the lead.  
Comments Date: 09171996  
Comments: On Sep. 6, 1996 DTSC approved the final Remedial Design for  
Comments Date: 09171996  
Comments: the Waste Pits area, with certain conditions.  
Comments Date: 09171996  
Comments: Not reported  
Comments Date: 09301997  
Comments: Field work suspended due to contract dispute.  
Comments Date: 09301997  
Comments: Not reported  
Comments Date: 10101995  
Comments: DTSC accepted an addendum to address the extensive comments  
Comments Date: 10101995  
Comments: received during the review process and has subsequently  
Comments Date: 10101995  
Comments: approved the RI/FS report. Additional plots of contaminated  
Comments Date: 10101995  
Comments: areas were provided; treatability study results were also  
Comments Date: 10101995  
Comments: reviewed and found acceptable.  
Comments Date: 12042001  
Comments: Site clean-up activity is ongoing using LTTD Unit at site.  
Comments Date: 12211998

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)**

**S100833324**

Comments: Transition to Chapter 6.5 - Amendment to the existing Site  
Comments Date: 12211998  
Comments: Investigation Agreement, Docket No. HSA 89/90-005 signed by the  
Comments Date: 12211998  
Comments: RP.  
Comments Date: 06192000  
Comments: low temperature thermal degradation unit (Transporable Treatment  
Comments Date: 06192000  
Comments: Unit ITTU)) at site.  
ID Name: CALSTARS CODE  
ID Value: 400161  
ID Name: BEP DATABASE PCODE  
ID Value: P41050  
ID Name: EPA IDENTIFICATION NUMBER  
ID Value: CAD073134777  
Alternate Name: UNIVERSITY OF CALIFORNIA RIVERSIDE  
Alternate Name: Not reported  
Special Programs Code: R3012  
Special Programs Name: RCRA 3012

**DEED:**

Envirostor ID: 33890001  
Area: PROJECT WIDE  
Sub Area: Not reported  
Site Type: STATE RESPONSE  
Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 07/26/2006

**CA BOND EXP. PLAN:**

Reponsible Party: RESPONSIBLE PARTY LEAD SITE CLEANUP WORKPLAN  
Project Revenue Source Company: Not reported  
Project Revenue Source Addr: Not reported  
Project Revenue Source City,St,Zip: Not reported  
Project Revenue Source Desc: The University of California Riverside Board of Regents and the Department are negotiating an enforceable agreement that will require the Regents to continue to conduct RI/FS activities. DHS has budgeted \$50,000 for related direct costs and DHS will recover 100 percent of those costs plus staff costs and overhead related to the project. The Regents will pay all costs associated with site investigation and remediation.  
Site Description: The site is adjacent to the University of California Riverside research facility. Pesticides and other hazardous substances from research activities were disposed of in pits on the site.  
Hazardous Waste Desc: Empty chemical containers, pesticides, miscellaneous experimental chemicals and lab stock chemicals were disposed of in unlined pits. The wastes identified in previous investigations include pesticides, chlorinated herbicides, solvents and polychlorinated biphenyls (PCBs).  
Threat To Public Health & Env: The variety of substances disposed of may present problems related to incompatibility of wastes and breakdown of constituents to more hazardous materials. The disposal sites are neither lined nor monitored. There is potential for contamination of ground water which is used for domestic supply. The pits are covered and there is little potential for direct exposure.  
Site Activity Status: The University of California completed remedial studies to identify soil contamination in April, 1988. Additional studies of soil and ground water are continuing.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNIVERSITY OF CALIFORNIA RIVERSIDE (Continued)

S100833324

HIST CORTESE:

Region: CORTESE  
Facility County Code: 33  
Reg By: CALSI  
Reg Id: 33890001

46  
West  
1/2-1  
0.996 mi.  
5257 ft.

CALIFORNIA SPRAY CHEMICAL COMPANY  
3530 CHICAGO AV  
RIVERSIDE, CA 92507

ENVIROSTOR S107735999  
N/A

Relative:  
Lower

ENVIROSTOR:

Facility ID: 60000214  
Status: Inactive - Needs Evaluation  
Status Date: 03/06/2006  
Site Code: Not reported  
Site Type: Evaluation  
Site Type Detailed: Evaluation  
Acres: 0.37  
NPL: NO  
Regulatory Agencies: SMBRP, US EPA  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: \* Greg Holmes  
Division Branch: Cleanup Cypress  
Assembly: 61  
Senate: 31  
Special Program: EPA - PASI  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not Applicable  
Latitude: 33.97835  
Longitude: -117.3480  
APN: 250160008  
Past Use: FUEL - VEHICLE STORAGE/ REFUELING  
Potential COC: Arsenic Methyl tertbutyl ether (MTBE)  
Confirmed COC: 30001-NO 30016-NO  
Potential Description: SOIL  
Alias Name: 250160008  
Alias Type: APN  
Alias Name: CAN000908316  
Alias Type: EPA Identification Number  
Alias Name: 60000214  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 06/13/2006  
Comments: Not reported  
  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALIFORNIA SPRAY CHEMICAL COMPANY (Continued)**

**S107735999**

Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RIVERSIDE	S104970783	UCR - PARKING LOT 6	UNIVERSITY OF CALIF, RIVERSIDE		LUST
RIVERSIDE	S108985921	UCR (PESTICIDE PITS)	N/A UNIVERSITY AVENUE		SLIC

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017	Source: EPA
Date Data Arrived at EDR: 12/22/2017	Telephone: N/A
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 12/22/2017
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017	Source: EPA
Date Data Arrived at EDR: 12/22/2017	Telephone: N/A
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 12/22/2017
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017	Source: EPA
Date Data Arrived at EDR: 12/22/2017	Telephone: N/A
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 12/22/2017
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 01/05/2018
Number of Days to Update: 92	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/11/2017	Source: EPA
Date Data Arrived at EDR: 12/22/2017	Telephone: 800-424-9346
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 01/17/2018
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/30/2018
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/11/2017	Source: EPA
Date Data Arrived at EDR: 12/22/2017	Telephone: 800-424-9346
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 01/17/2018
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/30/2018
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017	Source: EPA
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: (415) 495-8895
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: (415) 495-8895
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: (415) 495-8895
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: (415) 495-8895
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017	Source: Department of the Navy
Date Data Arrived at EDR: 06/13/2017	Telephone: 843-820-7326
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 11/08/2017
Number of Days to Update: 94	Next Scheduled EDR Contact: 02/26/2018
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 44	Next Scheduled EDR Contact: 03/12/2018
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 44	Next Scheduled EDR Contact: 03/12/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017

Date Data Arrived at EDR: 09/21/2017

Date Made Active in Reports: 10/13/2017

Number of Days to Update: 22

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 01/19/2018

Next Scheduled EDR Contact: 04/09/2018

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/30/2017

Date Data Arrived at EDR: 10/31/2017

Date Made Active in Reports: 12/15/2017

Number of Days to Update: 45

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/31/2017

Next Scheduled EDR Contact: 02/12/2018

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/30/2017

Date Data Arrived at EDR: 10/31/2017

Date Made Active in Reports: 12/15/2017

Number of Days to Update: 45

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/31/2017

Next Scheduled EDR Contact: 02/12/2018

Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/13/2017

Date Data Arrived at EDR: 11/14/2017

Date Made Active in Reports: 12/07/2017

Number of Days to Update: 23

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/14/2017

Next Scheduled EDR Contact: 02/26/2018

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/12/2017	Telephone: see region list
Date Made Active in Reports: 01/11/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 30	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Quarterly

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005  
Date Data Arrived at EDR: 02/15/2005  
Date Made Active in Reports: 03/28/2005  
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4496  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: Varies

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: Quarterly

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-570-3769  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017  
Date Data Arrived at EDR: 07/27/2017  
Date Made Active in Reports: 10/06/2017  
Number of Days to Update: 71

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 01/23/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017  
Date Data Arrived at EDR: 07/27/2017  
Date Made Active in Reports: 10/06/2017  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 01/23/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017	Source: EPA Region 7
Date Data Arrived at EDR: 07/27/2017	Telephone: 913-551-7003
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017	Source: EPA Region 8
Date Data Arrived at EDR: 07/27/2017	Telephone: 303-312-6271
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/27/2017	Telephone: 415-972-3372
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land  
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017	Source: EPA, Region 5
Date Data Arrived at EDR: 07/27/2017	Telephone: 312-886-7439
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-8677
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 98	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/25/2017	Source: EPA Region 10
Date Data Arrived at EDR: 11/07/2017	Telephone: 206-553-2857
Date Made Active in Reports: 12/08/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/12/2017	Telephone: 866-480-1028
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: Quarterly

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: Varies

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: Annually

## **State and tribal registered storage tank lists**

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017  
Date Data Arrived at EDR: 05/30/2017  
Date Made Active in Reports: 10/13/2017  
Number of Days to Update: 136

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 01/09/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Varies

### UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/12/2017  
Date Made Active in Reports: 01/17/2018  
Number of Days to Update: 36

Source: SWRCB  
Telephone: 916-341-5851  
Last EDR Contact: 12/12/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Semi-Annually



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 12/26/2017
Number of Days to Update: 69	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017	Source: EPA Region 7
Date Data Arrived at EDR: 07/27/2017	Telephone: 913-551-7003
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017	Source: EPA Region 6
Date Data Arrived at EDR: 07/27/2017	Telephone: 214-665-7591
Date Made Active in Reports: 12/08/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 134	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 98	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Semi-Annually

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017	Source: EPA Region 5
Date Data Arrived at EDR: 07/27/2017	Telephone: 312-886-6136
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017	Source: EPA Region 8
Date Data Arrived at EDR: 07/27/2017	Telephone: 303-312-6137
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017	Source: EPA, Region 1
Date Data Arrived at EDR: 07/27/2017	Telephone: 617-918-1313
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017	Source: EPA Region 9
Date Data Arrived at EDR: 07/27/2017	Telephone: 415-972-3368
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017	Source: EPA Region 10
Date Data Arrived at EDR: 07/27/2017	Telephone: 206-553-2857
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/23/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## **State and tribal voluntary cleanup sites**

### VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/30/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/31/2017	Telephone: 916-323-3400
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 10/31/2017
Number of Days to Update: 45	Next Scheduled EDR Contact: 02/12/2018
	Data Release Frequency: Quarterly

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/20/2017
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal Brownfields sites***

### **BROWNFIELDS: Considered Brownfields Sites Listing**

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/21/2017  
Date Data Arrived at EDR: 09/21/2017  
Date Made Active in Reports: 11/09/2017  
Number of Days to Update: 49

Source: State Water Resources Control Board  
Telephone: 916-323-7905  
Last EDR Contact: 12/26/2017  
Next Scheduled EDR Contact: 04/09/2018  
Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

#### **US BROWNFIELDS: A Listing of Brownfields Sites**

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 08/21/2017  
Date Data Arrived at EDR: 09/20/2017  
Date Made Active in Reports: 12/08/2017  
Number of Days to Update: 79

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: Semi-Annually

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

#### **WMUDS/SWAT: Waste Management Unit Database**

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 11/06/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: No Update Planned

#### **SWRCY: Recycler Database**

A listing of recycling facilities in California.

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/12/2017  
Date Made Active in Reports: 01/17/2018  
Number of Days to Update: 36

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/12/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Quarterly

#### **HAULERS: Registered Waste Tire Haulers Listing**

A listing of registered waste tire haulers.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/30/2017  
Date Data Arrived at EDR: 05/31/2017  
Date Made Active in Reports: 08/15/2017  
Number of Days to Update: 76

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 11/09/2017  
Next Scheduled EDR Contact: 02/26/2018  
Data Release Frequency: Varies

## INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 10/30/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: No Update Planned

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 11/03/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## **Local Lists of Hazardous waste / Contaminated Sites**

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017  
Date Data Arrived at EDR: 09/06/2017  
Date Made Active in Reports: 10/06/2017  
Number of Days to Update: 30

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/28/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: No Update Planned

### HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
Next Scheduled EDR Contact: 05/25/2009  
Data Release Frequency: No Update Planned

## SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/30/2017  
Date Data Arrived at EDR: 10/31/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 45

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/31/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Quarterly

## CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017  
Date Data Arrived at EDR: 08/18/2017  
Date Made Active in Reports: 09/21/2017  
Number of Days to Update: 34

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 01/08/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Varies

## TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017  
Date Data Arrived at EDR: 09/06/2017  
Date Made Active in Reports: 10/06/2017  
Number of Days to Update: 30

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Quarterly

## **Local Lists of Registered Storage Tanks**

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/01/1994  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/27/2017  
Date Data Arrived at EDR: 11/29/2017  
Date Made Active in Reports: 12/18/2017  
Number of Days to Update: 19

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/28/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Annually

## HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## Local Land Records

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/30/2017  
Date Data Arrived at EDR: 12/01/2017  
Date Made Active in Reports: 01/11/2018  
Number of Days to Update: 41

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/30/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/22/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 12/22/2017  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/04/2017	Source: DTSC and SWRCB
Date Data Arrived at EDR: 12/05/2017	Telephone: 916-323-3400
Date Made Active in Reports: 01/11/2018	Last EDR Contact: 12/05/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### **HMIRS: Hazardous Materials Information Reporting System**

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/21/2017	Telephone: 202-366-4555
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 22	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

### **CHMIRS: California Hazardous Material Incident Report System**

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/09/2017	Source: Office of Emergency Services
Date Data Arrived at EDR: 07/26/2017	Telephone: 916-845-8400
Date Made Active in Reports: 09/21/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 57	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

### **LDS: Land Disposal Sites Listing (GEOTRACKER)**

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/12/2017	Telephone: 866-480-1028
Date Made Active in Reports: 01/11/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 30	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Quarterly

### **MCS: Military Cleanup Sites Listing (GEOTRACKER)**

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/12/2017	Telephone: 866-480-1028
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: (415) 495-8895
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 11/22/2017
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/05/2018
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/13/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/11/2017
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 11/17/2017  
Next Scheduled EDR Contact: 02/26/2018  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/17/2017  
Date Data Arrived at EDR: 11/01/2017  
Date Made Active in Reports: 12/08/2017  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 04/09/2018  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 11/06/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 6

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 11/09/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 06/21/2017  
Date Made Active in Reports: 01/05/2018  
Number of Days to Update: 198

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 12/22/2017  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 01/10/2018  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 2

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 01/10/2018  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 10/27/2017  
Next Scheduled EDR Contact: 02/05/2018  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/22/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 21

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 12/22/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/17/2017  
Date Made Active in Reports: 12/08/2017  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/22/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/19/2018
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: 202-566-0500
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/12/2018
Number of Days to Update: 126	Next Scheduled EDR Contact: 04/23/2018
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 01/09/2018
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/23/2018
	Data Release Frequency: Quarterly

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 01/19/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 12/05/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/08/2017
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 10/26/2017
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/05/2017	Telephone: 202-343-9775
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 01/04/2018
Number of Days to Update: 8	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2017  
Date Data Arrived at EDR: 11/10/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 63

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 11/20/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 01/09/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016  
Date Data Arrived at EDR: 12/27/2016  
Date Made Active in Reports: 02/17/2017  
Number of Days to Update: 52

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 11/22/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/10/2017  
Date Data Arrived at EDR: 11/03/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 42

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 12/22/2017  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 10/29/2017  
Date Data Arrived at EDR: 11/28/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 45

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/28/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 12/01/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 12/01/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017  
Date Data Arrived at EDR: 09/26/2017  
Date Made Active in Reports: 10/20/2017  
Number of Days to Update: 24

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 12/19/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017  
Date Data Arrived at EDR: 09/06/2017  
Date Made Active in Reports: 09/15/2017  
Number of Days to Update: 9

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/27/2017  
Date Data Arrived at EDR: 11/21/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 202-564-0527  
Last EDR Contact: 01/19/2018  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016  
Date Data Arrived at EDR: 10/31/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 73

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 01/02/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/06/2017	Telephone: 202-564-2280
Date Made Active in Reports: 10/20/2017	Last EDR Contact: 01/19/2018
Number of Days to Update: 44	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/20/2017	Source: EPA
Date Data Arrived at EDR: 11/20/2017	Telephone: 800-385-6164
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 01/19/2018
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/05/2018
	Data Release Frequency: Quarterly

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/21/2017	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 09/21/2017	Telephone: 916-323-3400
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 12/26/2017
Number of Days to Update: 22	Next Scheduled EDR Contact: 04/09/2018
	Data Release Frequency: Quarterly

## DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/02/2017	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/08/2017	Telephone: 916-327-4498
Date Made Active in Reports: 10/16/2017	Last EDR Contact: 11/30/2017
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Annually

## EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015	Source: California Air Resources Board
Date Data Arrived at EDR: 03/21/2017	Telephone: 916-322-2990
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 12/22/2017
Number of Days to Update: 147	Next Scheduled EDR Contact: 04/02/2018
	Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/03/2017	Telephone: 916-445-9379
Date Made Active in Reports: 12/07/2017	Last EDR Contact: 01/22/2018
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/23/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/24/2017	Telephone: 916-255-3628
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 01/22/2018
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/14/2017	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 11/17/2017	Telephone: 916-341-6066
Date Made Active in Reports: 12/18/2017	Last EDR Contact: 11/09/2017
Number of Days to Update: 31	Next Scheduled EDR Contact: 02/26/2018
	Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2017	Telephone: 916-255-1136
Date Made Active in Reports: 10/17/2017	Last EDR Contact: 01/08/2018
Number of Days to Update: 97	Next Scheduled EDR Contact: 04/23/2018
	Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirositor.

Date of Government Version: 11/20/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/20/2017	Telephone: 877-786-9427
Date Made Active in Reports: 12/27/2017	Last EDR Contact: 11/20/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/05/2018
	Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/20/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/20/2017	Telephone: 916-323-3400
Date Made Active in Reports: 12/27/2017	Last EDR Contact: 11/20/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/05/2018
	Data Release Frequency: Quarterly

### HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/10/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/10/2017	Telephone: 916-440-7145
Date Made Active in Reports: 10/17/2017	Last EDR Contact: 01/09/2018
Number of Days to Update: 7	Next Scheduled EDR Contact: 04/23/2018
	Data Release Frequency: Quarterly

### MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/11/2017	Source: Department of Conservation
Date Data Arrived at EDR: 12/12/2017	Telephone: 916-322-1080
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 12/12/2017
Number of Days to Update: 31	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Quarterly

### MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/29/2017	Source: Department of Public Health
Date Data Arrived at EDR: 12/05/2017	Telephone: 916-558-1784
Date Made Active in Reports: 01/16/2018	Last EDR Contact: 12/05/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Varies

### NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/13/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/14/2017	Telephone: 916-445-9379
Date Made Active in Reports: 12/07/2017	Last EDR Contact: 11/14/2017
Number of Days to Update: 23	Next Scheduled EDR Contact: 02/26/2018
	Data Release Frequency: Quarterly

### PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/04/2017	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 12/05/2017	Telephone: 916-445-4038
Date Made Active in Reports: 01/16/2018	Last EDR Contact: 12/05/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/12/2017  
Date Made Active in Reports: 01/16/2018  
Number of Days to Update: 35

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/12/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/14/2017  
Date Data Arrived at EDR: 12/15/2017  
Date Made Active in Reports: 01/16/2018  
Number of Days to Update: 32

Source: State Water Resources Control Board  
Telephone: 916-445-3846  
Last EDR Contact: 12/13/2017  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: No Update Planned

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/11/2017  
Date Data Arrived at EDR: 12/12/2017  
Date Made Active in Reports: 01/17/2018  
Number of Days to Update: 36

Source: Department of Conservation  
Telephone: 916-445-2408  
Last EDR Contact: 12/12/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board's review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 04/15/2015  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/23/2015  
Number of Days to Update: 67

Source: RWQCB, Central Valley Region  
Telephone: 559-445-5577  
Last EDR Contact: 01/12/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007  
Date Data Arrived at EDR: 06/20/2007  
Date Made Active in Reports: 06/29/2007  
Number of Days to Update: 9

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Quarterly

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009  
Date Data Arrived at EDR: 07/21/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board  
Telephone: 213-576-6726  
Last EDR Contact: 12/19/2017  
Next Scheduled EDR Contact: 04/09/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 09/22/2017  
Date Data Arrived at EDR: 09/22/2017  
Date Made Active in Reports: 10/10/2017  
Number of Days to Update: 18

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/11/2017  
Date Data Arrived at EDR: 10/12/2017  
Date Made Active in Reports: 11/08/2017  
Number of Days to Update: 27

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 04/24/2017  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

#### CUPA Facility List

Cupa Facility List

Date of Government Version: 12/08/2017  
Date Data Arrived at EDR: 12/12/2017  
Date Made Active in Reports: 12/27/2017  
Number of Days to Update: 15

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 11/30/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Varies

### BUTTE COUNTY:

#### CUPA Facility Listing

Cupa facility list.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

CUPA Facility Listing  
Cupa Facility Listing

Date of Government Version: 08/31/2017  
Date Data Arrived at EDR: 09/05/2017  
Date Made Active in Reports: 11/08/2017  
Number of Days to Update: 64

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 12/20/2017  
Next Scheduled EDR Contact: 10/09/2017  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

CUPA Facility List  
Cupa facility list.

Date of Government Version: 08/07/2017  
Date Data Arrived at EDR: 08/08/2017  
Date Made Active in Reports: 10/16/2017  
Number of Days to Update: 69

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/20/2017  
Date Data Arrived at EDR: 11/29/2017  
Date Made Active in Reports: 01/19/2018  
Number of Days to Update: 51

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 10/30/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

CUPA Facility List  
Cupa Facility list

Date of Government Version: 10/31/2017  
Date Data Arrived at EDR: 11/01/2017  
Date Made Active in Reports: 11/14/2017  
Number of Days to Update: 13

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 10/25/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## EL DORADO COUNTY:

CUPA Facility List  
CUPA facility list.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/04/2017  
Date Data Arrived at EDR: 12/06/2017  
Date Made Active in Reports: 12/27/2017  
Number of Days to Update: 21

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 10/30/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/03/2017  
Date Data Arrived at EDR: 10/06/2017  
Date Made Active in Reports: 11/15/2017  
Number of Days to Update: 40

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 01/10/2018  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 10/25/2017  
Date Data Arrived at EDR: 10/27/2017  
Date Made Active in Reports: 11/15/2017  
Number of Days to Update: 19

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## HUMBOLDT COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 08/03/2017  
Date Data Arrived at EDR: 08/08/2017  
Date Made Active in Reports: 10/16/2017  
Number of Days to Update: 69

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 10/23/2017  
Date Data Arrived at EDR: 10/24/2017  
Date Made Active in Reports: 11/15/2017  
Number of Days to Update: 22

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## INYO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list.

Date of Government Version: 06/08/2017  
Date Data Arrived at EDR: 06/09/2017  
Date Made Active in Reports: 08/04/2017  
Number of Days to Update: 56

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## KERN COUNTY:

### Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/07/2017  
Date Made Active in Reports: 12/20/2017  
Number of Days to Update: 43

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/14/2017  
Date Data Arrived at EDR: 11/17/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 28

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 11/09/2017  
Date Data Arrived at EDR: 11/10/2017  
Date Made Active in Reports: 11/15/2017  
Number of Days to Update: 5

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 01/16/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 07/24/2017  
Date Data Arrived at EDR: 07/26/2017  
Date Made Active in Reports: 10/16/2017  
Number of Days to Update: 82

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 12/13/2017  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: No Update Planned

## HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/11/2017  
Date Data Arrived at EDR: 10/12/2017  
Date Made Active in Reports: 10/17/2017  
Number of Days to Update: 5

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/16/2017  
Date Data Arrived at EDR: 10/17/2017  
Date Made Active in Reports: 12/07/2017  
Number of Days to Update: 51

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 01/16/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 04/21/2017  
Date Made Active in Reports: 10/09/2017  
Number of Days to Update: 171

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 01/10/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 11/01/2017  
Date Data Arrived at EDR: 11/14/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 31

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 01/17/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 04/19/2017  
Date Made Active in Reports: 05/10/2017  
Number of Days to Update: 21

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 01/10/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017  
Date Data Arrived at EDR: 03/10/2017  
Date Made Active in Reports: 05/03/2017  
Number of Days to Update: 54

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018  
Date Data Arrived at EDR: 01/05/2018  
Date Made Active in Reports: 01/18/2018  
Number of Days to Update: 13

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/23/2018  
Data Release Frequency: Semi-Annually

## MADERA COUNTY:

### CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 10/26/2017  
Date Data Arrived at EDR: 10/27/2017  
Date Made Active in Reports: 11/06/2017  
Number of Days to Update: 10

Source: Madera County Environmental Health  
Telephone: 559-675-7823  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 01/02/2018  
Date Data Arrived at EDR: 01/05/2018  
Date Made Active in Reports: 01/17/2018  
Number of Days to Update: 12

Source: Public Works Department Waste Management  
Telephone: 415-473-6647  
Last EDR Contact: 01/02/2018  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Semi-Annually

## MERCED COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 10/02/2017  
Date Data Arrived at EDR: 10/03/2017  
Date Made Active in Reports: 10/17/2017  
Number of Days to Update: 14

Source: Merced County Environmental Health  
Telephone: 209-381-1094  
Last EDR Contact: 11/30/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## MONO COUNTY:

### CUPA Facility List

CUPA Facility List

Date of Government Version: 11/21/2017  
Date Data Arrived at EDR: 11/27/2017  
Date Made Active in Reports: 12/27/2017  
Number of Days to Update: 30

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/21/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Varies

## MONTEREY COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2017  
Date Data Arrived at EDR: 09/15/2017  
Date Made Active in Reports: 11/28/2017  
Number of Days to Update: 74

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 11/20/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## NAPA COUNTY:

### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/21/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: No Update Planned

### Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 11/22/2017  
Date Data Arrived at EDR: 11/27/2017  
Date Made Active in Reports: 12/19/2017  
Number of Days to Update: 22

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/21/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/07/2017  
Date Made Active in Reports: 11/15/2017  
Number of Days to Update: 8

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 10/25/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Varies

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/09/2017  
Date Made Active in Reports: 12/07/2017  
Number of Days to Update: 28

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/06/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/09/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 36

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/06/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/02/2017	Source: Health Care Agency
Date Data Arrived at EDR: 11/07/2017	Telephone: 714-834-3446
Date Made Active in Reports: 12/19/2017	Last EDR Contact: 11/07/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/19/2018
	Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/05/2017	Source: Placer County Health and Human Services
Date Data Arrived at EDR: 09/06/2017	Telephone: 530-745-2363
Date Made Active in Reports: 11/08/2017	Last EDR Contact: 11/30/2017
Number of Days to Update: 63	Next Scheduled EDR Contact: 03/19/2018
	Data Release Frequency: Semi-Annually

## PLUMAS COUNTY:

### CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 10/23/2017	Source: Plumas County Environmental Health
Date Data Arrived at EDR: 11/03/2017	Telephone: 530-283-6355
Date Made Active in Reports: 11/15/2017	Last EDR Contact: 01/22/2018
Number of Days to Update: 12	Next Scheduled EDR Contact: 05/07/2018
	Data Release Frequency: Varies

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/11/2017	Source: Department of Environmental Health
Date Data Arrived at EDR: 10/12/2017	Telephone: 951-358-5055
Date Made Active in Reports: 11/09/2017	Last EDR Contact: 12/15/2017
Number of Days to Update: 28	Next Scheduled EDR Contact: 04/02/2018
	Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/12/2017	Source: Department of Environmental Health
Date Data Arrived at EDR: 10/12/2017	Telephone: 951-358-5055
Date Made Active in Reports: 11/08/2017	Last EDR Contact: 12/15/2017
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/02/2018
	Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/02/2017  
Date Data Arrived at EDR: 10/03/2017  
Date Made Active in Reports: 10/06/2017  
Number of Days to Update: 3

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 01/03/2018  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Quarterly

## Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2017  
Date Data Arrived at EDR: 10/03/2017  
Date Made Active in Reports: 11/16/2017  
Number of Days to Update: 44

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 01/03/2018  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017  
Date Data Arrived at EDR: 11/03/2017  
Date Made Active in Reports: 11/17/2017  
Number of Days to Update: 14

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2017  
Date Data Arrived at EDR: 12/01/2017  
Date Made Active in Reports: 01/16/2018  
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 11/06/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/04/2017  
Date Data Arrived at EDR: 12/05/2017  
Date Made Active in Reports: 01/11/2018  
Number of Days to Update: 37

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/05/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015  
Date Data Arrived at EDR: 11/07/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 58

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/29/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017  
Date Data Arrived at EDR: 11/07/2017  
Date Made Active in Reports: 12/19/2017  
Number of Days to Update: 42

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/03/2017  
Date Data Arrived at EDR: 10/06/2017  
Date Made Active in Reports: 10/10/2017  
Number of Days to Update: 4

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 12/13/2017  
Next Scheduled EDR Contact: 04/02/2018  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 11/16/2017  
Date Data Arrived at EDR: 11/17/2017  
Date Made Active in Reports: 12/18/2017  
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 12/12/2017  
Date Data Arrived at EDR: 12/14/2017  
Date Made Active in Reports: 01/11/2018  
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/06/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Annually

## Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2017  
Date Data Arrived at EDR: 12/14/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 29

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 12/13/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### Cupa Facility List

Cupa facility list

Date of Government Version: 11/14/2017  
Date Data Arrived at EDR: 11/16/2017  
Date Made Active in Reports: 01/04/2018  
Number of Days to Update: 49

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

### HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

### LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 11/21/2017  
Next Scheduled EDR Contact: 03/12/2018  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/01/2017  
Date Data Arrived at EDR: 11/03/2017  
Date Made Active in Reports: 12/07/2017  
Number of Days to Update: 34

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 30

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Varies

## SOLANO COUNTY:

### Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/14/2017  
Date Data Arrived at EDR: 12/15/2017  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 28

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/08/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Quarterly

### Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 12/14/2017  
Date Data Arrived at EDR: 12/15/2017  
Date Made Active in Reports: 01/18/2018  
Number of Days to Update: 34

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/08/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Cupa Facility List

Cupa Facility list



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/25/2017  
Date Data Arrived at EDR: 09/27/2017  
Date Made Active in Reports: 11/16/2017  
Number of Days to Update: 50

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 12/19/2017  
Next Scheduled EDR Contact: 04/09/2018  
Data Release Frequency: Varies

## Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/03/2017  
Date Data Arrived at EDR: 10/06/2017  
Date Made Active in Reports: 11/10/2017  
Number of Days to Update: 35

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 01/04/2018  
Next Scheduled EDR Contact: 04/09/2018  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017  
Date Data Arrived at EDR: 11/10/2017  
Date Made Active in Reports: 11/16/2017  
Number of Days to Update: 6

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 01/16/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Varies

## SUTTER COUNTY:

### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/01/2017  
Date Data Arrived at EDR: 12/04/2017  
Date Made Active in Reports: 12/19/2017  
Number of Days to Update: 15

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 12/01/2017  
Next Scheduled EDR Contact: 03/19/2018  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA Facility List

Cupa facilities

Date of Government Version: 11/16/2017  
Date Data Arrived at EDR: 11/17/2017  
Date Made Active in Reports: 12/18/2017  
Number of Days to Update: 31

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 11/14/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 10/23/2017  
Date Data Arrived at EDR: 10/24/2017  
Date Made Active in Reports: 11/16/2017  
Number of Days to Update: 23

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## TULARE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa program facilities

Date of Government Version: 09/27/2017  
Date Data Arrived at EDR: 09/28/2017  
Date Made Active in Reports: 10/16/2017  
Number of Days to Update: 18

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 12/18/2017  
Next Scheduled EDR Contact: 02/19/2018  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 10/24/2017  
Date Data Arrived at EDR: 10/25/2017  
Date Made Active in Reports: 11/16/2017  
Number of Days to Update: 22

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Varies

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2017  
Date Data Arrived at EDR: 10/25/2017  
Date Made Active in Reports: 12/07/2017  
Number of Days to Update: 43

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/26/2017  
Next Scheduled EDR Contact: 04/16/2018  
Data Release Frequency: Annually

### Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/08/2017  
Next Scheduled EDR Contact: 02/26/2018  
Data Release Frequency: Quarterly

### Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2017  
Date Data Arrived at EDR: 10/25/2017  
Date Made Active in Reports: 12/07/2017  
Number of Days to Update: 43

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 01/22/2018  
Next Scheduled EDR Contact: 05/07/2018  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/27/2017	Source: Environmental Health Division
Date Data Arrived at EDR: 12/13/2017	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2018	Last EDR Contact: 12/11/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/26/2018
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 01/02/2018	Source: Yolo County Department of Health
Date Data Arrived at EDR: 01/09/2018	Telephone: 530-666-8646
Date Made Active in Reports: 01/19/2018	Last EDR Contact: 01/02/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/16/2018
	Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/08/2017	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 11/10/2017	Telephone: 530-749-7523
Date Made Active in Reports: 11/16/2017	Last EDR Contact: 10/25/2017
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/12/2018
	Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2017	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 11/14/2017	Telephone: 860-424-3375
Date Made Active in Reports: 12/18/2017	Last EDR Contact: 11/14/2017
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/26/2018
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/11/2017	Telephone: N/A
Date Made Active in Reports: 07/27/2017	Last EDR Contact: 01/05/2018
Number of Days to Update: 107	Next Scheduled EDR Contact: 04/23/2018
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/01/2017  
Date Data Arrived at EDR: 11/01/2017  
Date Made Active in Reports: 11/13/2017  
Number of Days to Update: 12

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 11/01/2017  
Next Scheduled EDR Contact: 02/12/2018  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 07/25/2017  
Date Made Active in Reports: 09/25/2017  
Number of Days to Update: 62

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 01/16/2018  
Next Scheduled EDR Contact: 04/30/2018  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 06/19/2015  
Date Made Active in Reports: 07/15/2015  
Number of Days to Update: 26

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 11/16/2017  
Next Scheduled EDR Contact: 03/05/2018  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 04/13/2017  
Date Made Active in Reports: 07/14/2017  
Number of Days to Update: 92

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 12/11/2017  
Next Scheduled EDR Contact: 03/26/2018  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## Electric Power Transmission Line Data

Source: PennWell Corporation

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## AHA Hospitals:

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

## Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

## Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

## State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

## Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

AMERICAN CAMPUS PHASE 1A  
LINDEN ST  
RIVERSIDE, CA 92507

### **TARGET PROPERTY COORDINATES**

Latitude (North):	33.978292 - 33° 58' 41.85"
Longitude (West):	117.324589 - 117° 19' 28.52"
Universal Transverse Mercator:	Zone 11
UTM X (Meters):	470016.6
UTM Y (Meters):	3759602.2
Elevation:	1082 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5641312 RIVERSIDE EAST, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

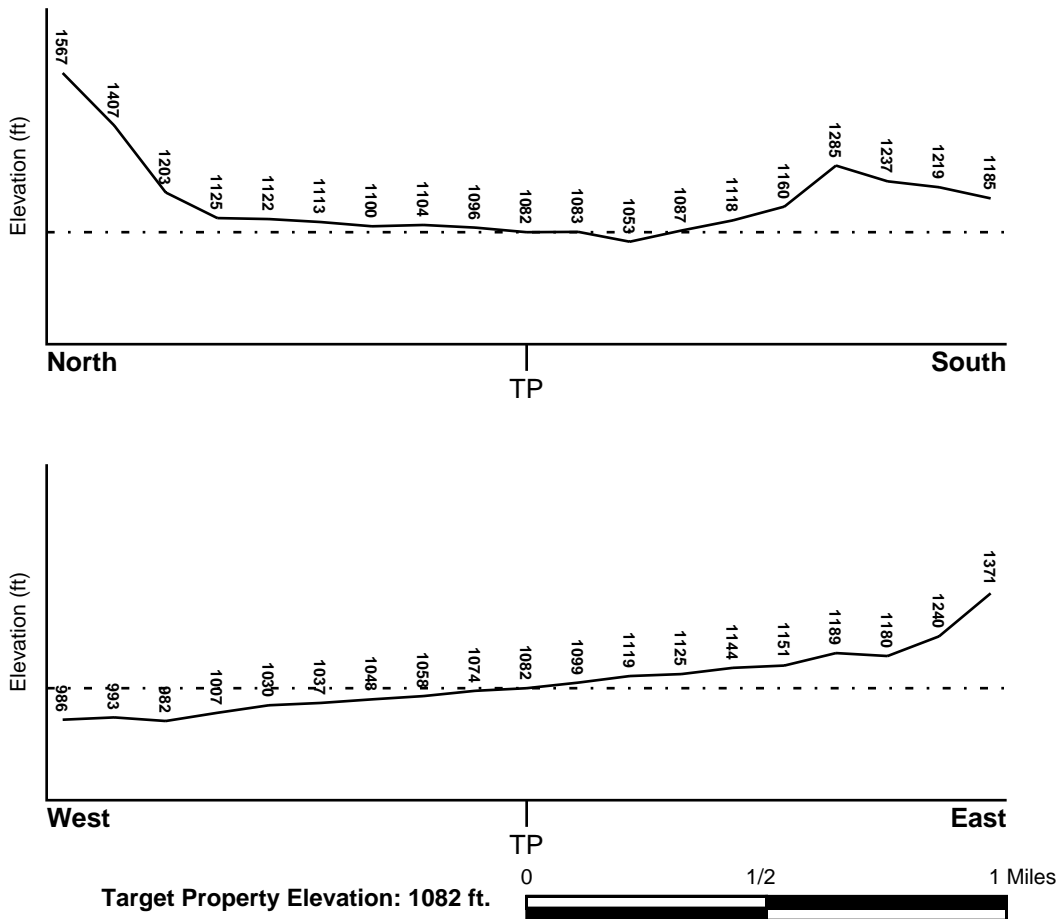
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06065C0727G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06065C0731G	FEMA FIRM Flood data
06065C0729G	FEMA FIRM Flood data
0602600020A	FEMA Q3 Flood data

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
A3	1/2 - 1 Mile WNW	W
A4	1/2 - 1 Mile WNW	W
A5	1/2 - 1 Mile WNW	Not Reported
A6	1/2 - 1 Mile WNW	Not Reported
A7	1/2 - 1 Mile WNW	Not Reported
1G	1/2 - 1 Mile WNW	W

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
2G	1/2 - 1 Mile WNW	W
3G	1/2 - 1 Mile WNW	Not Reported
4G	1/2 - 1 Mile WNW	Not Reported
5G	1/2 - 1 Mile WNW	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

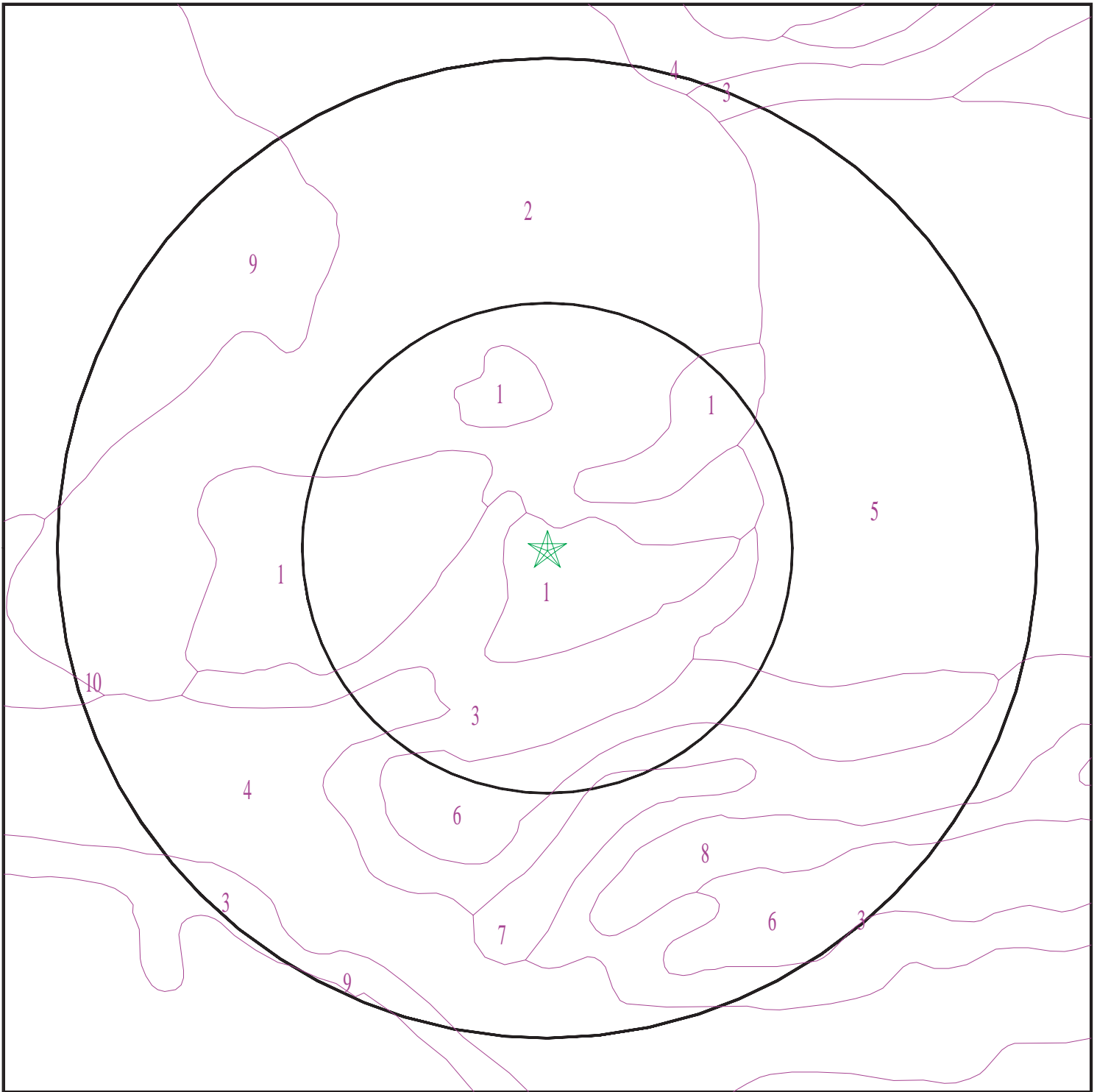
Era: Mesozoic  
System: Cretaceous  
Series: Cretaceous granitic rocks  
Code: Kg *(decoded above as Era, System & Series)*

#### **GEOLOGIC AGE IDENTIFICATION**

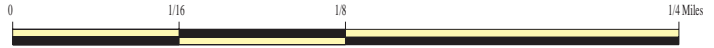
Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5167883.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: American Campus Phase 1A  
ADDRESS: Linden St  
Riverside CA 92507  
LAT/LONG: 33.978292 / 117.324589

CLIENT: Haley & Aldrich  
CONTACT: Carly Nemanic  
INQUIRY #: 5167883.2s  
DATE: January 24, 2018 7:57 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

#### Soil Map ID: 1

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	9 inches	18 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	18 inches	44 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	44 inches	57 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
5	57 inches	70 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 2**

Soil Component Name: ARLINGTON

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	11 inches	24 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	24 inches	35 inches	cemented	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: Min:
4	35 inches	46 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 3

Soil Component Name: Terrace escarpments

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:  
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

### Soil Map ID: 4

Soil Component Name: HANFORD

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	7 inches	40 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6
3	40 inches	59 inches	stratified loamy sand to coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6

**Soil Map ID: 5**

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	27 inches	44 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	44 inches	57 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
5	57 inches	70 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

### Soil Map ID: 6

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	9 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	27 inches	44 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	44 inches	57 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
5	57 inches	70 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

### Soil Map ID: 7

Soil Component Name: GORGONIO

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	14 inches	59 inches	stratified gravelly loamy sand to gravelly loamy fine sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6

**Soil Map ID: 8**

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	27 inches	44 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	44 inches	57 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
5	57 inches	70 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

### Soil Map ID: 9

Soil Component Name: BUREN

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.1
2	11 inches	27 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
3	27 inches	37 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	37 inches	57 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

### Soil Map ID: 10

Soil Component Name: ARLINGTON

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	11 inches	50 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	50 inches	59 inches	cemented	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: Min:
4	59 inches	70 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
_____	_____	_____

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

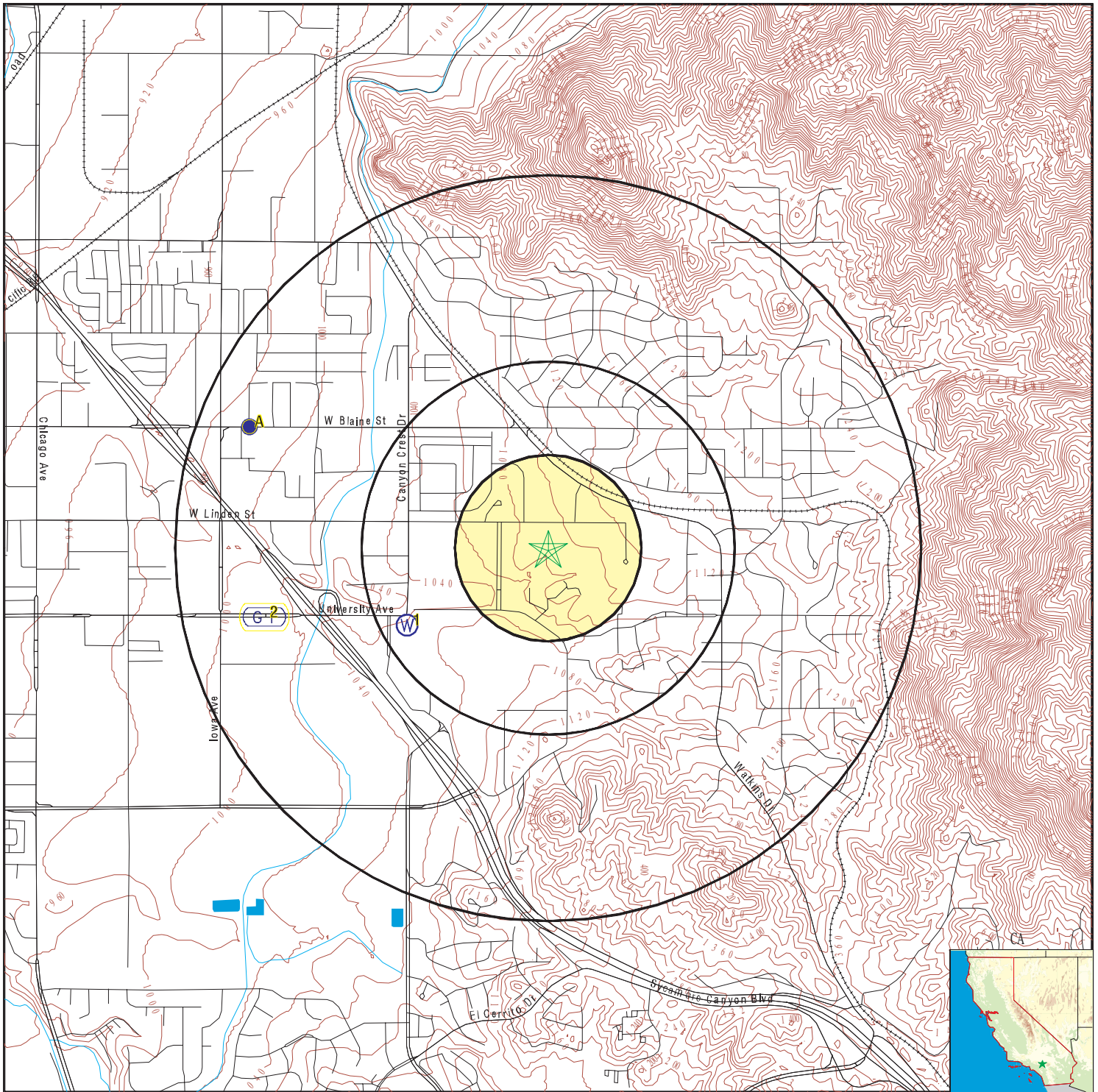
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	2484	1/4 - 1/2 Mile WSW

# PHYSICAL SETTING SOURCE MAP - 5167883.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: American Campus Phase 1A  
 ADDRESS: Linden St  
 Riverside CA 92507  
 LAT/LONG: 33.978292 / 117.324589

CLIENT: Haley & Aldrich  
 CONTACT: Carly Nemanic  
 INQUIRY #: 5167883.2s  
 DATE: January 24, 2018 7:57 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

<b>1</b>	<b>WSW</b>		
	1/4 - 1/2 Mile	<b>CA WELLS</b>	<b>2484</b>
	Lower		

**Water System Information:**

Prime Station Code: 02S/05W-01G02 S	User ID: WAT	
FRDS Number: 3310031094	County: Riverside	
District Number: 14	Station Type: WELL/AMBNT/MUN/INTAKE/SUPPLY	
Water Type: Well/Groundwater	Well Status: Standby Untreated	
Source Lat/Long: 335831.9 1171949.2	Precision: 10 Feet (1/10 Second)	
Source Name: UCR MAIN - STANDBY		
System Number: 3310031		
System Name: Riverside, City of		
Organization That Operates System: 3900 MAIN STREET RIVERSIDE, CA 92522		
Pop Served: 245000	Connections: 58586	
Area Served: RIVERSIDE		

<b>2</b>	<b>WSW</b>		
	1/2 - 1 Mile	<b>AQUIFLOW</b>	<b>50809</b>
	Lower		
	Site ID: 083302877T		
	Groundwater Flow: Not Reported		
	Shallow Water Depth: 100		
	Deep Water Depth: 110		
	Average Water Depth: Not Reported		
	Date: 06/03/1997		

<b>A3</b>	<b>WNW</b>		
	1/2 - 1 Mile	<b>AQUIFLOW</b>	<b>39020</b>
	Lower		
	Site ID: 083300601T		
	Groundwater Flow: W		
	Shallow Water Depth: Not Reported		
	Deep Water Depth: Not Reported		
	Average Water Depth: 160		
	Date: 10/29/1987		

<b>A4</b>	<b>WNW</b>		
	1/2 - 1 Mile	<b>AQUIFLOW</b>	<b>66355</b>
	Lower		
	Site ID: 083300601T		
	Groundwater Flow: W		
	Shallow Water Depth: Not Reported		
	Deep Water Depth: Not Reported		
	Average Water Depth: 160'		
	Date: 10/29/1987		

<b>A5</b>	<b>WNW</b>		
	1/2 - 1 Mile	<b>AQUIFLOW</b>	<b>54881</b>
	Lower		
	Site ID: 083303149T		
	Groundwater Flow: Not Reported		
	Shallow Water Depth: Not Reported		
	Deep Water Depth: Not Reported		
	Average Water Depth: 100		
	Date: 05/29/1998		

<b>A6</b>	<b>WNW</b>		
	1/2 - 1 Mile	<b>AQUIFLOW</b>	<b>54880</b>
	Lower		
	Site ID: 083303149T		
	Groundwater Flow: Not Reported		
	Shallow Water Depth: Not Reported		
	Deep Water Depth: Not Reported		
	Average Water Depth: 100		
	Date: 05/29/1998		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
<b>A7</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083303149T		<b>AQUIFLOW</b>	<b>54882</b>
	Groundwater Flow:	Not Reported			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	100			
	Date:	05/29/1998			
<b>1G</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083300601T		<b>AQUIFLOW</b>	<b>39020</b>
	Groundwater Flow:	W			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	160			
	Date:	10/29/1987			
<b>2G</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083300601T		<b>AQUIFLOW</b>	<b>66355</b>
	Groundwater Flow:	W			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	160'			
	Date:	10/29/1987			
<b>3G</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083303149T		<b>AQUIFLOW</b>	<b>54881</b>
	Groundwater Flow:	Not Reported			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	100			
	Date:	05/29/1998			
<b>4G</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083303149T		<b>AQUIFLOW</b>	<b>54880</b>
	Groundwater Flow:	Not Reported			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	100			
	Date:	05/29/1998			
<b>5G</b> <b>WNW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083303149T		<b>AQUIFLOW</b>	<b>54882</b>
	Groundwater Flow:	Not Reported			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	100			
	Date:	05/29/1998			
<b>6G</b> <b>WSW</b> <b>1/2 - 1 Mile</b> <b>Lower</b>	Site ID:	083302877T		<b>AQUIFLOW</b>	<b>50809</b>
	Groundwater Flow:	Not Reported			
	Shallow Water Depth:	100			
	Deep Water Depth:	110			
	Average Water Depth:	Not Reported			
	Date:	06/03/1997			

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92507	43	0

Federal EPA Radon Zone for RIVERSIDE County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level  $\geq$  2 pCi/L and  $\leq$  4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### RADON

#### State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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## **APPENDIX E**

### **Site Photographs**



Photograph 1. View of subject site residence.



Photograph 2. View of subject site residence.



Photograph 3. View of modular units used for maintenance storage.



Photograph 4. View of subject site dumpster area.





Photograph 5. View of the playground area.



Photograph 6. View of paint storage area.



assess  
resolve  
strengthen

## **CITADEL** ENVIRONMENTAL SERVICES, INC.

September 19, 2018

Ms. Colleen Canfield  
Project Manager  
**HALEY & ALDRICH, INC.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

**Re: CITADEL Project No. 7076.1017.0  
Environmentally Regulated Materials (ERM) Survey Report  
Pre-Demolition Asbestos and Lead Survey  
Canyon Crest Family Student Housing Units and Support Buildings  
University of California, Riverside  
Riverside, California 92507**

Dear Ms. Canfield:

Enclosed please find Citadel Environmental Services, Inc.'s Environmentally-Regulated Materials (ERMs) Survey Report for the above-referenced location.

The ERMs survey was conducted for Haley & Aldrich, Inc. in accordance with Citadel's Proposal 7076.1017.P, dated June 25, 2018 and a mutually agreed upon scope of work.

If after your review you have any questions or require additional information, please do not hesitate to telephone me at (818) 246-2707.

Sincerely,  
**CITADEL ENVIRONMENTAL SERVICES, INC.**

Jack Samuels, CAC, CDPH  
Associate Principal, Building Sciences

Enclosure

**Haley & Aldrich, Inc.**  
5333 Mission Center Road, Suite 300  
San Diego, California 92108

## **Environmentally-Regulated Materials Survey Report**

September 19, 2018

Citadel Project Number 7076.1017.0

Pre-Demolition Asbestos and Lead Survey  
Canyon Crest Family Student Housing Units and Support Buildings  
University of California, Riverside  
Riverside, California 92507



**CITADEL ENVIRONMENTAL SERVICES, INC.**

1725 Victory Boulevard, Glendale, California 91201 / P 818.246.2707 / F 818.246.3145 [www.citadelenvironmental.com](http://www.citadelenvironmental.com)

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## **1.0 INTRODUCTION**

Citadel Environmental Services, Inc. (Citadel) was contracted by Haley & Aldrich, Inc. (Client) to conduct a Pre-Demolition Environmentally-Regulated Materials (ERMs) survey {i.e., asbestos-containing materials/asbestos-containing construction materials (ACMs/ACCMs) & lead-containing materials (LCMs)} of the Canyon Crest Family Student Housing Units and Support Buildings (Survey Area) located at the University of California, Riverside in Riverside, California (Project Site).

Citadel separated the housing units into four categories based on similar, homogenous, construction. The categories are as follows:

- Single Family Unit (SFU) Structures with Peaked Roofs – 69 Structures
- Single Family Unit (SFU) Structures with Flat Roofs – 19 Structures
- Rectangular Duplex Structures – 79 Structures
- Offset Duplex Structures – 12 Structures

Citadel performed full pre-demolition asbestos and lead screening surveys of 25% of each type of housing structure. In addition, Citadel performed walkthrough surveys of the remaining housing structures to confirm that the suspect asbestos-containing materials were the same (homogenous) throughout each type. In cases where different homogeneous materials were identified in the walkthrough structures, these materials were bulk sampled for asbestos.

Full pre-demolition surveys were performed in the following housing structures:

725/727 Grape Street (Duplex)  
766 Grape Street (SFU)  
813/815 Grape Street (Duplex)  
840/842 Grape Street (Duplex)  
860 Grape Street (SFU)  
873 Grape Street (SFU)  
3411/3413 Avocado Street (Duplex)  
3422/3424 Avocado Street (Duplex)  
3446 Avocado Street (SFU)  
3452 Avocado Street (SFU)  
3459/3461 Avocado Street (Duplex)  
3472/3474 Avocado Street (Duplex)  
3489/3491 Avocado Street (Duplex)  
810 Peach Street (SFU)  
848/850 Peach Street (Duplex)  
3401/3407 Kentucky Street (Duplex)  
3419 Kentucky Street (SFU)  
3434 Kentucky Street (SFU)  
3480/2488 Kentucky Street (Duplex)  
786 Blaine Alley (SFU)  
876/876 Blaine Alley (Duplex)  
890 Blaine Alley (SFU)  
801/803 Cherry Street (Duplex)

821/823 Cherry Street (Duplex)  
861 Cherry Street (SFU)  
3308 Utah Street (SFU)  
3315/3317 Utah Street (Duplex)  
3321/3323 Utah Street (Duplex)  
3341 Utah Street (SFU)  
3342/3344 Utah Street (Duplex)  
3348 Utah Street (SFU)  
3350 Utah Street (SFU)  
3367 Utah Street (SFU)  
3384 Utah Street (SFU)  
3408/3416 Florida Street (Duplex)  
3429 Florida Street (SFU)  
3475/3479 Florida Street (Duplex)  
3323/3325 Idaho Street (Duplex)  
3334 Idaho Street (SFU)  
3359/3361 Idaho Street (Duplex)  
3370 Idaho Street (SFU)  
3398 Idaho Street (SFU)  
811 Plum Street (SFU)  
822 Plum Street (SFU)  
849/851 Plum Street (Duplex)  
747/749 Linden Street (Duplex)

Citadel performed full pre-demolition asbestos and lead surveys of the vacant support buildings on the site. The following buildings were inspected.

- Community Center/Computer Lab (Duplex Building at 890/892 Plum Street)
- Laundry Building
- Maintenance & Grounds Shop (3458 Avocado Street)
- Parks & Recreation Restroom
- HDRS Facilities Warehouse
- Carpenter Shop (3358 Utah Street)

The following support buildings were occupied and were not included in the survey.

- HDRS Facilities Management (Duplex 3496/3498 Avocado Street)
- KUCR Campus Radio Station (Duplex 691/693 Linden Street)
- Child Development Center

The survey was conducted between July 23<sup>rd</sup> and August 30<sup>th</sup>, 2018 by Citadel representatives Joshua Hoover and Juan Magallon. Mr. Hoover is a California Department of Occupational Safety and Health (DOSH) Certified Site Surveillance Technician (CSST) (No. 14-5288), and California Department of Public Health Services (CDPH) Lead-Related Construction Sampling Technician (LRCST) (No. 26885). Mr. Magallon is a DOSH CSST (No. 15-5358), and CDPH LRCST (No. 26502). All work was performed under the general supervision of and this report was written by Jack Samuels. Mr. Samuels is a DOSH Certified Asbestos Consultant (CAC) (No. 92-0475), and CDPH Lead-Related Construction Inspector Assessor (LRCIA) (No. 5380). The report was reviewed by Mr. Kier DeLeo, CHMM. Project team certifications can be found in Appendix A.

## **2.0 SURVEY METHODOLOGIES**

### **FIELD METHODOLOGIES – ASBESTOS**

Citadel performed full pre-demolition asbestos surveys of 25% of each type of housing structure (the “25% units”). In addition, Citadel performed walkthrough surveys of the remaining housing structures (the “walkthrough units”) to confirm that the homogeneous materials were the same as those fully surveyed. Unique materials found in the walkthrough units were sampled for asbestos. Full pre-demolition asbestos surveys were also performed in the support structures.

Citadel began the field survey by visually inspecting the project area to categorize suspect ACMs/ACCMs to be impacted by the project. Suspect ACMs/ACCMs were categorized by homogeneous areas (HAs). HAs consist of groupings of materials that have uniform appearances, textures, and installation dates.

Demolition inspection techniques were utilized during the survey. Demolition inspection techniques included penetrating wall cavities and coring the floor to the floor joists. Access into the housing unit attic space was limited to a few locations because there were no ceiling access hatches and the attic could not be accessed from the roof vents on the side walls.

Following the walk through, representative bulk samples of suspect ACMs/ACCMs were then collected. As the samples were collected, the locations of the HAs and samples were marked on field sketches. Locations of visible debris, if observed, were also noted.

### **ACMs/ACCMs Condition Assessment**

Materials were assessed to be in good, *damaged*, or *significantly damaged* condition based on how their condition at the time of the survey related to the following:

- ❖ **Good Condition** - No or very limited visible damage or deterioration was observed.
- ❖ **Damaged Condition** - Crumbling, blistering, water damage, gouges, or other damage was observed over less than 25% of the materials (one-tenth if evenly distributed); or accumulation of suspect powder, dust or debris below the material was observed.
- ❖ **Significantly Damaged Condition** - Crumbling, blistering, water damage, gouges, or other damage was observed over greater than 25% of the material (one-tenth if evenly distributed); material is delaminating or showing adhesive failure; or accumulation of suspect powder, dust or debris below the material was observed.

## **FIELD METHODOLOGIES – LEAD CONTAINING MATERIALS (LCMS)**

Citadel performed pre-demolition lead screening surveys of 25% of each type of housing structure. Pre-demolition lead screening surveys were also performed in the support structures. In the walkthrough units, unique materials not found in the 25% units.

### **X-Ray Fluorescence (XRF SA) (SCREEN)**

A limited lead inspection/screening was conducted to test predominant surface paints/coatings on surface area components, such as walls, doors, floors, frames, etc. for lead-based paints and lead-containing paints. Citadel utilized X-Ray Fluorescence Spectrum Analysis (XRF-SA) to test suspect paints and coatings. Assays (tests) were taken from interior painted/coated surfaces as necessary.

The XRF irradiates the paint on a given surface causing the lead in the paint, if present, to emit a characteristic frequency of x-ray radiation. The intensity of this radiation is measured by the detector and related to the amount of lead in the paint. The type of XRF used in this survey was a Niton XLP-303A X-Ray Fluorescence Spectrum Analyzer. The XRF analyzer provides an in-the-field determination of suspect LBP without the need to collect substantial numbers of paint chip samples for subsequent laboratory analysis.

In order to obtain a reading, the XRF was placed with the face of the instrument flush against the surface to be tested. It was then held in place for the duration of the sample, which was determined by the instrument. At the conclusion of the sample time, the lead concentration was displayed on the device's readout screen. The values, expressed in milligrams per square centimeter (mg/cm<sup>2</sup>), are stored in the device and can be recalled by the inspector upon downloading into computer software. The Niton is sensitive to 0.01 milligrams per square centimeter (mg/cm<sup>2</sup>) of lead.

The instrument, equipped with a sealed radioactive source, was operated by certified personnel in accordance with manufacturer requirements and applicable regulations. The operator calibrated the XRF-SA pursuant to the manufacturer's specifications and regularly verified XRF-SA readings against pre-determined lead samples produced by the National Institute of Standards and Testing (NIST). These quality control measures produced a 95% confidence level that the XRF-SA readings accurately reflected the actual level of lead in the tested surfaces.

## **3.0 RESULTS**

### **ASBESTOS**

#### **Asbestos Definitions**

**Asbestos-Containing Materials (ACM):** The EPA's Asbestos NESHAPs and the South Coast Air Quality Management District (SCAQMD), the local air pollution control district, define an asbestos-containing material as any material that contains a concentration of asbestos of greater than one percent (>1.0%) by area as determined by PLM (Federal Register, Volume 59, No. 146, August 1, 1994, P. 38970-38971). NESHAPs and SCAQMD Rule 1403 further segregate asbestos-containing materials into *Regulated Asbestos-Containing Materials (RACM)*, *Category I Non-Friable Materials*, and *Category II Non-Friable Materials*, which are defined as follows:



- ❖ **Regulated Asbestos-Containing Materials (RACM)/Asbestos-Containing Materials (ACM):** Includes all friable asbestos materials, Category I/Class I Nonfriable ACM that have become friable or will become friable, and Category II/Class II Nonfriable ACM that have a high probability of being crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of renovation or demolition.
- ❖ **Category I Nonfriable ACM/Class I Nonfriable ACM:** Includes asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products that when dry can be crumbled, pulverized, or reduced to powder by hand pressure in the course of renovation and demolition activities.
- ❖ **Category II Nonfriable ACM/Class II Nonfriable ACM:** Includes all non-friable materials, excluding *Category I/Class I Nonfriable ACM* that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Asbestos-Containing Construction Materials (ACCM):** The California Department of Occupational Safety and Health (Cal/OSHA) further defines an asbestos-containing construction material (ACCM) as a material that contains greater than one-tenth of one percent (>0.1%) asbestos.

**Presumed Asbestos-Containing Material (PACM)** means thermal system insulation and surfacing material found in buildings, vessels, and vessel sections constructed no later than 1980 that are assumed to contain greater than one percent asbestos but have not been sampled or analyzed to verify or negate the presence of asbestos. PACM may also be used in this report to identify additional suspect ACM that was not sampled but should be assumed to be ACM.

### Asbestos Results

During the survey, a total of 1,894 asbestos bulk samples were collected. Where multiple layers were present, the laboratory analyzed each layer and their results reported. The bulk samples were submitted to the following laboratories for analysis by polarized light microscopy (PLM) for asbestos content using EPA 600/R-93/116 Method. The EPA method is a semi-quantitative procedure with a detection limit of one-tenth to one percent (0.10 – 1.0%) by area, dependent upon the material being analyzed. If indicated, select samples were submitted for more objective analysis following EPA 600/R-93/116 Method Point Count procedures (1,000 points). The Point Count procedure is used to increase the amount of sample viewed under PLM so that the results are statistically enhanced, resulting in a generally more accurate analysis.

LA Testing in Huntington Beach, California (NVLAP Code 101384-0)

EMSL Analytical, Inc. in New York, New York (NVLAP Code 101048-10)

EMSL Analytical, Inc. in Depew, New York (NVLAP Code 200025-0)

EMSL Analytical, Inc. in St. Louis, Missouri (NVLAP Code 200742-0)

EMSL Analytical, Inc in Dallas, Texas (NVLAP Code 300111-0)

EMSL Analytical, Inc. in Houston, Texas (NVLAP Code 102106-0)

EMSL Analytical, Inc. in San Leandro, California (NVLAP Code 101048-3)

EMSL Analytical, Inc. in Seattle, Washington (NVLAP Code 200613-0)

Table A.1 below summarizes the materials identified and sampled to be **Asbestos Containing Materials (ACM)** (>1.0% asbestos) in the project area, along with the locations of each material:

**TABLE A.1**

MATERIAL TYPE	HA NO.	LOCATION(S)	APPROX. QUANTITY <sup>1</sup>
<b>Housing Units, All Types</b>			
Floor Tile, Various Colors, Floor Tile Mastic, Black, Vapor Barrier (Typically, Two Layers)	Various	Living Room, Bedrooms, Hallway, Closets in All Housing Units	141,750 SF
Sheet Flooring, Various, Floor Tile Various, Mastic, Black, Vapor Barrier (Typically, Three to Five Layers Including at Least One Plywood Subfloor)	Various	Kitchens in All Housing Units	35,100 SF
Sheet Flooring, Various, Floor Tiles, Various, Floor Tile Mastic, Black, Vapor Barrier (Typically, Two Layers)	Various	Restrooms in All Housing Units	8,100 SF
Roof Mastic, Gray/Black	RPM1	Roofs of All Housing Structures	2,700 SF
<b>Community Center/Computer Lab (Duplex Building at 890/892 Plum Street)</b>			
12x12 Vinyl Floor Tile, Beige, and Floor Tile Mastic, Black (Middle Layer)	12VFT59	Rooms A, B, C, D, E, H, I	1,350 SF
9x9 Vinyl Floor Tile, Brown, Floor Tile Mastic, Black, Vapor Barrier (Bottom Layer)	9VFT61	Rooms A, B, C, D, E, H, I	1,350 SF
Vinyl Sheet Flooring, Yellow, Mastic, Vapor Barrier (Bottom Layer)	VSF65	Room G	45 SF
Vinyl Sheet Flooring, Beige, Mastic, Vapor Barrier (Bottom Layer)	VSF66	Room F	100 SF
Roof Mastic, Gray/Black	RPM1	Roof	20 SF
<b>Laundry Building</b>			
None Identified	N/A	N/A	N/A

<sup>1</sup> All quantities (SF/LF/EA) provided by Citadel are estimates. Contractors are responsible for field verifying actual quantities of materials.

MATERIAL TYPE	HA NO.	LOCATION(S)	APPROX. QUANTITY <sup>1</sup>
<b>Maintenance &amp; Grounds Shop (3458 Avocado Street)</b>			
Transite Panels, Gray	MISC52	Exterior	2,500 SF
<b>Parks &amp; Recreation Restroom</b>			
None Identified	N/A	N/A	N/A
<b>HDRS Facilities Warehouse</b>			
12x12 Vinyl Floor Tile, Beige, Floor Tile Mastic, Black, Vapor Barrier	12VFT61	Rooms A, B, C, D, E, F, H, I, J, K, M, P	2,800 SF
Vinyl Sheet Flooring, Gray/White, Mastic, Vapor Barrier (Bottom Layer)	VSF68	Rooms J, L, M, O, Q	1,300 SF
12x12 Vinyl Floor Tile, Beige, Floor Tile Mastic, Black, Vapor Barrier	12VFT62	Room L	60 SF
Vinyl sheet Flooring, Black Marble, Mastic, Vapor Barrier (Bottom Layer)	VSF69	Room G	100 SF
12x12 Vinyl Floor Tile, Light Beige, Floor Tile Mastic, Black, Vapor Barrier	12VFT63	Room R	650 SF
1x1 Wall Tile, White, Small Hole, Adhesive, Brown	CT1	Room K South Wall	100 SF
Transite Panel, Grey	MISC53	Rooms I, K, O (Walls and Floors)	1,300 SF
Exterior Stucco, Brown	ES58	East and West Exterior Walls of Room R	850 SF
Roof Shingles, Red	RS54	Roof	6,200 SF
Roof Mastic, Black	RPM52	Roof	100 SF
<b>Carpenter Shop (3358 Utah Street)</b>			
Roof Mastic	RPM51	Roof	20 SF
Roof Patch	RP50	Roof	150 SF

Table A.2 below summarizes the materials identified and sampled to be **Asbestos Containing Construction Materials (ACCM)** (> 0.1%, but ≤1.0% asbestos) in the survey area, along with the locations of each material:

**TABLE A.1**

MATERIAL TYPE	HA NO.	LOCATION(S)	APPROX. QUANTITY <sup>2</sup>
<b>Housing Units, All Types</b>			
Exterior Stucco	ES1	3370 Idaho Street	785 SF
<b>Community Center/Computer Lab (Duplex Building at 890/892 Plum Street)</b>			
None Identified	N/A	N/A	N/A
<b>Laundry Building</b>			
None Identified	N/A	N/A	N/A
<b>Maintenance &amp; Grounds Shop (3458 Avocado Street)</b>			
None Identified	N/A	N/A	N/A
<b>Parks &amp; Recreation Restroom</b>			
None Identified	N/A	N/A	N/A
<b>HDRS Facilities Warehouse</b>			
None Identified	N/A	N/A	N/A
<b>Carpenter Shop (3358 Utah Street)</b>			
None Identified	N/A	N/A	N/A

Table A.3 below summarizes the materials that were inaccessible and possibly present or were not sampled and are categorized as **Presumed Asbestos Containing Construction Materials (PACM)**:

**TABLE A.1**

MATERIAL TYPE	HA NO.	LOCATION(S)	APPROX. QUANTITY <sup>3</sup>
<b>Housing Units, All Types</b>			
3" Transite Pipe, Gray	N/A	Wall Cavity Between Kitchen and Restroom in All Housing Units	2,700 LF 2,100 SF (One Per Unit)

<sup>2</sup> All quantities (SF/LF/EA) provided by Citadel are estimates. Contractors are responsible for field verifying actual quantities of materials.

<sup>3</sup> All quantities (SF/LF/EA) provided by Citadel are estimates. Contractors are responsible for field verifying actual quantities of materials.

MATERIAL TYPE	HA NO.	LOCATION(S)	APPROX. QUANTITY <sup>3</sup>
Transite Panel, Gray	N/A	Crawlspace Under All Duplex Structures	3,640 SF
Roofing Materials Under Peaked Roofs	N/A	Unknown (See Note 1)	Not Quantified
<b>Community Center/Computer Lab (Duplex Units 890/892 Plum Street)</b>			
3" Transite Pipe	N/A	Wall Cavities Between Rooms A & I and F & G	20 LF 16 SF
Transite Panel, Gray	N/A	Crawlspace	40 SF
<b>Laundry Building</b>			
None Identified	N/A	N/A	N/A
<b>Maintenance &amp; Grounds Shop (3458 Avocado Street)</b>			
None Identified	N/A	N/A	N/A
<b>Parks &amp; Recreation Restroom</b>			
None Identified	N/A	N/A	N/A
<b>HDRS Facilities Warehouse</b>			
None Identified	N/A	N/A	N/A
<b>Carpenter Shop (3358 Utah Street)</b>			
None Identified	N/A	N/A	N/A

**Note 1:** It was reported to Citadel that originally all of the housing units had flat roofs with composition roofing materials. There was a program to remove these roofs and replace them with the peaked roofs that are currently present. To save money at the end of the project, the removal of the flat roofs was suspended, and the peaked roofs were installed over the existing flat roofs. It was reported to Citadel that this condition is limited. During our survey, Citadel did not have access to the attic spaces either from inside the units or from the roof vents, so we were unable to confirm which buildings have this condition. During abatement and demolition, the buildings should be inspected to confirm if this condition exists. It should be noted that Citadel performed sampling of the housing units (single family and duplexes) where the flat roofs had not been covered with the peaked roofing system. The roof field membrane in all cases were negative for asbestos, however ACM mastics were present.

Table A.4 below summarizes the materials that were reported by the laboratory to not contain detectable quantities of asbestos **None Detected or ND** or contained less than 0.1% asbestos by the Point Count procedure:

**TABLE A.4**

MATERIAL TYPE	HA NO.
<b>Housing Units</b>	
12x12 Vinyl Floor Tile, Beige w/Gray Streaks, w/Mastic, Yellow (Top Layer)	12VFT1
12x12 Vinyl Floor Tile, Beige w/Brown Streaks, w/Mastic, Brown	12VFT5
12x12 Vinyl Floor Tile, Beige w/Beige Specs, w/Mastic, Beige	12VFT50
12x12 Vinyl Floor Tile, Beige, w/Mastic, Beige	12VFT52
12x12 Vinyl Floor Tile, Beige, w/Mastic, Beige	12VFT53
12x12 Vinyl Floor Tile, Grey, w/Mastic, Black	12VFT56
12x12 Vinyl Floor Tile, White w/Specks, w/Mastic, Beige	12VFT57
9x9 Vinyl Floor Tile, Red, w/Mastic, Black, w/Vapor Barrier	9VFT50
Exterior Stucco, Gray	ES1
Exterior Stucco, Gray	ES50
Exterior Stucco, Orange	ES51
Baseboard Mastic, Beige A/W Black Baseboard	FBM1
Baseboard Mastic, Yellow A/W Black Baseboard	FBM2
Baseboard Mastic, White A/W Black Baseboard	FBM3
Baseboard Mastic, Beige	FBM50
Baseboard Mastic, White	FBM51
Leveling Compound, Gray	FLC50
Blown-In Insulation, White	MISC1
Exterior Window Frame Putty, Gray	MISC50
Vapor Barrier, Paper, Black	MISC51
Composition Roofing Material, w/Brown Insulation, w/Styrofoam Coating, Flat Roof on Single Family Units	RFM1
Composition Roofing Material, Black, Flat Roof on Duplex Structure	RFM54
Roof Parapet Material, Black, Flat Roof on Duplex Structure	RP50
Roof Mastic, Black/Painted White, Flat Roof on Duplex Structure	RPM53
Roof Mastic, Gray, Flat Roof on Duplex Structure	RPM54
Roofing Shingle, Black/Brown, w/Vapor Barrier	RS1
Roofing Shingle, Gray/Orange, w/Vapor Barrier	RS2
Roofing Shingle, Red, w/Vapor Barrier	RS50
Under Sink Mastic, Black	USM1
Under Sink Mastic, White	USM2
Under Sink Mastic, Gray	USM3
Under Sink Mastic, Gray	USM50
Under Sink Mastic, Black	USM51
Under Sink Mastic, White	USM52
Vinyl Sheet Flooring, White/Gray/Brown w/6" Squares, w/Mastic, Yellow	VSF1

**TABLE A.4**

<b>MATERIAL TYPE</b>	<b>HA NO.</b>
Vinyl Sheet Flooring, White/Gray w/Mixed Square/Triangle Pattern, w/Mastic, Yellow/Beige	VSF2
Vinyl Sheet Flooring, White/Gray w/Rectangle Pattern, w/Mastic, Beige	VSF5
Vinyl Sheet Flooring, White/Gray/Brown w/6" Squares, w/Mastic, Yellow	VSF11
Vinyl Sheet Flooring, Mixed Pattern w/Flowers, w/Mastic, Yellow	VSF12
Vinyl Sheet Flooring, Red, w/Mastic, Black and Vapor Barrier	VSF13
Vinyl Sheet Flooring, w/White Squares and Rectangle Patter, w/Mastic, White	VSF15
Vinyl Sheet Flooring, White/Squares, w/Mastic	VSF50
Vinyl Sheet Flooring, Tan Marble, w/Mastic	VSF52
Vinyl Sheet Flooring, Beige/White 6" Square, w/Mastic	VSF56
Vinyl Sheet Flooring, White Triangle, w/Mastic	VSF57
Vinyl Sheet Flooring, Yellow, w/Mastic	VSF59
Vinyl Sheet Flooring, White Small Rectangles, w/Mastic	VSF60
Window Putty, Black/Gray	WP1
Plaster, White/Gray, and Button Board, White	WPF1
Plaster w/Heavy Texture, White/Gray, and Button Board, White	WPF2
Plaster, White/Gray, and Button Board, White	WPF50
Drywall and Joint Compound, White	WS/J1
Drywall and Joint Compound, White	WS/J50
Drywall and Joint Compound, White	WS/J51
<b>Community Center/Computer Lab (Duplex Building at 890/892 Plum Street)</b>	
Plaster w/Button Board, White	WPF52
Drywall w/Joint Compound, White	WS/J53
Vinyl Sheet Flooring, White, 6" Square, and Mastic	VSF64
Carpet Mastic, Beige	FCM50
Baseboard, Gray, and Mastic, White	FCM50
Window Putty, White	WP51
Sink Mastic, Gray	USM53
Exterior Stucco, Orange	ES53
Roof Shingles, Red	RS53
<b>Laundry Building</b>	
Drywall w/Joint Compound, White	WS/J54
12x12 Vinyl Floor Tile, Beige, and Mastic, Beige	12VFT60
Vinyl Sheet Flooring, White Small Triangle, and Mastic	VSF57
Window Putty, White	WP52
Exterior Stucco, White	ES54
Roof Field Membrane, Black	RFM50
Roof Mastic, Grey	RPM50
Pitch Pocket Mastic, Black	PP50

**TABLE A.4**

<b>MATERIAL TYPE</b>	<b>HA NO.</b>
<b>Maintenance &amp; Grounds Shop (3458 Avocado Street)</b>	
Drywall Panels, White	WS/J51
Plaster, White	WPF51
Compact Wood Boards, Brown	MISC51
Drywall	WS/J52
12x12 Vinyl Floor Tile, Beige, and Mastic, Beige	12VFT58
Subfloor Vapor Barrier, Black	FVB52
Window Putty, White	WP52
Roof Shingles, Red	RS51
<b>Parks &amp; Recreation Restroom</b>	
Roofing Shingles, Red	RS52
<b>HDRS Facilities Warehouse</b>	
Plaster w/Button Board, White	WPF53
Plaster, Gray	WPF54
Drywall w/Joint Compound	WS/J56
Textured Drywall w/Joint Compound	WS/J57
1x1 Ceiling Tile, White, Fissured, Adhesive, Brown	1CT50
Baseboard Mastic, Tan	FBM54
Baseboard Mastic, Brown	FBM55
Window Putty, Gray	WP53
Exterior Stucco, White	ES56
Exterior Stucco, Orange	ES57
Roof Field Membrane, Black, Multiple Layers	RFM52
Roof Field Membrane, Black, Multiple Layers	RFM53
Roof HVAC Mastic, Gray	HVT50
<b>Carpenter Shop (3358 Utah Street)</b>	
Drywall w/Joint Compound, White	WS/J1
Baseboard Mastic, White	FBM53
Vinyl Sheet Flooring, White w/Brown Specks, and Mastic	VSF67
Exterior Stucco, Gray	ES55
Roof Field Membrane, Black	RFJ51

The drawings with bulk sample locations can be found in Appendix **B**. A detailed summary of bulk samples collected may be found in Appendix **C**, Table 1.0 – *Bulk Sample Results*. Detailed information pertaining to the location of homogeneous asbestos-containing materials is presented in Appendix **D**, Table 2.0 – *Summary by Material*. LA Testing's bulk sample laboratory results may be found in Appendix **E**.



## LEAD-CONTAINING MATERIALS

### Lead Definitions

- ❖ **Lead Containing Paint (LCP)** - A lead-containing paint is a paint or coating that contains any detectable concentration of lead.
- ❖ **Lead Based Paint (LBP)** - The California Department of Public Health (CDPH) and the US Department of Housing and Urban Development (HUD) define Lead-Based Paint (LBP) as paint containing lead greater than or equal to 1.0 milligram per square centimeter ( $\geq 1.0$  mg/cm<sup>2</sup>) or greater than or equal to 0.5% by weight also expressed as 5,000 parts per million ( $\geq 5,000$  ppm).
- ❖ **Lead Containing Material (LCM)** - A lead-containing material may consist of identified lead-containing paint (LCP), lead-based paint (LBP), or other materials such as lead sheeting, ceramic tile glazing, etc., or presumed LCMS.
- ❖ **Presumed Lead-Based Paint (PLBP)** - Title 17, California Code of Regulations, Division 1, Chapter 8 defines as paint or surface coating affixed to a component in or on a structure constructed prior to January 1, 1978 as a presumed lead-based paint unless it has been tested and found to contain an amount of lead  $< 1.0$  mg/cm<sup>2</sup> or  $< 0.5\%$  by weight.

A total of 2,529 assays (tests) (excluding "Null" and "Calibration Readings"), using the XRF-SA were conducted during the survey. Of the 2,529 assays collected, 452 were found to contain LBP (i.e.,  $\geq 1.0$  mg/cm<sup>2</sup>).

XRF-SA results may be found in Appendix **F**, Table 3.0 – XRF-SA Results; Appendix **G**, Table 3.1 – Lead-Based Paint (LBP) XRF-SA results; and Appendix **H**, Table 3.2 – Lead-Containing Paint (LCP) results (i.e.,  $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>).

Table B.1 below summarizes the materials identified and sampled to be **Lead-Based Paints (LBP)** (detectable quantities of lead in concentrations of  $\geq 5,000$  ppm or  $\geq 1.0$  mg/cm<sup>2</sup>) in the project area:

**TABLE B.1**

COMPONENT	SUBSTRATE	COLOR(S)	LOCATION(S)
<b>Housing Units, All Types</b>			
Baseboard	Wood	White	Interior of Housing Units
Conduit	Metal	White	Interior of Housing Units
Corner Panel	Wood	Beige	Exterior of Housing Units
Door	Wood	Beige	Interior and Exterior of Housing Units
Door	Wood	Green	Interior and Exterior of Housing Units
Door	Wood	Tan	Exterior of Housing Units
Door	Wood	White	Interior of Housing Units

COMPONENT	SUBSTRATE	COLOR(S)	LOCATION(S)
Door Frame	Metal	Beige	Exterior of Housing Units
Door Frame	Metal	Tan	Exterior of Housing Units
Door Frame	Wood	Beige	Exterior of Housing Units
Door Frame	Wood	Beige	Exterior of Housing Units
Door Frame	Wood	Brown	Exterior of Housing Units
Door Frame	Wood	Green	Interior of Housing Units
Door Frame	Wood	Tan	Interior and Exterior of Housing Units
Door Frame	Wood	White	Interior and Exterior of Housing Units
Door Flashing	Metal	Beige	Exterior of Housing Units
Door Flashing	Metal	Brown	Exterior of Housing Units
Door Flashing	Metal	Green	Exterior of Housing Units
Door Jamb	Metal	Beige	Interior of Housing Units
Door Jamb	Metal	Green	Interior of Housing Units
Door Jamb	Wood	Beige	Interior of Housing Units
Door Jamb	Wood	Green	Interior of Housing Units
Door Jamb	Wood	White	Interior of Housing Units
Panel Below Window	Wood	Beige	Exterior of Housing Units
Siding	Metal	Brown	Exterior of Housing Units
Siding	Wood	Brown	Exterior of Housing Units
Siding Panels	Wood	Beige	Exterior of Housing Units
Tub	Porcelain	White	Bathrooms of Housing Units
Wall Molding	Wood	Tan	Exterior of Housing Units
Wall Panels	Wood	Beige	Exterior of Housing Units
Wall Siding	Wood	Beige	Exterior of Housing Units
Wall Trim	Wood	White	Exterior of Housing Units
Window	Metal	Beige	Exterior of Housing Units
Window	Metal	Black	Exterior of Housing Units

COMPONENT	SUBSTRATE	COLOR(S)	LOCATION(S)
Window	Wood	White	Interior of Housing Units
Window Center Frame	Wood	White	Interior of Housing Units
Window Flashing	Metal	Beige	Exterior of Housing Units
Window Flashing	Metal	Brown	Exterior of Housing Units
Window Flashing	Metal	Green	Exterior of Housing Units
Window Frame	Metal	Beige	Exterior of Housing Units
Window Frame	Metal	Black	Exterior of Housing Units
Window Frame	Wood	White	Interior of Housing Units
Window Guard	Metal	Beige	Exterior of Housing Units
Window Mullion	Wood	White	Interior of Housing Units
Window Sill	Wood	White	Interior of Housing Units
<b>Community Center/Computer Lab (Duplex Building at 890/892 Plum Street)</b>			
Door	Wood	Tan	Exterior
Door Frame	Wood	Tan	Exterior
Wall	Wood	Tan	Exterior
Window	Metal	Tan	Exterior
Window Flashing	Metal	Tan	Exterior
Window Frame	Metal	Tan	Exterior
Door	Wood	White	Throughout Interior
Door Flashing	Metal	Brown	Exterior
Door Frame	Wood	White	Throughout Interior
Window Mullion	Wood	White	Throughout Interior
<b>Laundry Building</b>			
Garage Door	Wood	Blue	Exterior
Garage Door	Wood	White	Exterior
<b>Maintenance &amp; Grounds Shop (3458 Avocado Street)</b>			
Door	Wood	Beige	Garage
Door	Wood	White	Room E

COMPONENT	SUBSTRATE	COLOR(S)	LOCATION(S)
Eave	Metal	Tan	Exterior
Fascia	Wood	Gray	Exterior
Sink	Porcelain	White	Room D
Wall	Metal	Tan	Exterior
Wall	Transite	Beige	Exterior
Wall	Wood	Tan	Exterior
Window	Metal	Tan	Exterior
Window Frame	Wood	Beige	Interior
Window Frame	Wood	Tan	Exterior
<b>Parks &amp; Recreation Restroom</b>			
None Identified	N/A	N/A	N/A
<b>HDRS Facilities Warehouse</b>			
Door	Metal	Beige	Exterior
Door	Metal	Brown	Room J
Door	Wood	Beige	Room V
Door Flashing	Metal	Beige	Room V
Door Frame	Metal	Beige	Exterior
Door Frame	Wood	Beige	Room V
Door Frame	Wood	Brown	Room T
Door Frame	Wood	White	Room A
Eave	Wood	Beige	Exterior
Flag Pole	Metal	Silver	Exterior
Parking Stripes	Asphalt	Yellow	Exterior
Wall Siding Molding	Wood	Beige	Exterior
Window	Metal	Beige	Room U
Window Flashing	Metal	Beige	Room U
Window Frame	Metal	Brown	Room E
Window Frame	Wood	Beige	Exterior

COMPONENT	SUBSTRATE	COLOR(S)	LOCATION(S)
Window Frame	Wood	Beige	Room U
Window Sill	Metal	Beige	Exterior
Window Sill	Metal	White	Room E
Window Sill	Wood	Blue	Room K
Window Sill	Wood	White	Room A
<b>Carpenter Shop (3358 Utah Street)</b>			
Door	Wood	Green	Exterior
Door Frame	Wood	White	Exterior
Wall	Wood	Gray	Room B

See Appendix **G** - Table 3.1 for complete list of LBP materials.

See Appendix **H** - Table 3.2 for a summary of materials identified and sampled to be **Lead-Containing Paints (LCP)** (detectable quantities of lead in concentrations of <5,000 ppm or  $\geq 0.01$  mg/cm<sup>2</sup> and <1.0 mg/cm<sup>2</sup>) in the project area.

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

### **ASBESTOS**

The results of the survey indicate that ACMs and PACMs are present in the housing structures and support structures.

Citadel performed full pre-demolition asbestos surveys of 25% of each type of housing structure. In addition, Citadel performed walkthrough surveys of the remaining housing structures to confirm that the homogeneous materials were the same, and if found, unique materials were sampled. Full pre-demolition asbestos surveys were also performed in the support structures.

Demolition inspection techniques were utilized during the survey. Demolition inspection techniques included penetrating wall cavities and coring the floor to the floor joists. Access into the housing unit attic space was limited to a few locations because there were no ceiling access hatches and the attic could not be accessed from the roof vents on the side walls.

It was reported to Citadel that all of the housing units originally had flat roofs with composition roofing materials. There was a program to remove these roofs and replace them with the peaked roofs that are currently present. To save money at the end of the project, the removal of the flat roofs was suspended and the peaked roofs were installed over the existing flat roofs. It was reported to Citadel that this condition is limited. During our survey, Citadel did not have access to the attic spaces either from inside the units or from the roof vents so we were unable to confirm which buildings have this condition. During abatement and demolition, the buildings should be inspected to confirm if this condition exists. It should be noted that Citadel performed sampling of the housing units with exposed flat roofs. The roof field membrane in all cases were negative for asbestos, however ACM mastics were identified.

If suspect materials are identified during demolition activities that were not specifically sampled, they should be assumed to be ACM until they can be sampled.

All asbestos removal operations shall be performed by a Cal/OSHA-DOSH-registered and California-licensed asbestos contractor. All disturbances of asbestos-containing materials, and/or abatement operations, should be performed under the surveillance of a third-party Cal/OSHA Certified Asbestos Consultant retained by the Client.

All disturbances of asbestos-containing materials, and/or abatement operations, must be performed in accordance with the Cal/OSHA requirements set forth in 8 CCR 1529. Given the location of the subject facility, all asbestos abatement must also be performed in accordance with SCAQMD Rule 1403.

Finally, notification of the presence and location of asbestos-containing materials shall be made to all employees and vendors who work within the subject structure, in accordance with California Health and Safety Code, Section 25915, et seq. (also known as Connolley Notification Bills).

Citadel recommends that all undamaged ACMs, ACCMs, and PACMs not to be disturbed as part of this project and scheduled to remain be managed in place in accordance with the EPA's guidance document Managing Asbestos In-Place (a.k.a., the Green Book). The Green Book can be obtained by calling the Toxic Substance Control Act Hotline at (202) 554-1404. Citadel also recommends that the materials be managed in place in accordance with the Client's Operations and Maintenance (O & M program) addressing building cleaning, maintenance, renovation, and general operation procedures to minimize exposure to asbestos.

## **LEAD-CONTAINING MATERIALS**

### **Lead-Containing Materials/Lead-Based Paints (LCM/LBP)**

This survey revealed that building components coated with LCM/LBP were identified within the project area.

Citadel performed lead screening surveys of 25% of each type of housing structure.

At present, there are no explicit state or federal regulations requiring mandatory lead removal prior to disturbance or demolition of structures with identified lead materials. However, there are applicable Cal/OSHA worker protection and training requirements, Cal/EPA waste disposal requirements, CDPH requirements for public and residential buildings, and SB 460 lead hazard regulations that apply to lead-related construction activities and their associated wastes

The following is a brief discussion and summary of applicable regulatory requirements:

- ❖ **Cal/OSHA:** 8 CCR 1532.1 governs occupational exposure to lead. This regulation requires that prior to initiation of certain activities, referred to as "trigger tasks", workers must be trained, medically evaluated, and properly fitted with respiratory protection, and protective clothing until statistically reliable personal eight-hour Time Weighted Average (TWA) results indicate lead exposure levels below the Personal Exposure Limit (PEL) for each unique task which disturbs lead-based and lead-containing coatings. This process is known as a Negative Exposure Assessment (NEA). If the result of the exposure assessment is above the Action Level (AL), additional monitoring is required, and if the result is above the PEL,

additional exposure monitoring, worker protection (including respirator protection and PPE), training and medical requirements apply. At a minimum, contractors performing any lead in construction work shall have a hand washing station and HEPA vacuum present on the job site.

- ❖ "Trigger tasks" are tasks that are assumed to exceed the PEL pending an exposure assessment and encompass the majority of construction activities that disturb surface coatings. Examples of "trigger tasks" range from manual paint scraping as a lower expected exposure up to hot work and abrasive blasting as the highest expected exposures, and include any non-listed task that the employer determines may potentially expose employees to lead levels above the AL.

NOTE: "OSHA does not consider any method that relies solely on the analysis of bulk materials or surface content of lead (or other toxic material) to be acceptable for safely predicting employee exposure to airborne contaminants. Without air monitoring results or without the benefit of historical or objective data (including air sampling, which clearly demonstrates that the employee cannot be exposed above the AL during any process, operation, or activity) the analysis of bulk or surface samples cannot be used to determine employee exposure." OSHA Standard Interpretation dated 5/8/2000.

Furthermore, Cal/OSHA states that these rules apply to "any detectable concentration of lead", without a specified detection level. Due to the Consumer Product Safety Commission currently allowing paint to contain up to 600 parts per million (ppm) of lead for residential consumption and no limits for industrial or commercial coatings, the variation of lead content due to aging and weathering, and the variation of detection limits associated with both paint chip and XRF analysis, all coated surfaces should be treated as potentially containing lead, unless bulk sample analysis indicates that no lead was detected. Positive analytical results can be utilized to indicate that detectable lead is present, but negative XRF results cannot be interpreted as conclusively demonstrating the absence of lead.

Analytical data can be helpful in evaluation of lead-related environmental risks in general but cannot be used to calculate worker exposures and are not a substitute for employee exposure monitoring. As a result of the above, any employee that works around potential lead-based or lead-containing coatings should have hazard communication training (lead awareness) training and personal exposure air monitoring if they will potentially disturb such coatings. Significant additional certification, notification, and work practices are required for materials found to be "lead-based" or where the operation or process involved results in airborne lead exposures exceeding the PEL.

- ❖ Any welding, cutting, or heating of metal surfaces containing surface coatings should be conducted in accordance with 29 CFR 1926.354 and 8 CCR 1537. These regulations require surfaces covered with toxic preservatives, and in enclosed areas, be stripped of all toxic coatings for a distance of at least 4 inches, in all directions, from the area of heat application prior to the initiation of such heat application. There are some provisions for conducting hot work on coated surfaces, but only with required respiratory protection such as properly selected supplied air respirators.
- ❖ **Cal/EPA** through the Division of Toxic Substance Control (DTSC) regulates disposal of lead hazardous waste (22 CCR Division 4.5, Minimum Standards for Management of Hazardous and Extremely Hazardous Wastes). It is the responsibility of the waste generator to evaluate all waste streams produced and ensure that any resulting wastes that may be hazardous under California and Federal RCRA standards for lead be properly handled, packaged

and transported under proper manifest to a permitted hazardous waste storage, treatment and disposal facility.

- ❖ **CDPH:** The Department of Public Health (DPH) has specific requirements (Title 17 Sections 35001 thru 36100) for hazard assessment and work involving lead-based paint (LBP) hazards in public or residential structures. These regulations require special certifications, work practices, and notifications for such activities.
- ❖ **Senate Bill 460 (SB 460):** An act to amend Section 1941.1 of the Civil Code, and to amend Sections 17961, 17980, and 124130 of, and to add Sections 17920.10, 105251, 105252, 105253, 105254, 105255, 105256, and 105257 to, the Health and Safety Code, relating to lead abatement. This bill allows for fines and criminal penalties to be levied on any person who is found to have performed lead abatement without containment or created a measurable lead hazard based upon current CDPH standards. The testing for this determination can be initiated by any local official. A determination of a lead hazard is not solely based upon the lead content of the paint or coating and can be the result of the disturbance of such materials with low concentrations of lead.
- ❖ **EPA Lead Renovation, Repair, and Paint Rule (40 CFR, Part 745):** Beginning in April 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination.

## **5.0 SURVEY LIMITATIONS**

The survey and bulk sampling was limited to representative locations of the building(s) that were explicitly defined by the Client to be surveyed. Similar materials found elsewhere within the site should be assumed to be the same unless specifically tested. Demolition inspection techniques were utilized during the survey. Demolition inspection techniques included penetrating wall cavities and coring the floor to the floor joists. Access into the housing unit attic space was limited to a few locations because there were no ceiling access hatches and the attic could not be accessed from the roof vents on the side walls.

Additional suspect materials and/or debris may be present in concealed spaces including, but not limited to, above-ceiling areas, within wall cavities, and beneath floor coverings, but will only be accessible during the course of demolition activities. Care should be exercised when accessing these areas. Any suspect environmentally-regulated materials (ERMs) encountered during the course of demolition/renovation activities that were not previously sampled, including ERMs not specifically addressed herein, should be *presumed* to be ACMs/ACCMs and LCMs until sampled and proven otherwise. The areas that were accessible should be representative of the types, quantities, and conditions of the materials present at the site. Quantities presented in this report are for informational purposes only and should not be the sole basis for an estimate for abatement. Contractors should verify and conduct their own takeoffs for their purposes.

This report has been prepared by Citadel Environmental Services, Inc. exclusively for our Client and their Authorized Representatives. The information contained herein pertains only to accessible materials identified at the referenced property at the time of the survey performed in accordance with a mutually agreed upon scope of work. The findings and recommendations presented are based upon observations of present conditions, and may not necessarily indicate future conditions. Citadel Environmental Services, Inc. implies no warranty to the accuracy of information provided them by outside agents and transmitted herein. The information contained herein may not be used, disclosed, or copied without written permission of the Client.



This survey report is not intended to be a stand-alone design document for the solicitation of bids. This survey report should only be used for developing the scope of work, bid/contract document, and as a reference document.

## **6.0 SIGNATURES**

Services performed by:

[Refer to project documentation for signature]

Joshua Hoover  
Certified Site Surveillance Technician (No. 14-5288)  
Lead-Related Construction Sampling Technician (LRCST 26885)

Juan Magallon  
Certified Site Surveillance Technician (No. 15-5358)  
Lead-Related Construction Sampling Technician (LRCST 26502)

Report Prepared by:

Jack Samuels  
Certified Asbestos Consultant (No. 92-0475)  
Lead-Related Construction Inspector/Assessor and Project Monitor (LRCIA/PM 5380)

Report Reviewed by:

Kier DeLeo, CHMM

Attachments



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix A**

## **Project Team Certifications**

## CERTIFICATIONS

<b>INSPECTOR</b>	Joshua E Hoover
<b>CERTIFICATION</b>	Certified Site Surveillance Technician
<b>CERTIFIED BY</b>	State of California Division of Occupational Safety and Health
<b>CERTIFICATION NUMBER</b>	14-5288
<b>EXPIRATION DATE</b>	09/10/18



<b>INSPECTOR</b>	Joshua E Hoover
<b>CERTIFICATION</b>	Lead-Related Sampling Technician
<b>CERTIFIED BY</b>	State of California Department of Public Health
<b>CERTIFICATION NUMBER</b>	26885
<b>EXPIRATION DATE</b>	09/10/18



## CERTIFICATIONS

<b>INSPECTOR</b>	Juan R Magallon
<b>CERTIFICATION</b>	Certified Site Surveillance Technician
<b>CERTIFIED BY</b>	State of California Division of Occupational Safety and Health
<b>CERTIFICATION NUMBER</b>	15-5358
<b>EXPIRATION DATE</b>	03/17/19



<b>INSPECTOR</b>	Juan R Magallon
<b>CERTIFICATION</b>	Lead-Related Sampling Technician
<b>CERTIFIED BY</b>	State of California Department of Public Health
<b>CERTIFICATION NUMBER</b>	26502
<b>EXPIRATION DATE</b>	07/03/18



## CERTIFICATIONS

<b>INSPECTOR</b>	Jack Simmons Samuels
<b>CERTIFICATION</b>	Certified Asbestos Consultant
<b>CERTIFIED BY</b>	State of California Division of Occupational Safety and Health
<b>CERTIFICATION NUMBER</b>	92-0475
<b>EXPIRATION DATE</b>	01/07/19



<b>INSPECTOR</b>	Jack Simmons Samuels
<b>CERTIFICATION</b>	Lead-Related Inspector/Assessor Supervisor Project Monitor
<b>CERTIFIED BY</b>	State of California Department of Public Health
<b>CERTIFICATION NUMBER</b>	5380
<b>EXPIRATION DATE</b>	03/11/19





**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix B**

## **Drawings with Bulk Sample Locations**

*HOUSING UNITS*



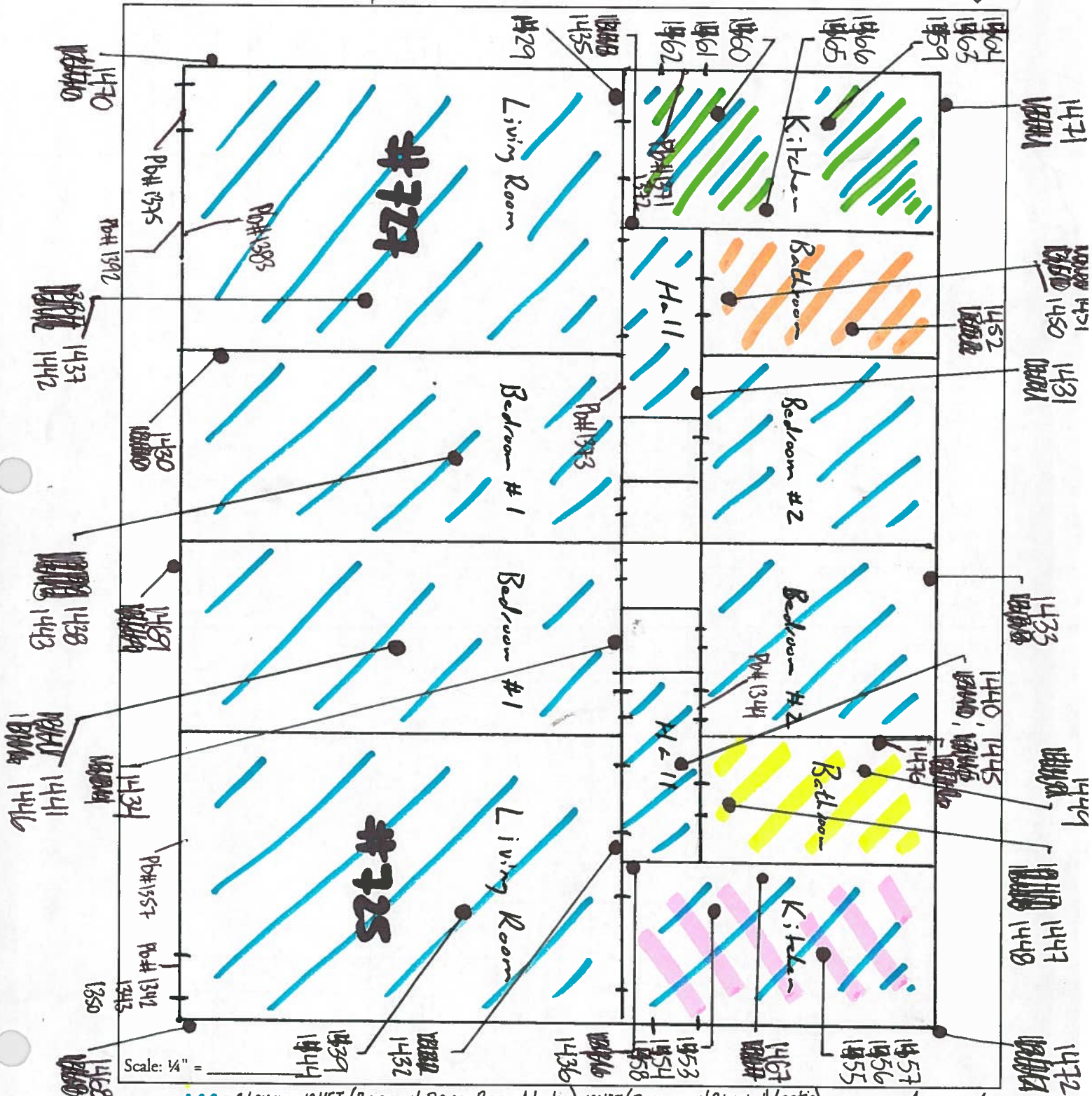
*CITADEL ENVIRONMENTAL SERVICES, INC.*



Inspector: J. Magallon  
 Date: 08-01-18  
 Drawing Title: Grape St - 725/727  
 Street Address: UCR - Grape St.



Client: Haley & Aldrich  
 Project #: 7096.1017.0  
 Project Title: UCR Canyon Crest Housing  
 Floor: 1st

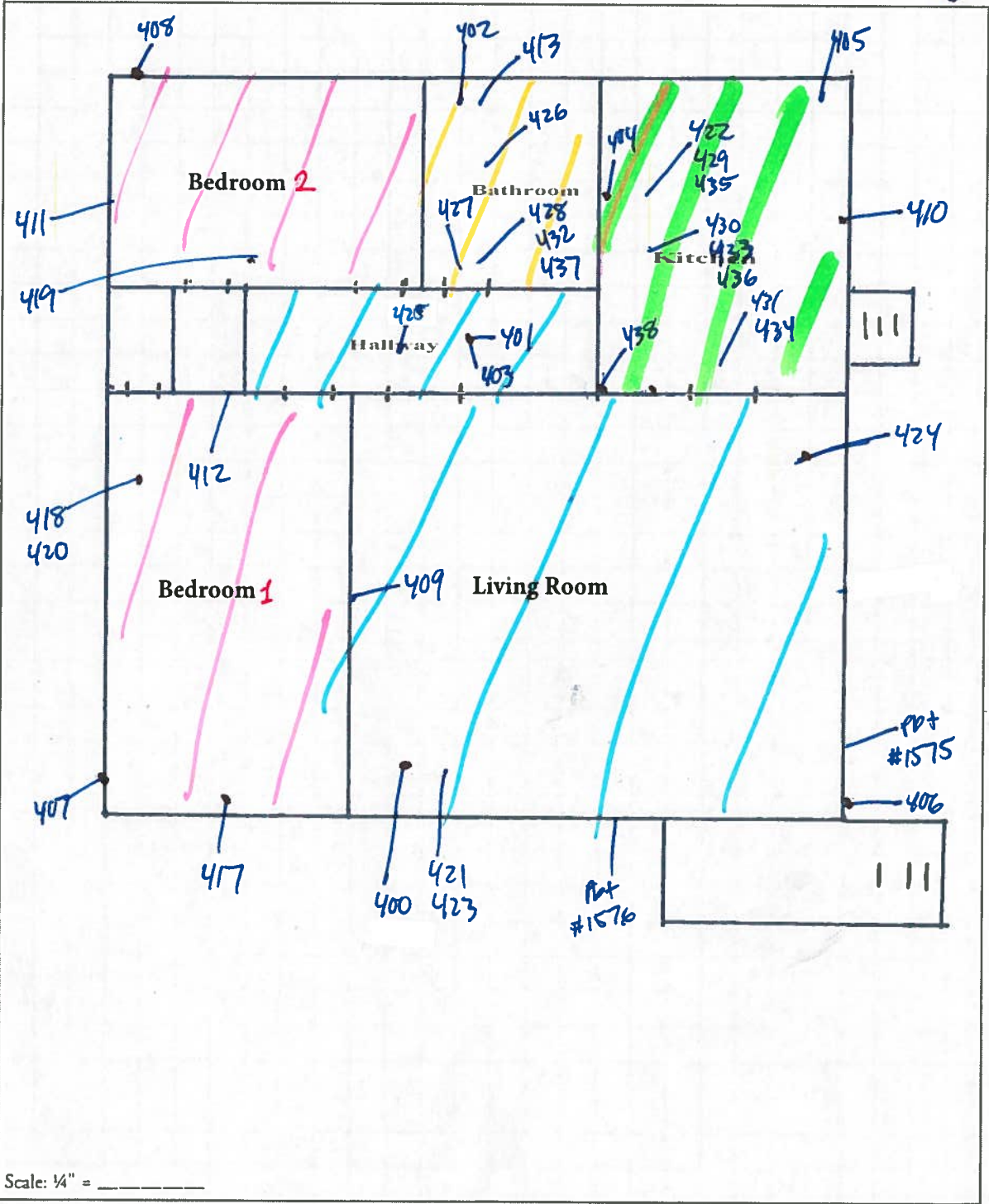


- Legend:
- = 2 Layers - 12VFT (Beige w/ Specs, Beige Mastic), 12VFT (Brown, w/ Black Mastic)
  - = VSF (White Small Rectangles)
  - = 2 Layers - VSF (White w/ Brown Design), 12VFT (Green w/ Black Mastic)
  - = VSF (6" Square Sheet Flooring)
  - = 2 Layers - VSF (Beige w/ Green Flower), 12VFT (Tan w/ Red Blue Spec Black Mastic)

Inspector: JOSH HOOPER  
 Date: \_\_\_\_\_  
 Drawing Title: \_\_\_\_\_  
 Street Address: 766 GRAPE ST



Client: \_\_\_\_\_  
 Project #: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

- /// 12VFT 1 w/YELLOW MASTIC, 12VFT 3 w/BLACK MASTIC + VAPOR BARRIER
- /// 12VFT 2 w/YELLOW MASTIC, 12VFT 3 w/BLACK MASTIC + VAPOR BARRIER
- /// - VSF 1 w/YELLOW MASTIC, 12VFT 3 w/BLACK MASTIC, VSF 9 w/YELLOW MASTIC, VSF 6 w/BROWN MASTIC
- /// - VSF 2 w/YELLOW MASTIC, VSF 9 w/YELLOW MASTIC, 12VFT 3 w/BLACK MASTIC, VSF 6 w/BROWN MASTIC

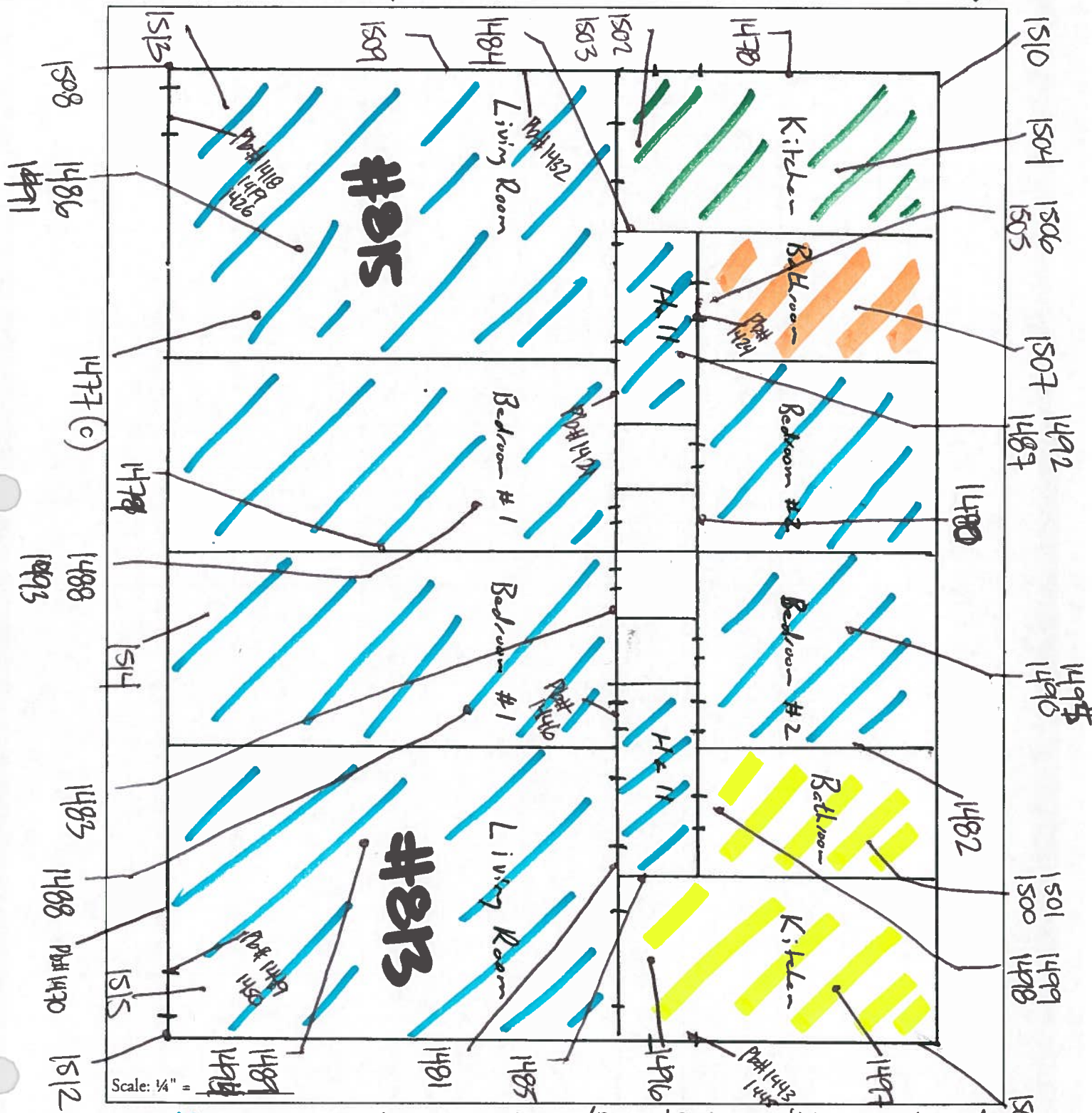
Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Magallon  
 Date: 08-02-18  
 Drawing Title: Grape St. 813/815  
 Street Address: UCP - Grape St.



**CITADEL**  
 ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich  
 Project #: 7076.1017.0  
 Project Title: UCP Canyon Crest  
 Floor: 1st



Scale: 1/4" =

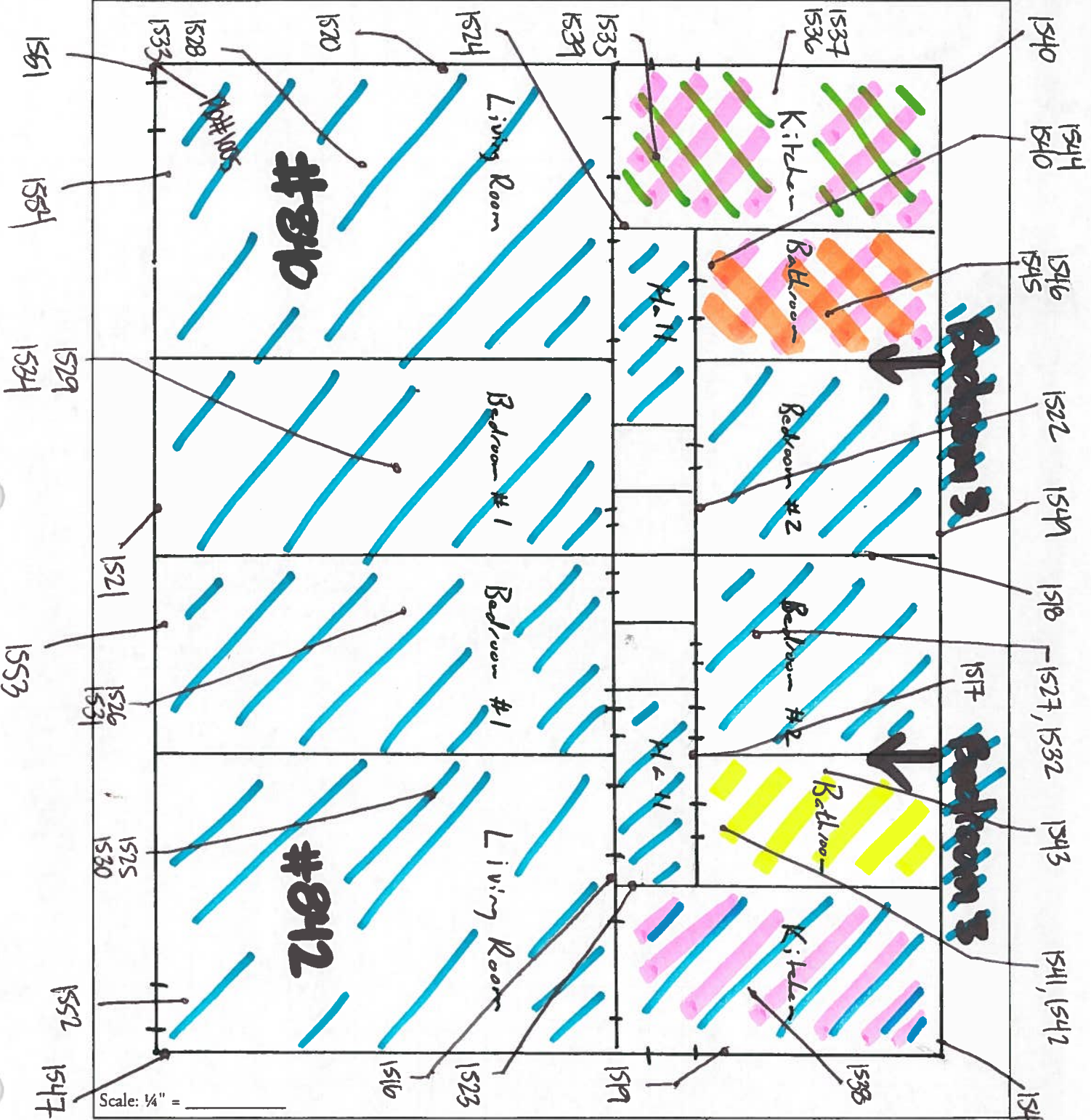
- Legend:
- = 2 layers - 12" Beige w/ Specs, Beige Mastic, 12VFT (Brown w/ Black Mastic)
  - = VSF (Small Triangle Sheet Floor)
  - = VSF (6" Square Sheet Floor)
  - = VSF (Small Rectangle Sheet Floor)

Inspector: J. Magallon  
 Date: 08-02-18  
 Drawing Title: Grape St. 840/842 (offset)  
 Street Address: \_\_\_\_\_



**CITADEL**  
 ENVIRONMENTAL SERVICES, INC.

Client: Halley & Abbrich  
 Project #: 7076-1017.0  
 Project Title: UCR Canyon Crest  
 Floor: 1st



Legend: = 2 layers · 12VFT (Berbe w/Specs), 12VFT (Brown w/ Black Mastic & Vapor)

= VSF Bottom Layer: Yellow (Flower Sheet Flooring)

= VSF (6\"/>

= VSF (Rectangle Sheet Flooring)

= VSF (Triangle Sheet Flooring)

Sheet No. 1 of 1

Scale: 1/4" = \_\_\_\_\_

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 860 GRAPE



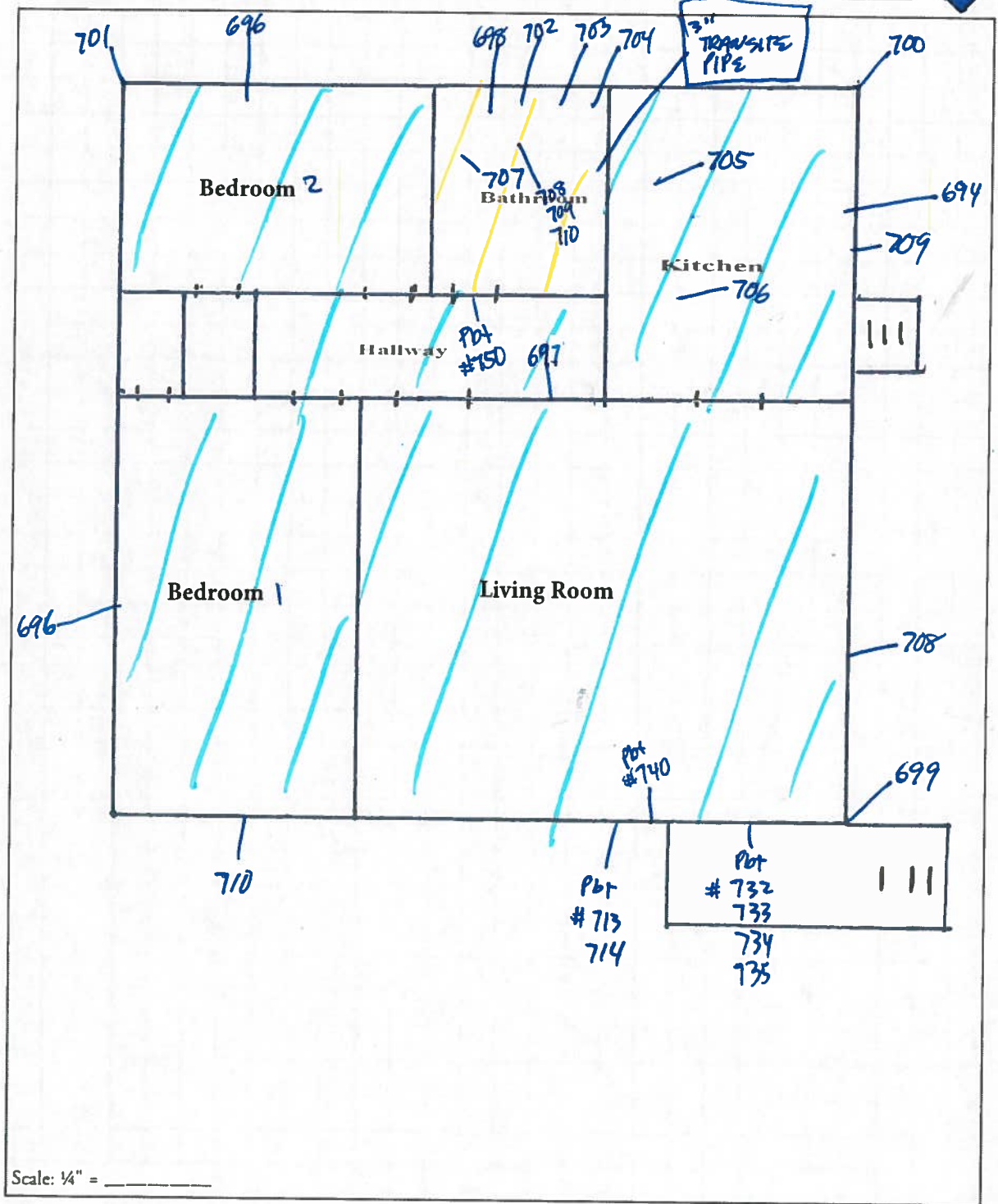
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

/// - Vsf 2 w/ yellow mastic

/// - 12VFTZ

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. HOONER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 873 GRAPE



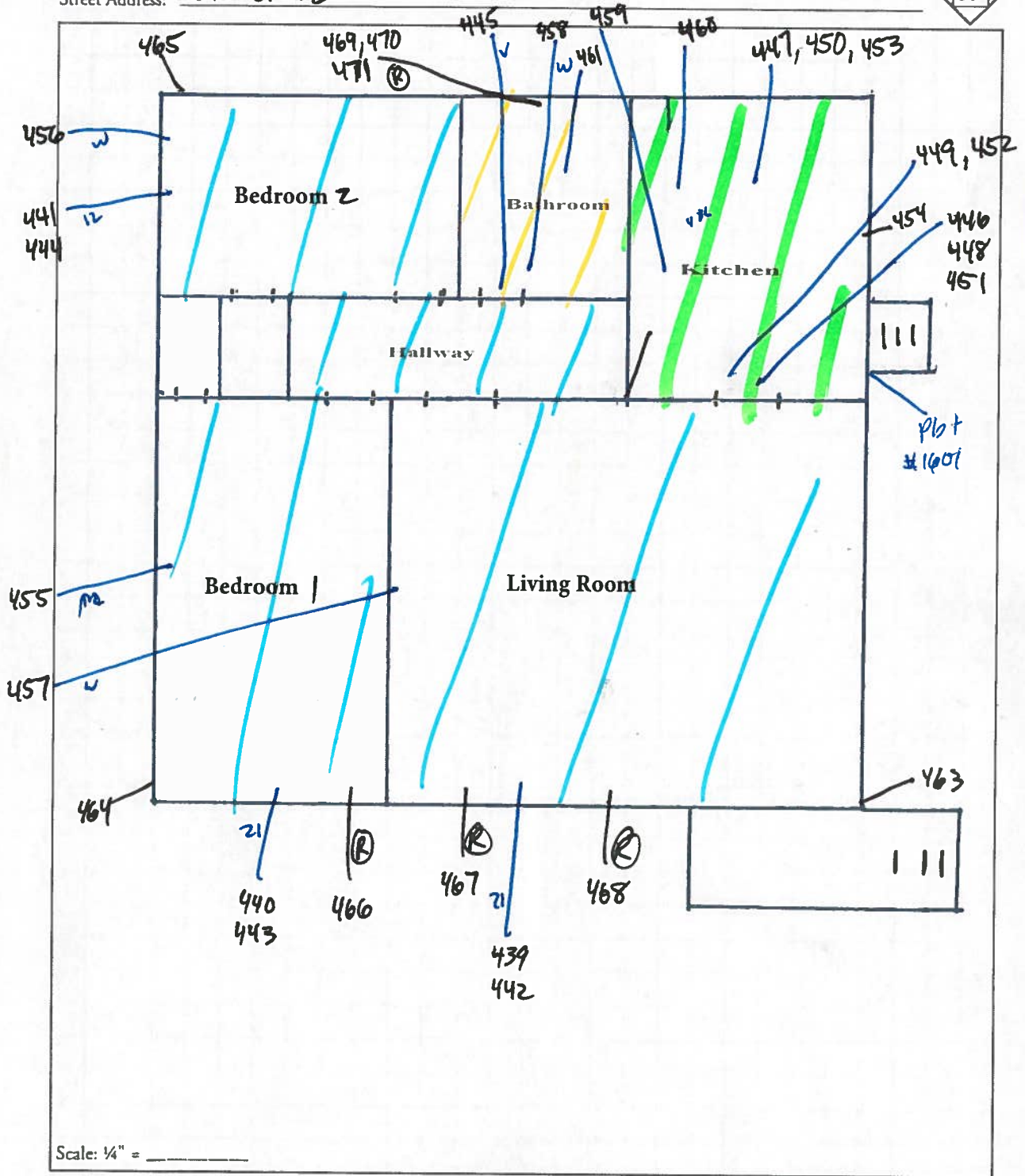
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

- VSF 5 w/ yellow mastic, 12VFT 2 w/ yellow mastic, VSF 3 w/ yellow mastic, VSF 8 w/ yellow mastic
- 12VFT 2 w/ yellow mastic mastic, 12VFT 3 w/ black mastic + vapor barrier
- VSF 5 w/ yellow mastic

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

yellow mastic + vapor barrier

Inspector: J. Magallon

Date: 08-23-18

Drawing Title: Avocado St - 3401 / 3403

Street Address: UCR - Canyon Crest



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley Aldrich

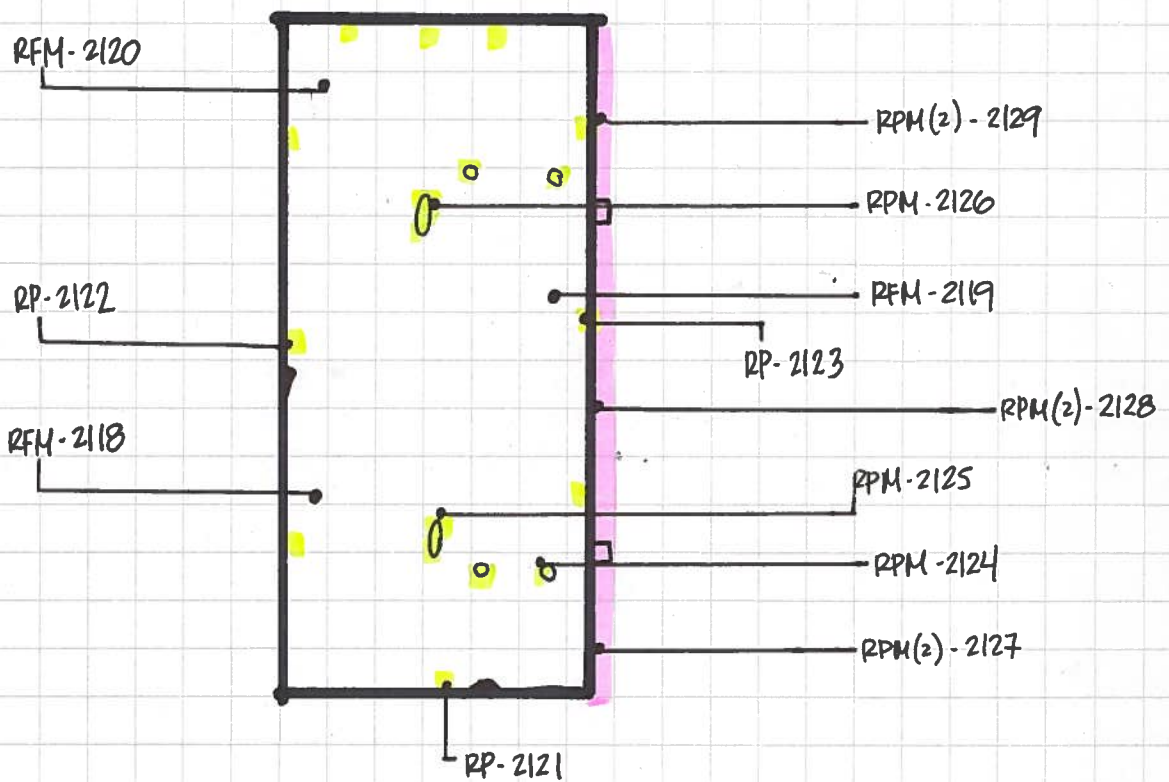
Project #: 7096-1017-0

Project Title: UCR - Canyon Crest

Floor: Roof



# DUPLEX - FLAT ROOF



= RPM (Grey)  
 = RPM (White)

Scale: 1/4" =

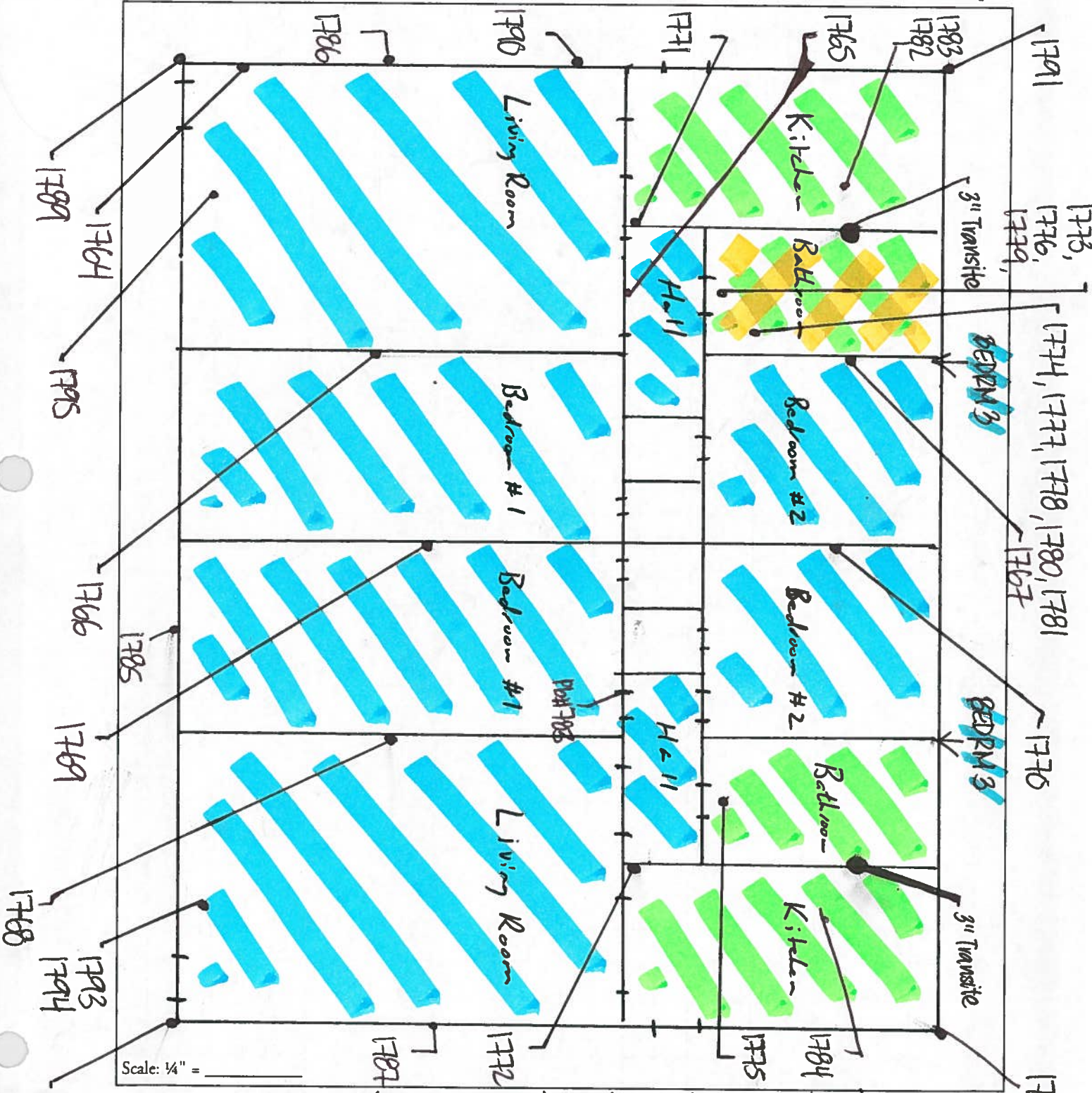
Legend:

Sheet No. 1 of 1

Inspector: J. Magallon  
 Date: 08.14.18  
 Drawing Title: Avacado St - 3411 / 3413  
 Street Address: 1 UCR - Avacado St.



Client: Hailey & Aldrich  
 Project #: 7076.7017.0  
 Project Title: UCR - Canyon Crest  
 Floor: 1st



Scale: 1/4" = \_\_\_\_\_

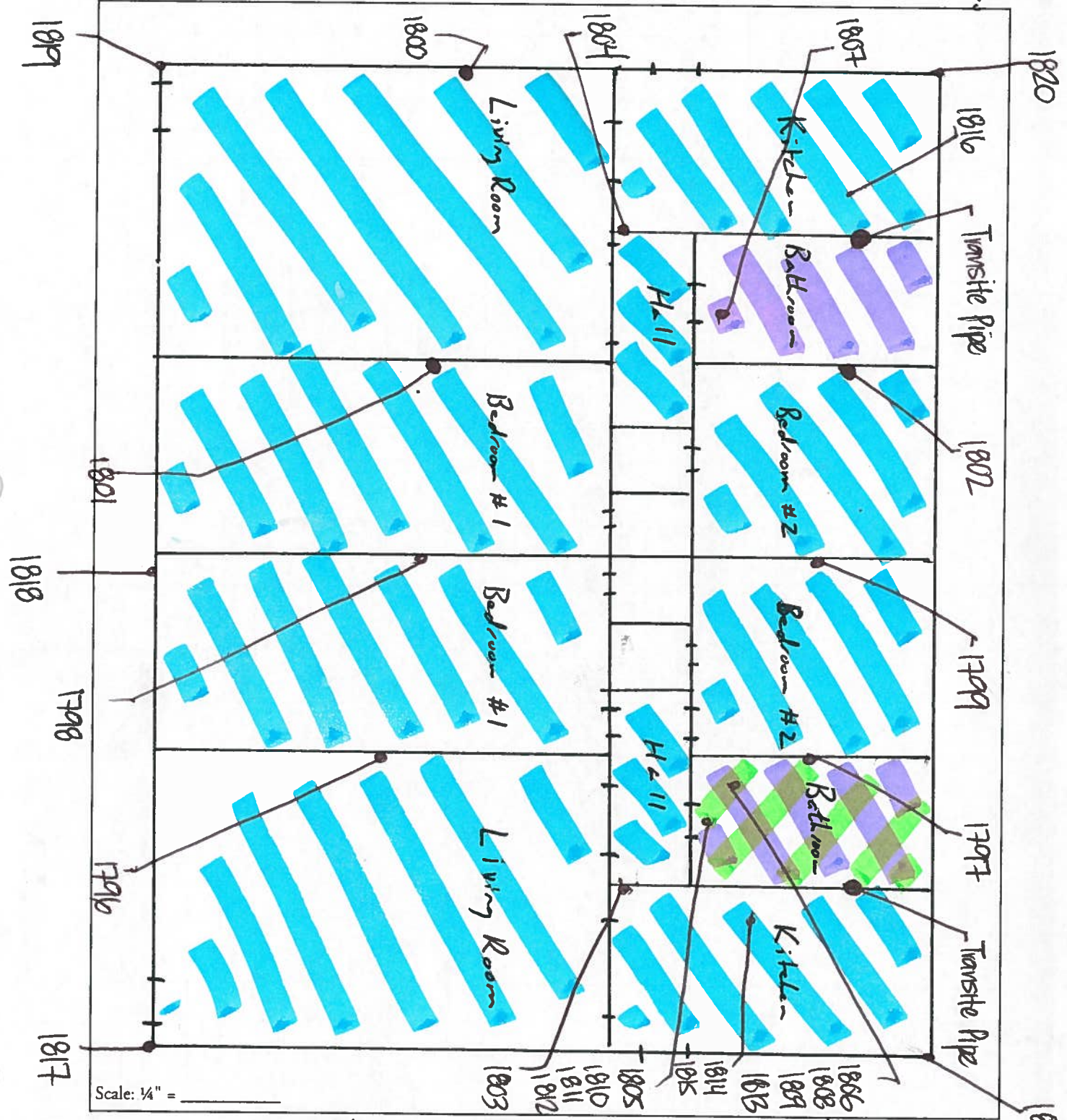
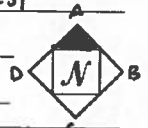
- Legend:
- = 2 Layers · 1/2VFT (Beige w/ Beige Mastic), 1/2VFT (Brown w/ Black Mastic & Vapor)
  - = VSF (White 6" Square Sheet Flooring w/ Beige Mastic)
  - = 2 Layers · VSF (Beige w/ Beige Mastic), VSF (Green w/ Black Mastic & Vapor)



Inspector: J. Magallon  
 Date: 08.14.18  
 Drawing Title: Avacado St. 3422 / 3424  
 Street Address: UCR - Avacado St.



Client: Haley & Aldrich  
 Project #: 7076.1017.0  
 Project Title: UCR - Canyon Crest  
 Floor: 1st



Scale: 1/4" = \_\_\_\_\_

- Legend:
- = 2 layers · 12VF (Beige w/Specs, Beige Mastic), 12VF1 (Brown w/ Black Mastic)
  - = VSF (Small Triangle Sheet Flooring)
  - = Vapor Barrier Paper.



Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3452 AVOCADO



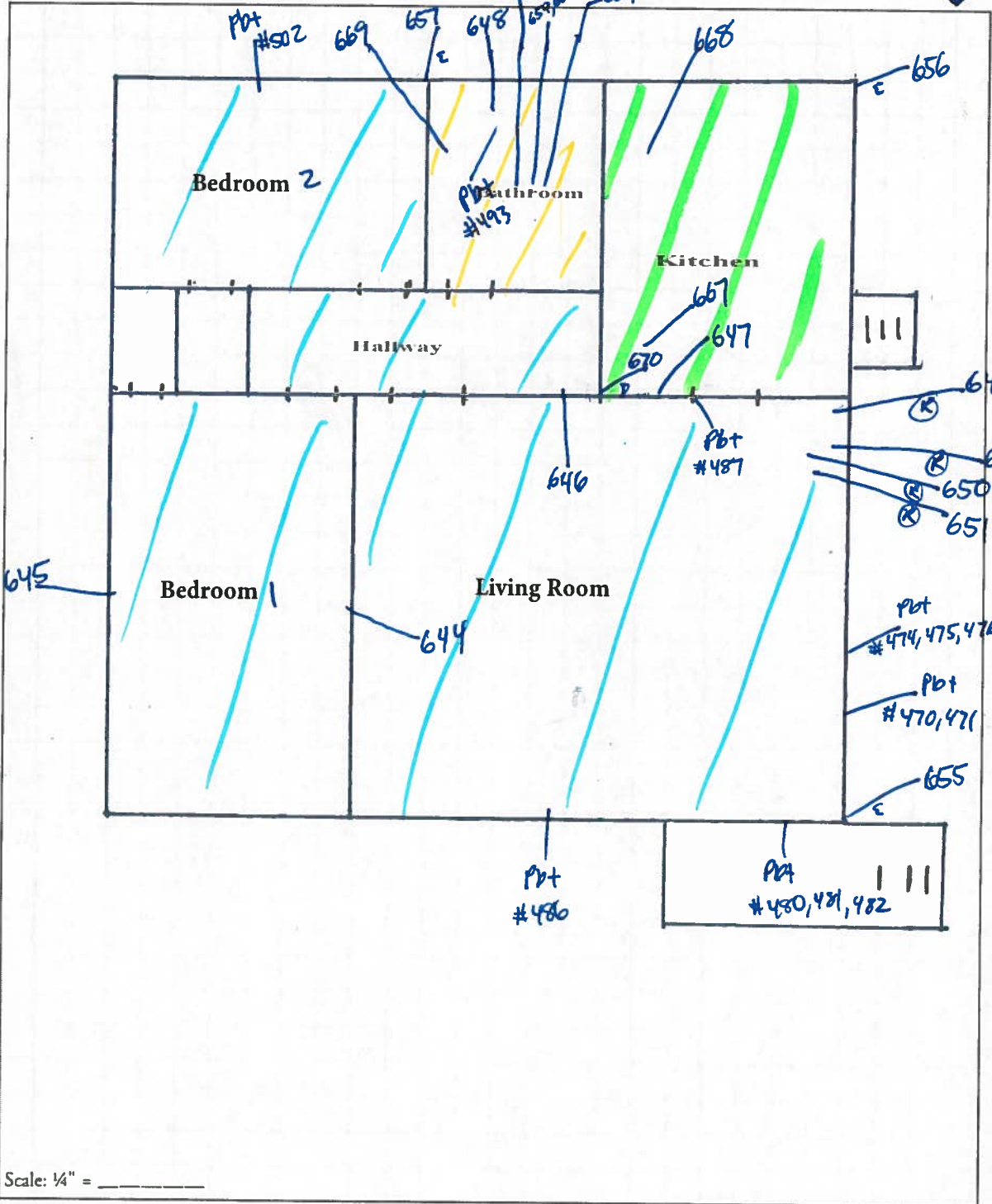
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Legend:

- V5F2

- 12VFT 2

- 12VFT 1 w/ yellow mastic + V5F1 V57 w/ yellow mastic + vapor barrier + 9VFT 2 w/ black mastic + vapor barrier + insulation

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Magallon

Date: 08-15-18

Drawing Title: Acavado St. 3459/3461 **CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Street Address: UCP - Acavado St.

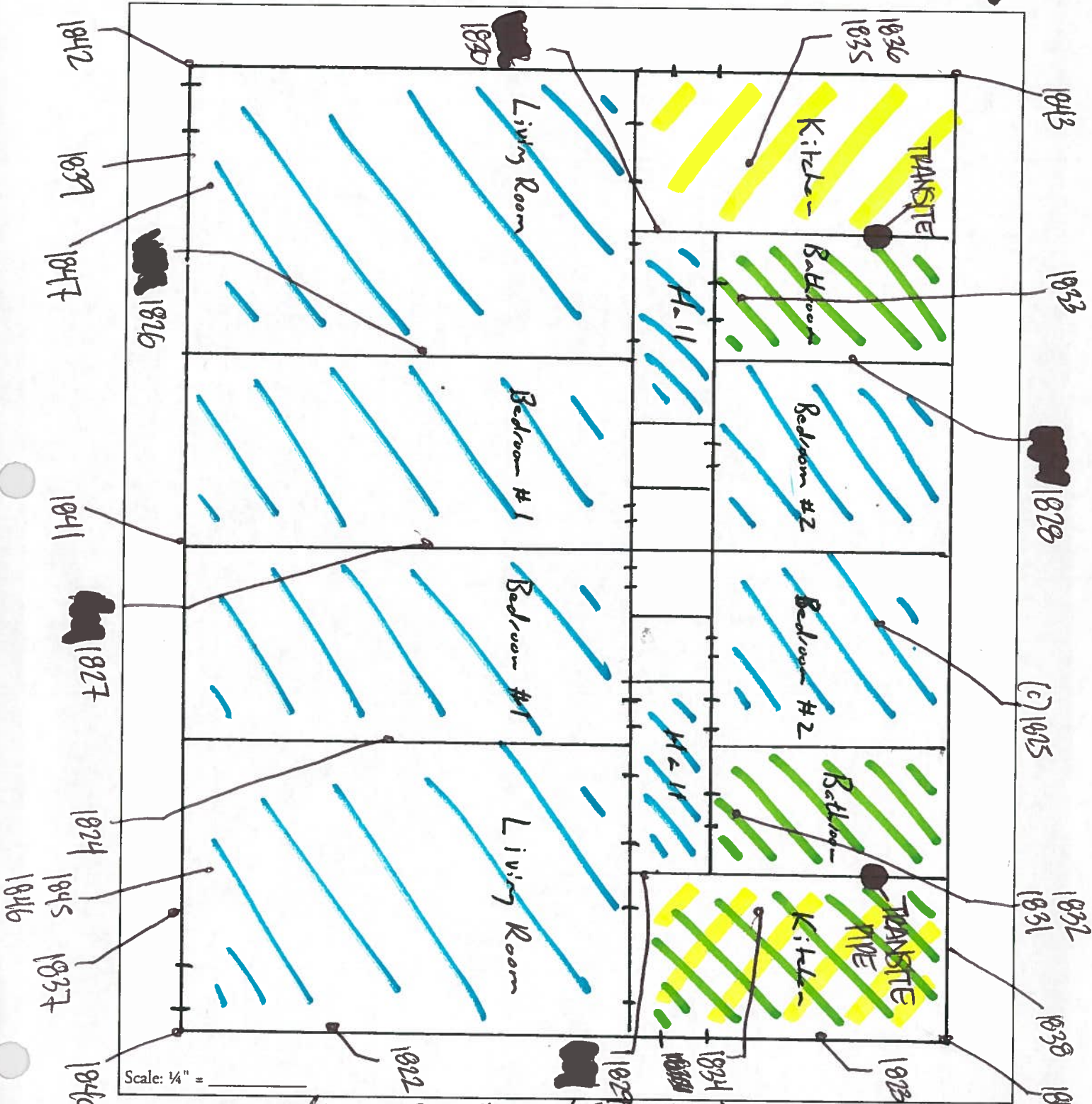


Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCP - Canyon Crest

Floor: 1st



Scale: 1/4" =

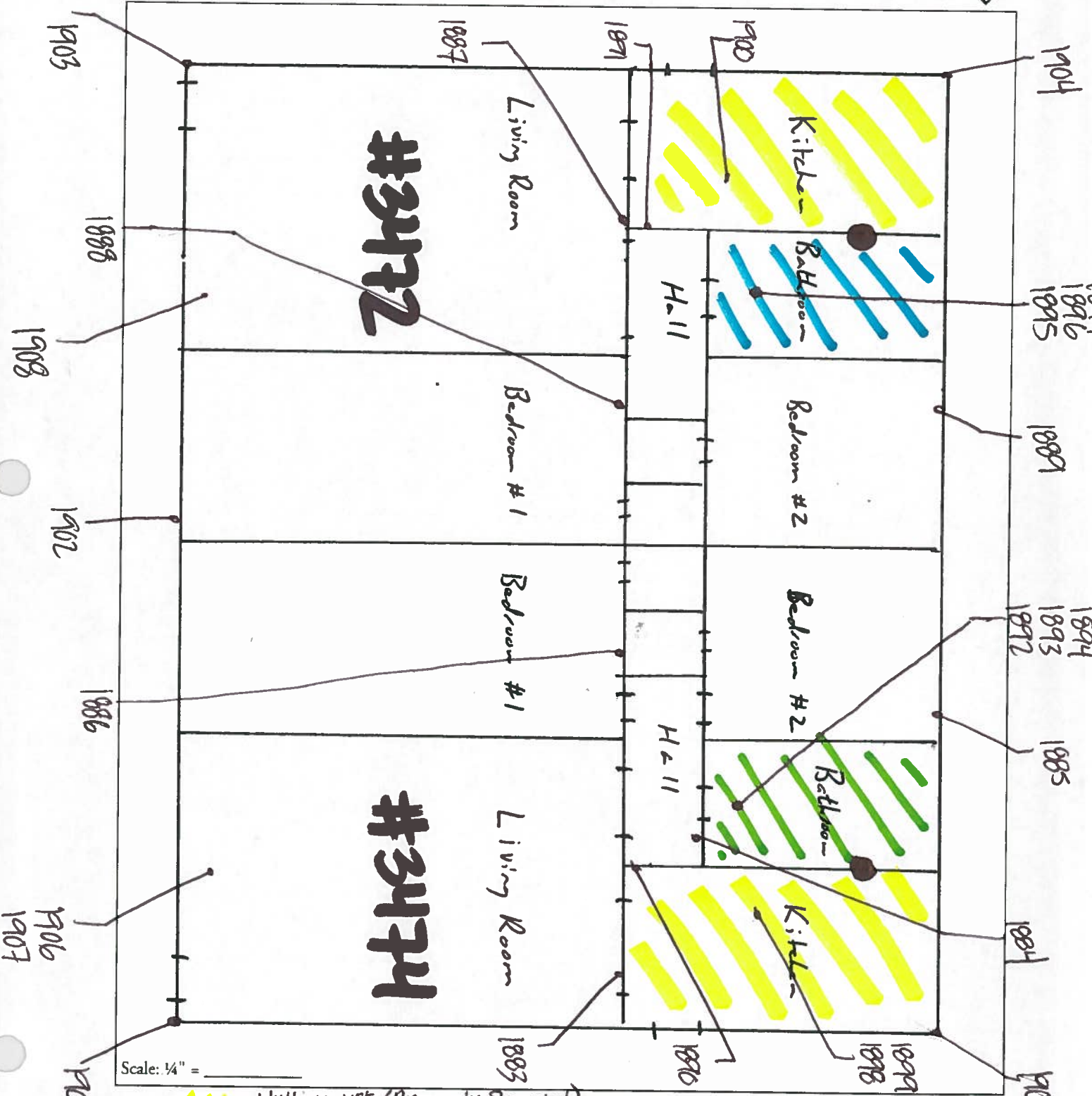
- Legend:
- = VSF (6" Square Sheet Flooring w/ Beige Mastic)
  - = 2 Layers (Previously Sampled)
  - = Multiple Layers (VSF) (Previously Sampled)

Inspector: J. Magallon  
 Date: 08-15-18  
 Drawing Title: Avacado St. 3472/3474  
 Street Address: UCR Avacado St.



**CITADEL**  
 ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich  
 Project #: 7076 10170  
 Project Title: UCR Canyon Crest  
 Floor: 1st



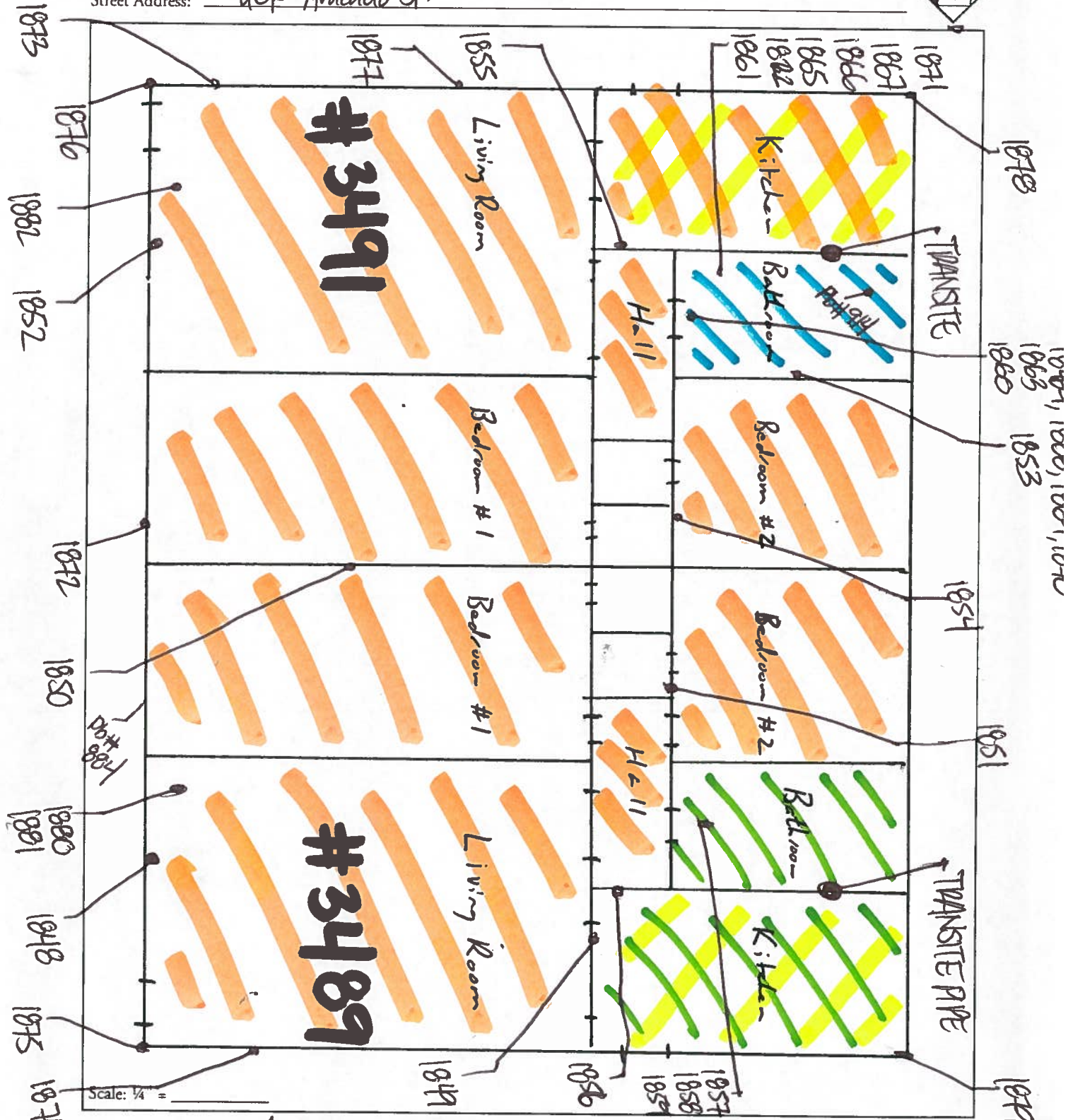
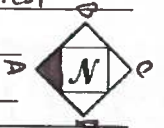
- Scale: 1/4" = \_\_\_\_\_
- Legend:
- = Multiple VSF (Previously Sampled)
  - = VSF (Small Rectangles Sheet Flooring w/ Mastic ; Vapor Barrier)
  - = VSF (6" Square Sheet Flooring w/ Mastic)

Inspector: J. Magallon  
 Date: 08-15-18  
 Drawing Title: Avacado St. 3489 / 3491  
 Street Address: UCR - Avacado St.



**CITADEL**  
 ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich  
 Project #: 7076-1017.0  
 Project Title: UCR - Canyon Crest  
 Floor: 1st



Legend:   
 ■■■ = VSF (6" Square Sheet Flooring)   
 ■■■ = VSF (Small Triangle Sheet Floor)   
 ■■■ = 2 Layers - 12VFT (Previously Sampled)   
 ■■■ = Multiple VSF Layers (Previously Sampled)   
 Sheet No. 1 of 1

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 810 PEACH



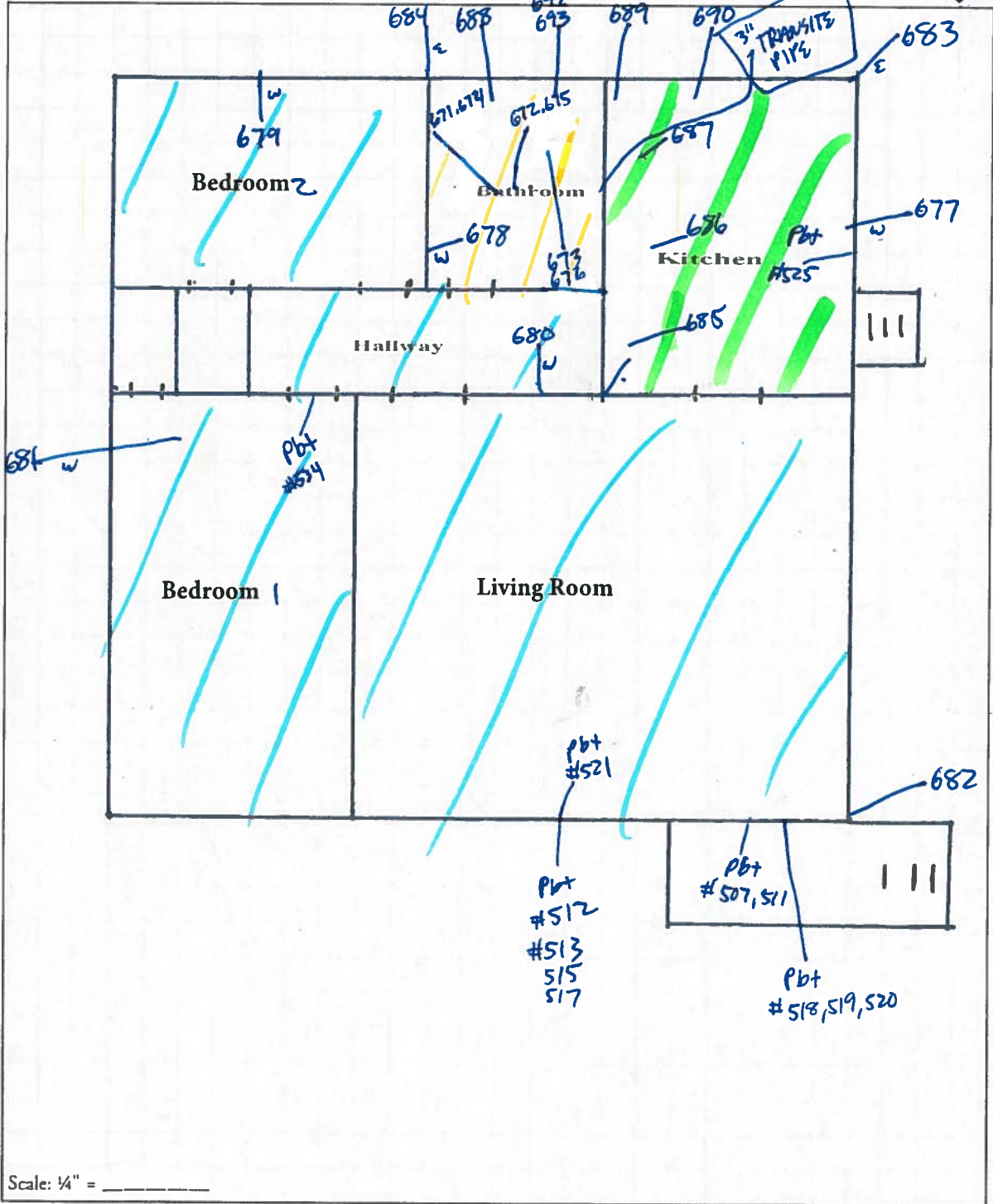
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

- VSF 1
- 12VPT 2
- 12VPT 2 w/ yellow mastic, VSF 3 w/ black mastic + vapor barrier

Sheet No. \_\_\_\_\_ of \_\_\_\_\_





Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3400 KENTUCKY



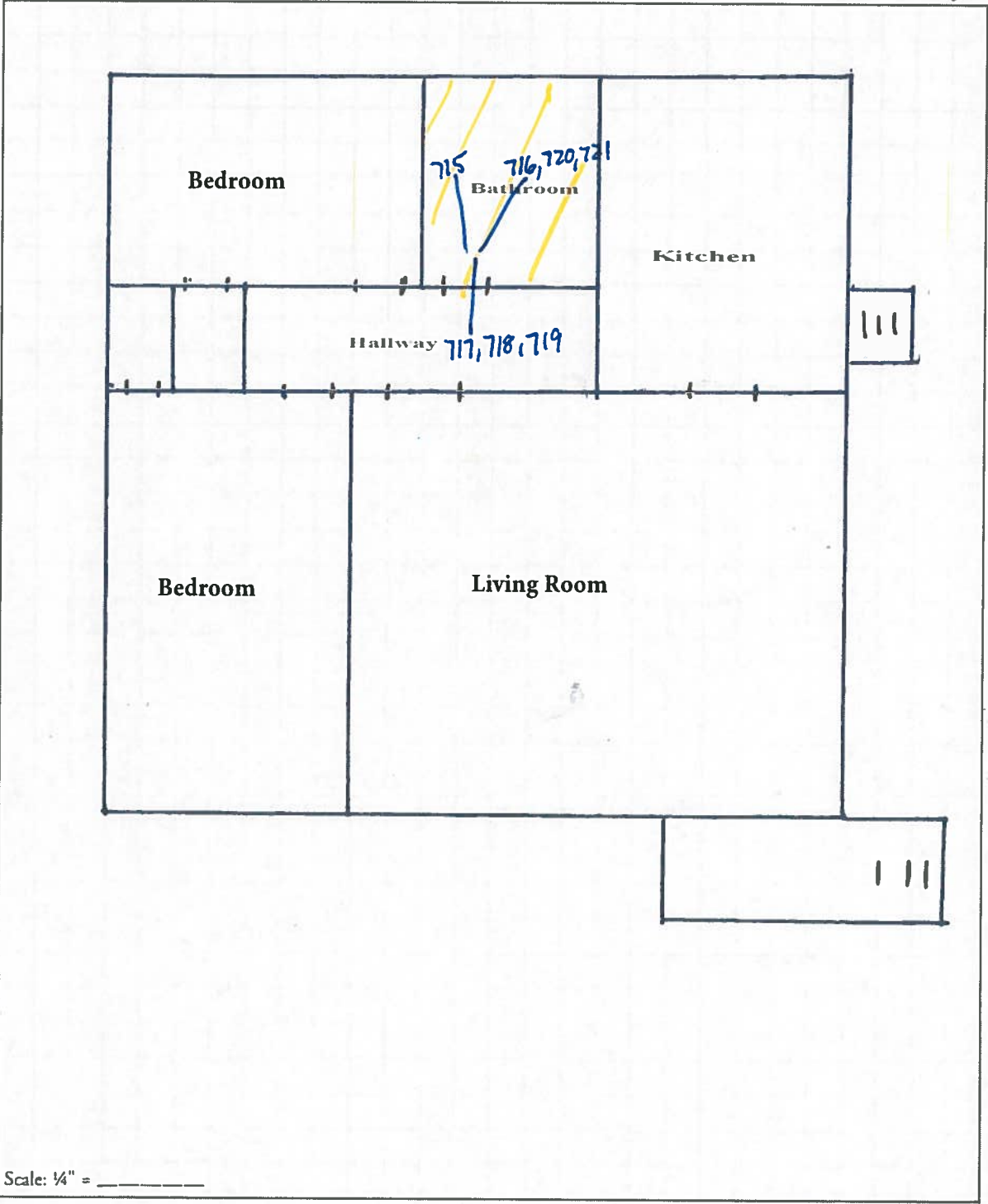
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

**///** - VSF 1 w/ BEIGE MASTIC, VSF 15 w/ WHITE MASTIC, VSF 14 w/ BLACK MASTIC + VAPOR BARRIER



Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: 3419 KENTUCKY

Street Address: \_\_\_\_\_



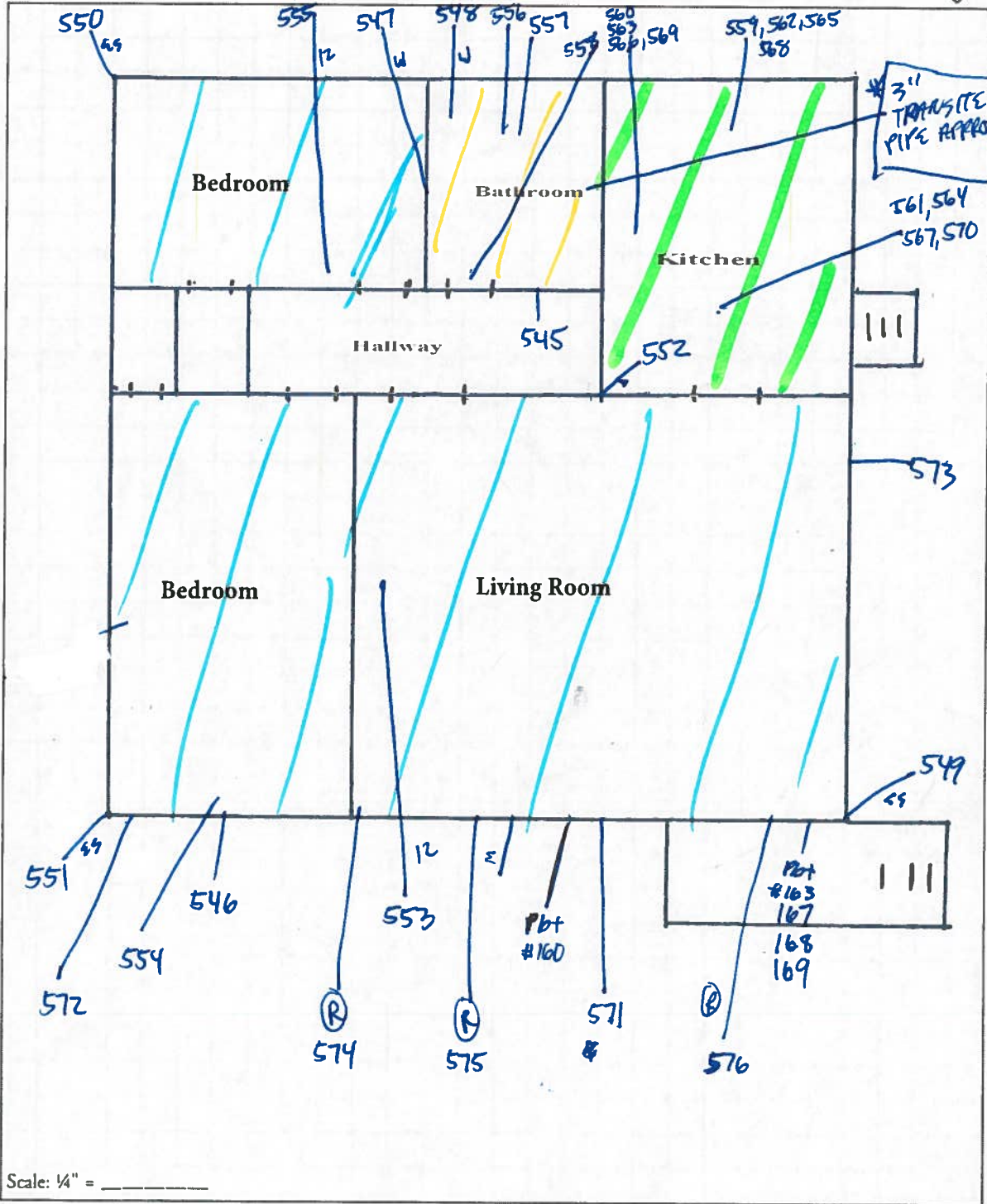
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_

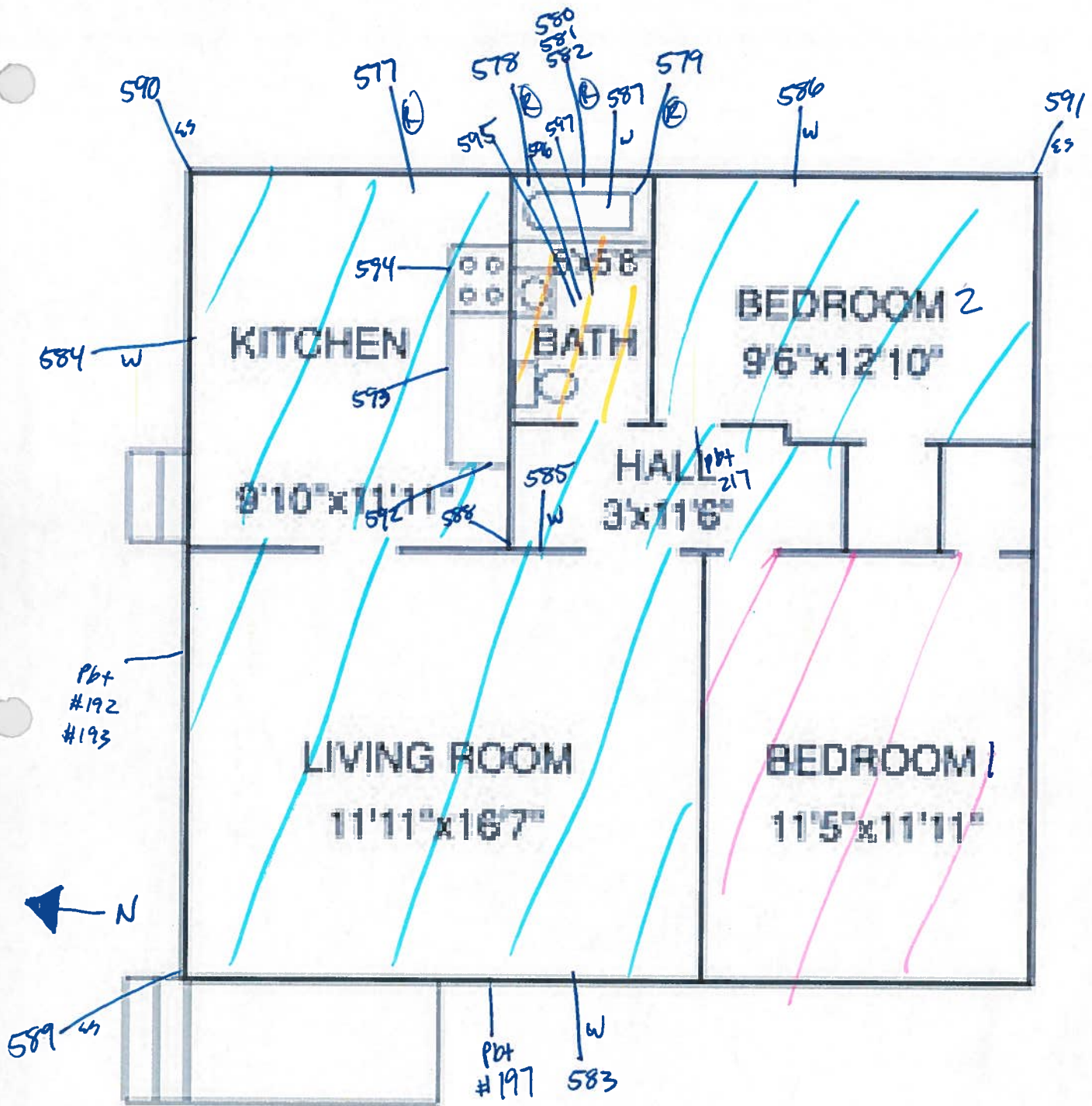


Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_ of \_\_\_\_

- 12VFT2 w/ yellow mastic, VSF 12 w/ yellow mastic, VSF 8 w/ blk mastic w/ vapor barrier
- VSF 13 w/ black
- 12VFT2 w/ yellow mastic, 12VFT3 w/ blk mastic + vapor barrier
- VSF 1 w/ yellow mastic



Address: 3434 KENTUCKY

Note: \_\_\_\_\_

- /// - 12VFT 1
- /// - 12VFT 2
- /// - VSF 1 w/ YELLOW MASTIC

Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3479 KENTUCKY



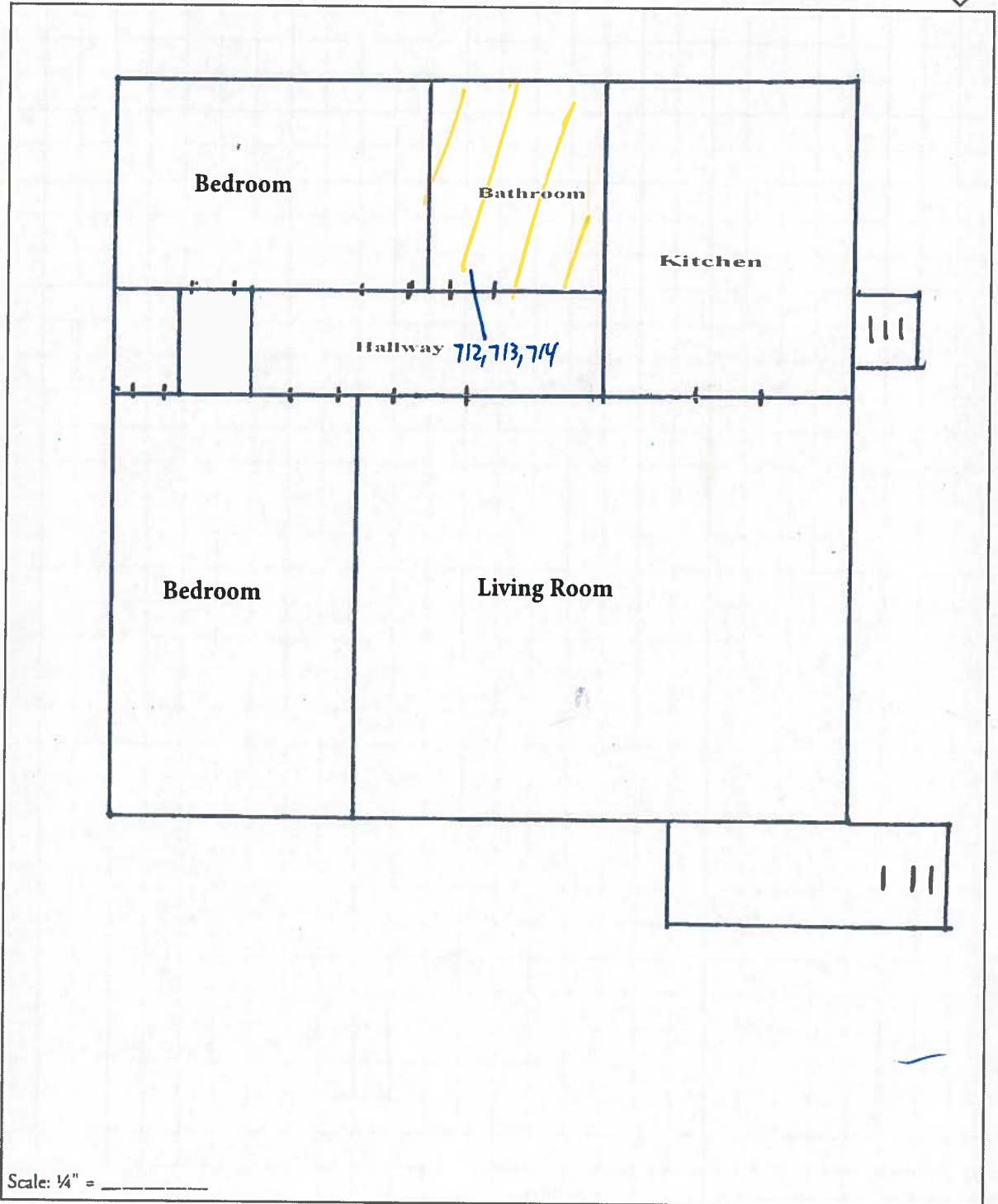
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Legend:

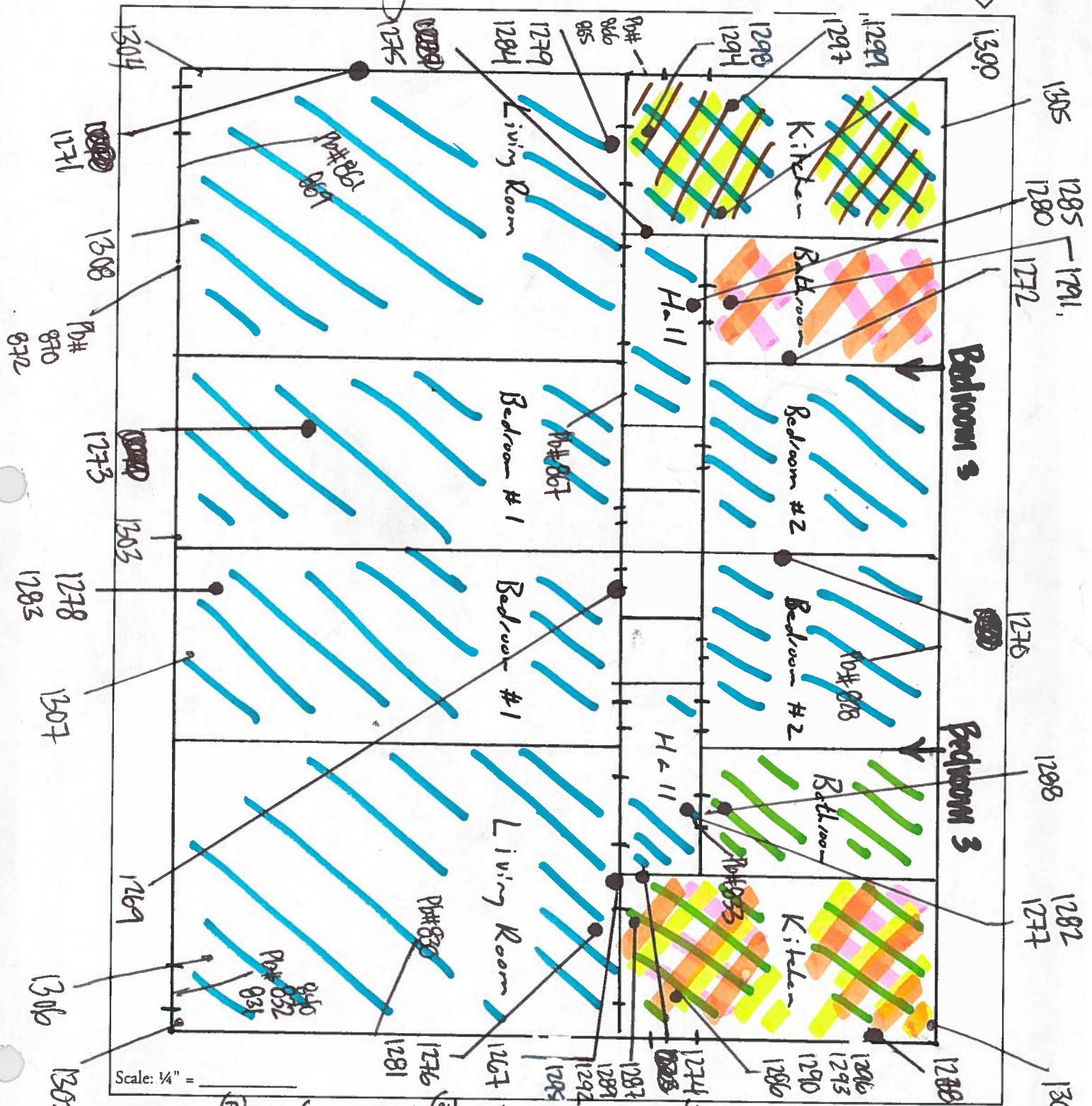
||| - VSF 2 w/ WHITE MASTIC, VSF 5 w/ BLACK MASTIC, BELLEVUE w/ BROWN PATTERN & GOLD SPECS  
 w/ BLK MASTIC + VAPOR BARRIER PAPER

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Magallon  
 Date: 07-30-18  
 Drawing Title: Kentucky St. 3400/8400  
 Street Address: 1002 Kentucky St.



Client: Haley Aldrich  
 Project #: 7016.10170  
 Project Title: UCP-Housing  
 Floor: 1st



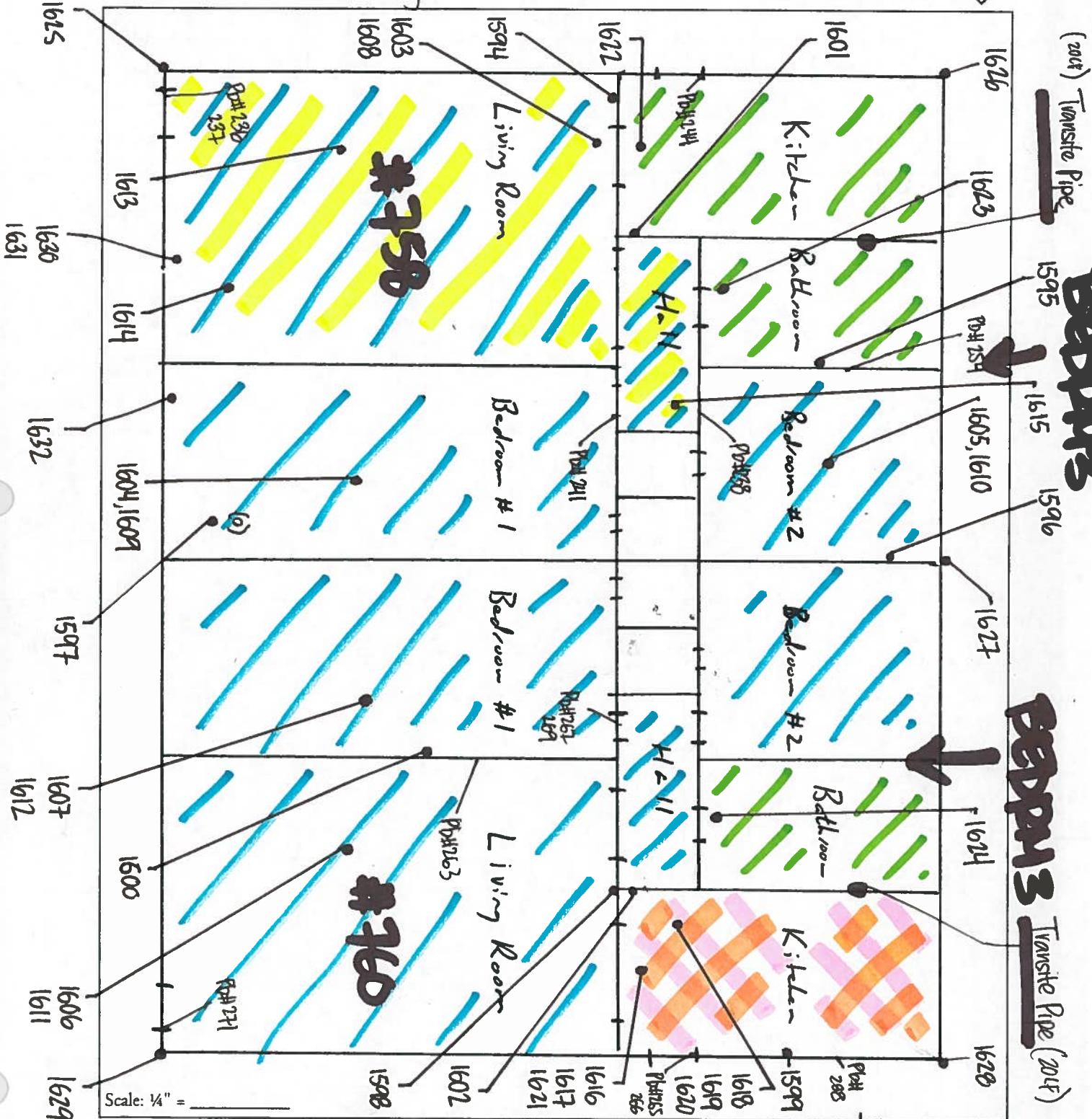
Scale: 1/4" =

- Legend:
- = 12VFT (Benzene) Specs, (64) 12VFT (Brown w/ Black H. Vapor)
  - = USF (6" Square Floor Sheeting)
  - = USF (Flower Floor Sheet)
  - = USF (Marble Floor Sheet)
  - = USF (Small Triangles Floor Sheet)
  - = USF (Base Floor Sheet)

Inspector: J. Magallon  
 Date: 08.08.18  
 Drawing Title: Blaine Alley - 758/760  
 Street Address: UCR - Blaine Alley



Client: Haley Aldrich  
 Project #: 7076.1017.0  
 Project Title: UCR - Canyon Crest  
 Floor: 1st



- Scale: 1/4" = \_\_\_\_\_
- Legend:
- ▬▬▬ = 2 layers - 12VFT (Beige w/ Specs Tile, Beige Mastic), 12VFT (Brown Tile, Black Mastic)
  - ▬▬▬ = VSF (White 6" Square Sheet Floor, Beige Mastic)
  - ▬▬▬ = VSF (White Small Triangle Sheet Floor, Beige Mastic)
  - ▬▬▬ = Top layer - 12VFT (White w/ Specs Tile, Beige Mastic)
  - ▬▬▬ = Bottom Layer - VSF (White, Plain Sheet Flooring w/ Vapor)
- Sheet No. 1 of 1

Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: 786 BLAINE

Street Address: \_\_\_\_\_



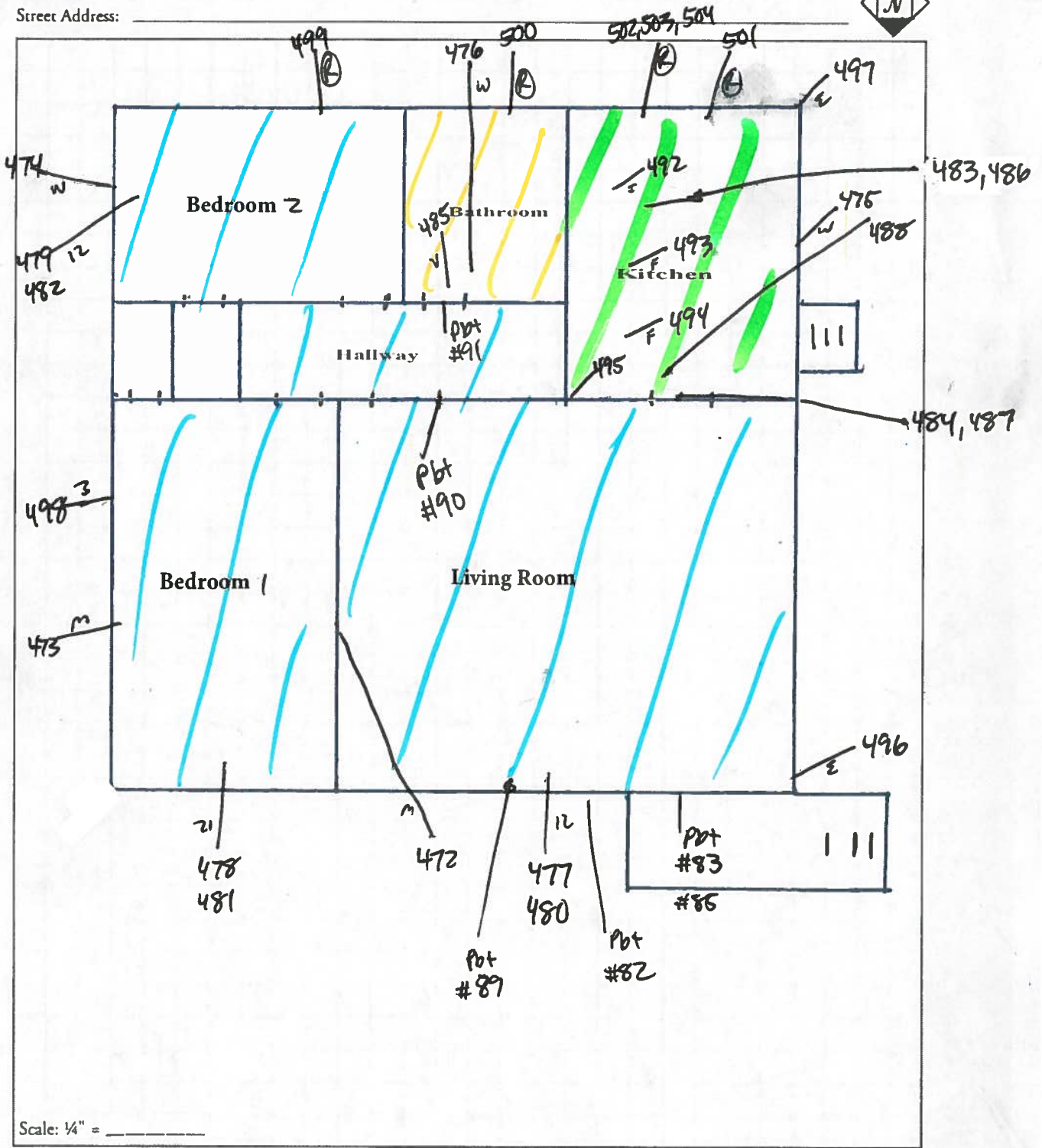
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Legend:

Sheet No. \_\_\_\_ of \_\_\_\_

- ||| - VSF 11 w/yellow mastic, 12VPT2 w/yellow mastic, VSF 3 w/mastic, VSF 8 w/blk mastic + <sup>UPPER</sup> ~~BARREL~~
- ||| - 12VPT 2 w/yellow mastic, 12VPT 3 w/blk mastic
- ||| - VSF 11 w/yellow mastic



Inspector: J. Magallon

Date: 08-07-18

Drawing Title: Blaine Alley - 876/878

Street Address: UCP - Blaine Alley



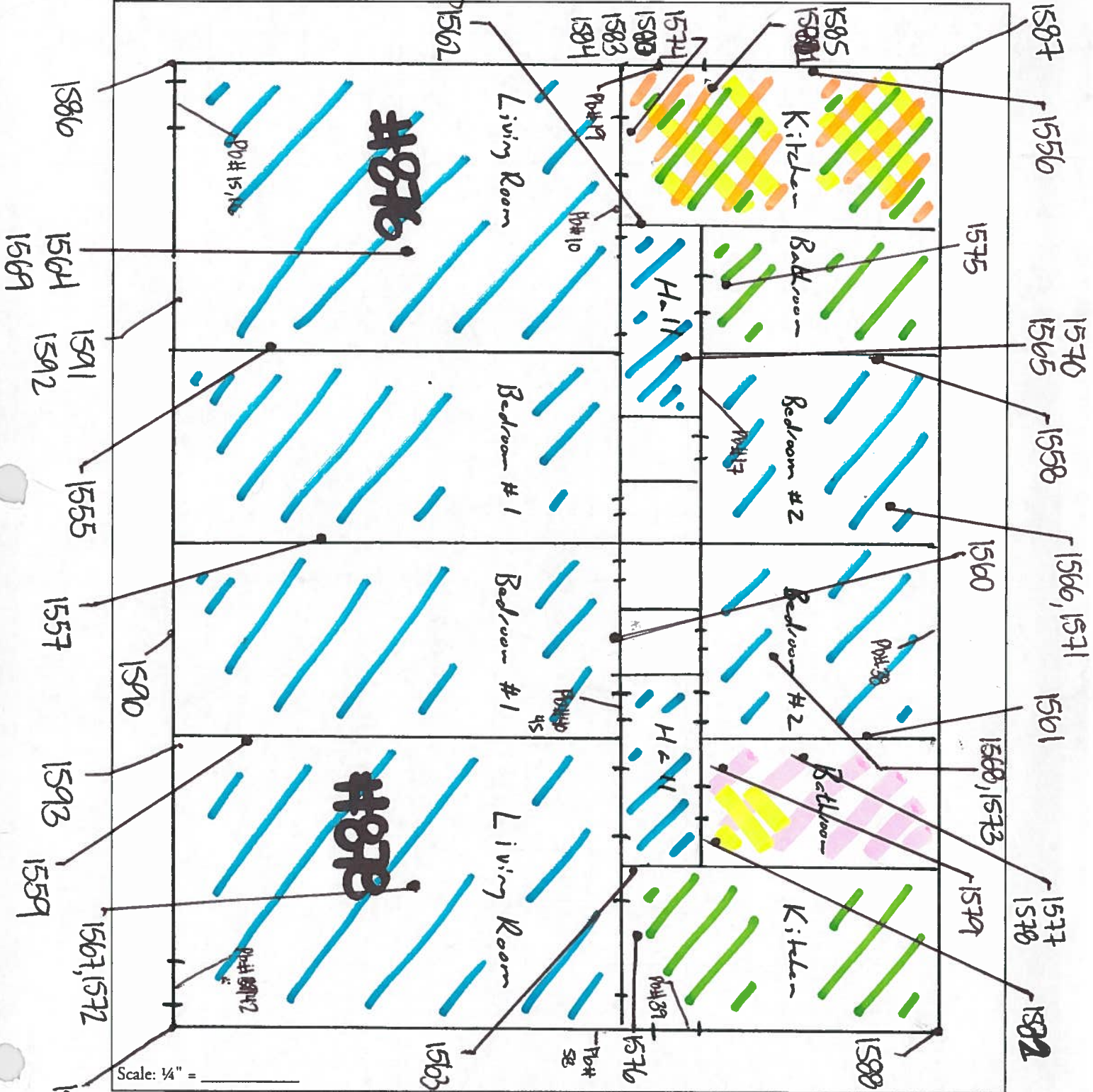
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCP - Canyon Crest

Floor: 1st



Scale: 1/4" = \_\_\_\_\_

- Legend:
- = 2 Layers - 12VFT (Beige w/Specs, Black Mastic), 12VFT (Brown w/ Black Mastic & Vapor)
  - = VSF (6" square sheet flooring white w/ beige mastic)
  - = Middle layer - VSF (Flower (Brown) Sheet Flooring)
  - = Top layer - VSF (Small Triangles Sheet Flooring w/ Beige Mastic)
  - = Bottom Layer - 12VFT (Tan w/ Blue/Red Specs, Black Mastic & Vapor)

Inspector: J-HOOVER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 890 BLAINE



**CITADEL**

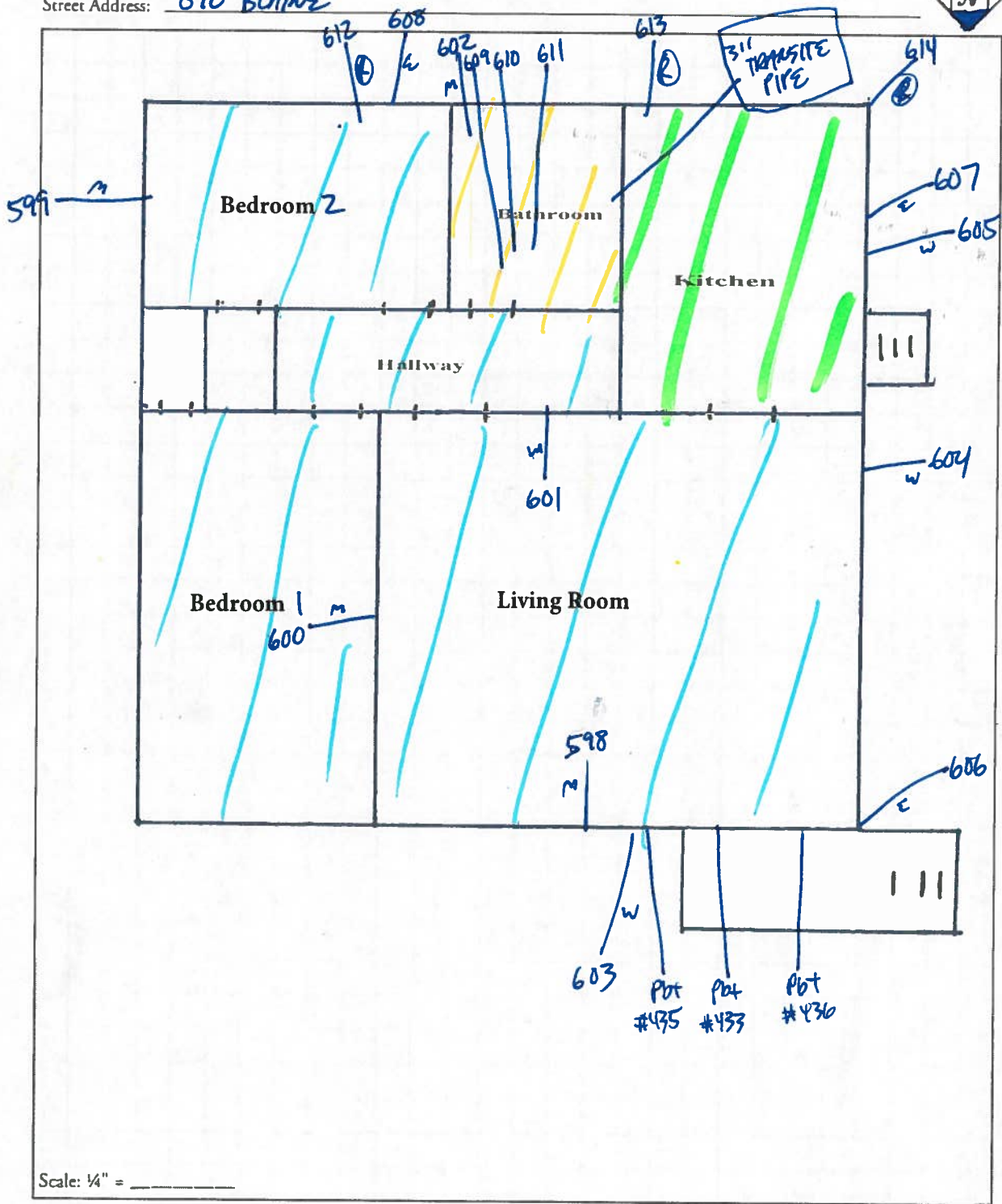
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

- VSF2
- VSF1
- VSF1 - w/ BEIGE MARBLE

Inspector: Juan Magallon

Date: 7.26.18

Drawing Title: Cherry St. Unit 801/803

Street Address: UCP - Cherry St.



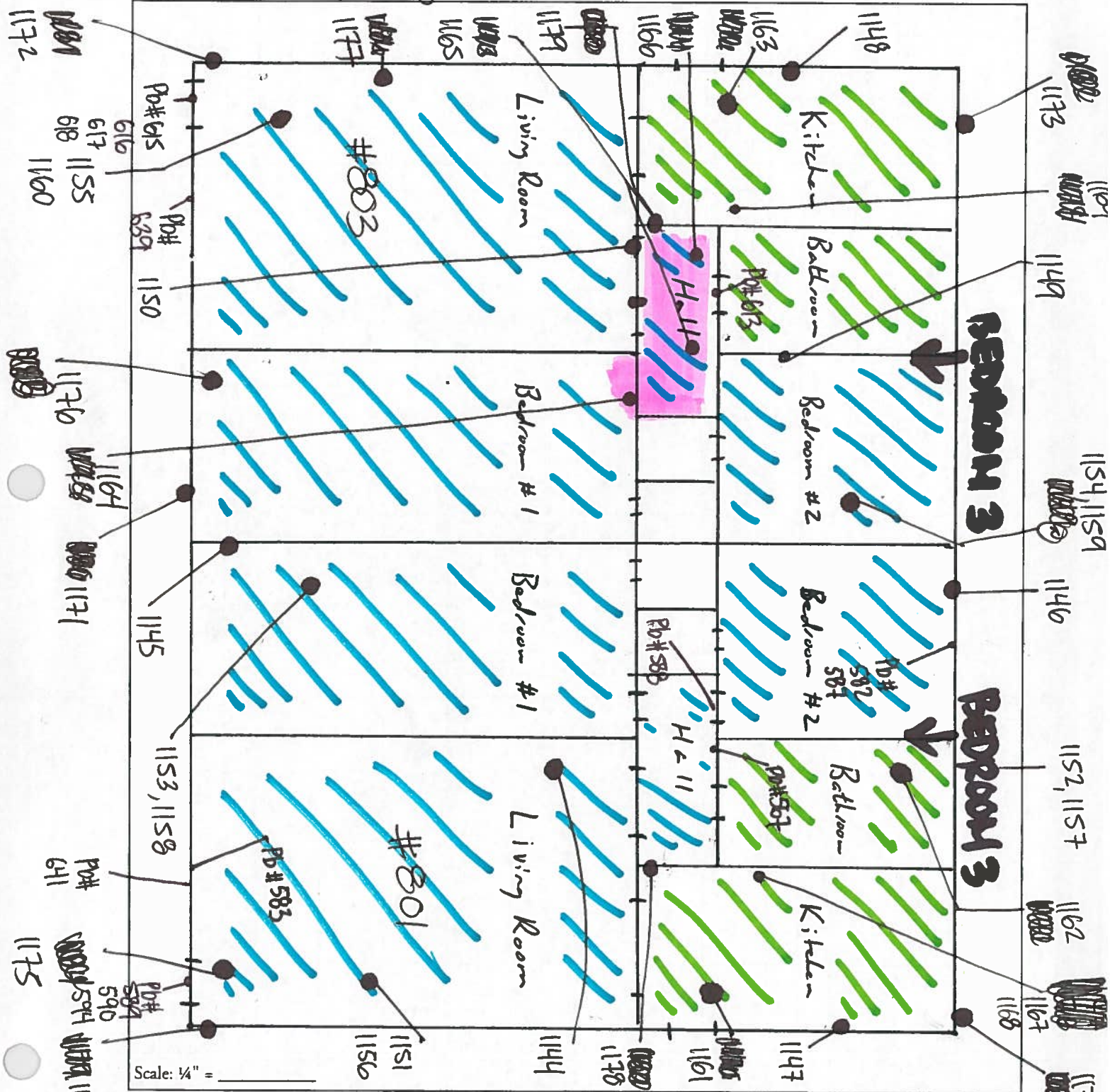
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCP - Housing

Floor: 1st



Scale: 1/4" =

- Legend:
- = 1 Layer - VSF (6" Square Sheet)
  - = 2 Layers - 12VFT (12" Beige w/Specs, Beige Uastio), 12VFT (12" Brown, Blak Mastic, Vapor Paper)
  - = 3 Layers - Top (12" Smooth Beige)

Sheet No. 1 of 1

Inspector: Juan Magallon

Date: 07-25-18

Drawing Title: Cherry St. Unit B21

Street Address: UCR - Cherry Street



CITADEL

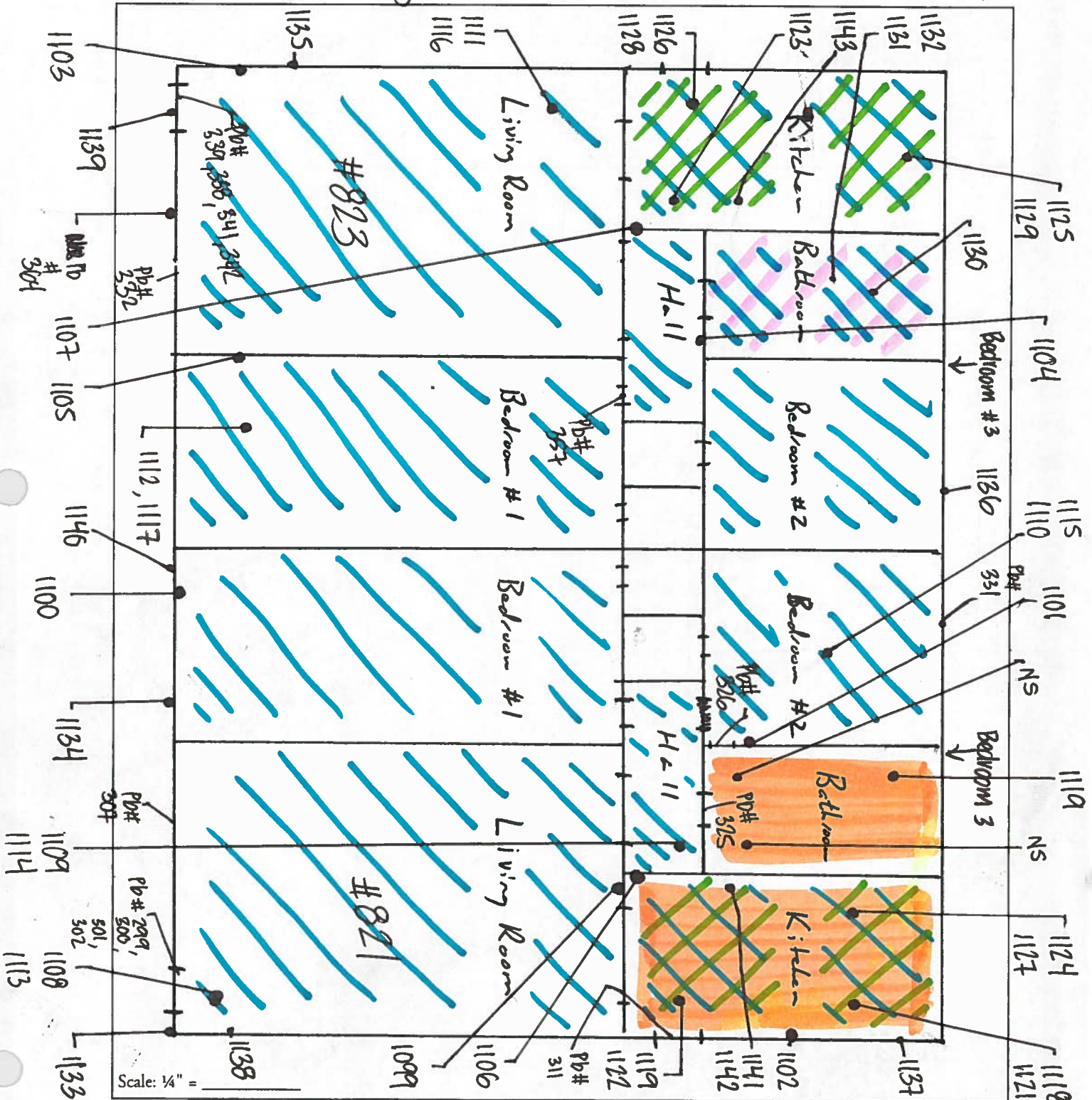
ENVIRONMENTAL SERVICES, INC.

Client: Haley / Aldrich

Project #: 7076 1017.0

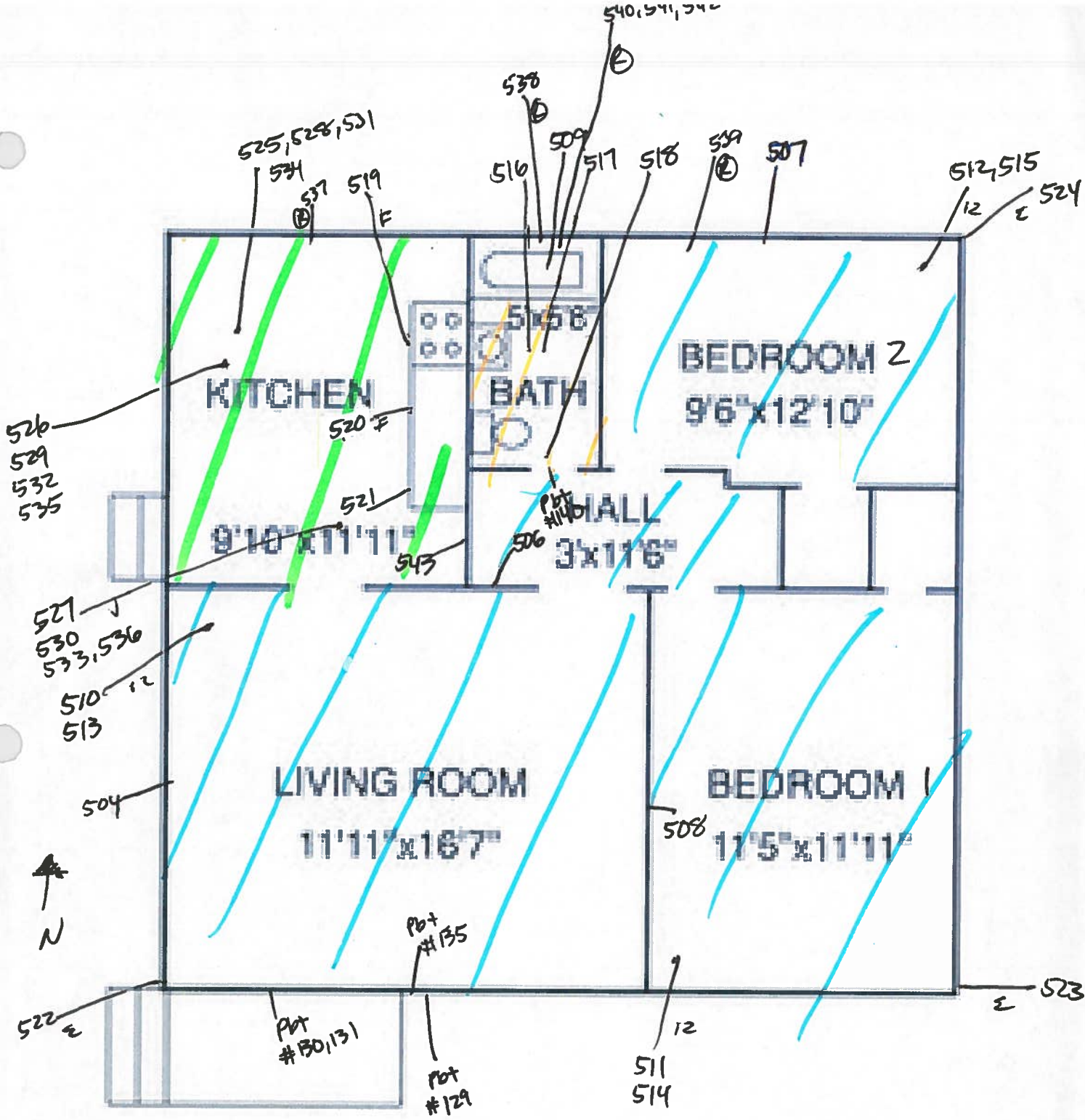
Project Title: UCR - Housing

Floor: Roof



- Legend:
- = 2 Layers - 12" Beige w/ Specs Tile w/ Beige Mastic
  - = 3 Layers - VSF - (Beige), 12 VFT (Brown) w/ Black Mastic
  - = VSF - 6" Squares White
  - = 3 Layers - VSF - Marble Beige sheet, VSF - Flowey Beige Sheet, 12 VFT - Red/Blue w/ Beige Mastic, Vapor

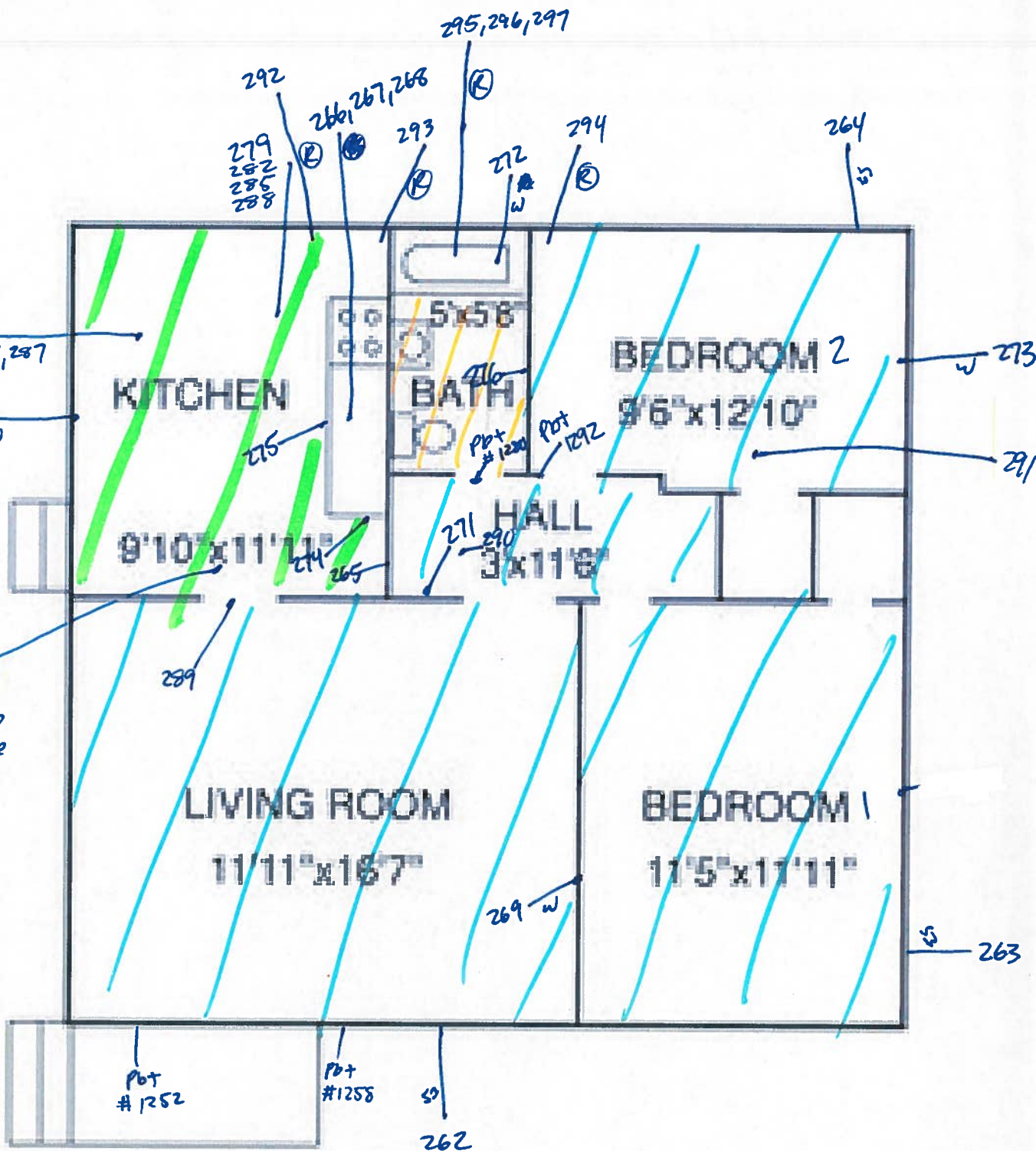
Sheet No. \_\_\_\_\_ of \_\_\_\_\_



Address: 861 CHERRY

Note: \_\_\_\_\_

- /// VSF 2 w/ WHITE MASTIC, 12VFT 2 w/YELLOW MASTIC, VSF 7 w/MASTIC, VSF 3 w/~~WHITE~~ MASTIC, VSF 10 - BEIGE, YELLOW & BROWN w/FLOWER PATTERN w/BLACK MASTIC + VAPOR BARRIER
- /// 12VFT 2 w/YELLOW MASTIC, 12VFT 3 w/BLACK MASTIC + VAPOR BARRIER
- /// VSF 1 w/YELLOW MASTIC



Address: 3308 VINTH

Note: \_\_\_\_\_

- /// - VSF 2 w/ yellow mastic, 12VFT2 w/ yellow mastic, VSF 4 w/ yellow mastic, VSF 8 w/ black mastic + vapor barrier
- /// - VSF 2 w/ yellow mastic
- /// - 12VFT2 w/ yellow mastic, 12VFT3 w/ black mastic + vapor barrier

Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3318 UTAH



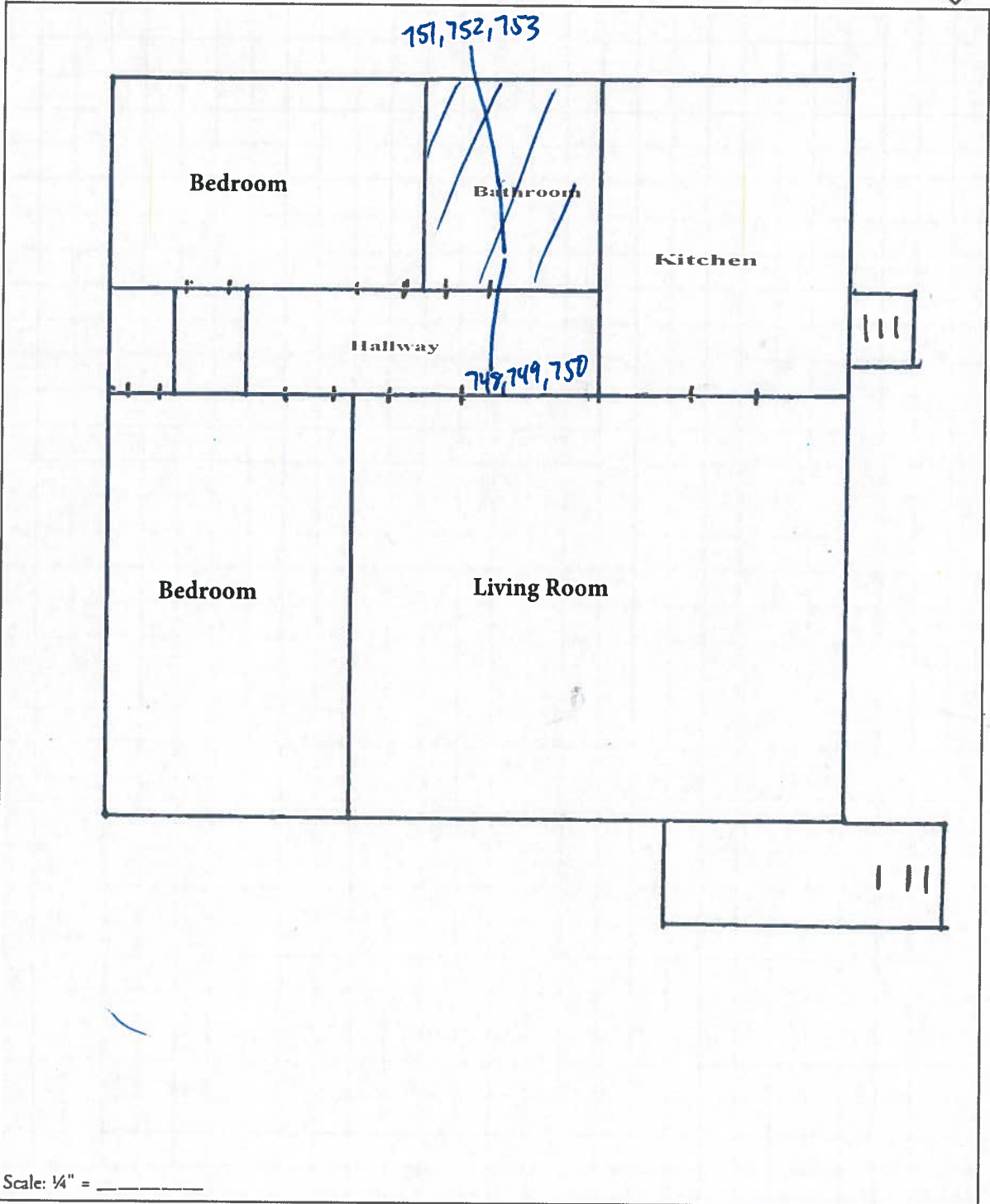
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Legend:

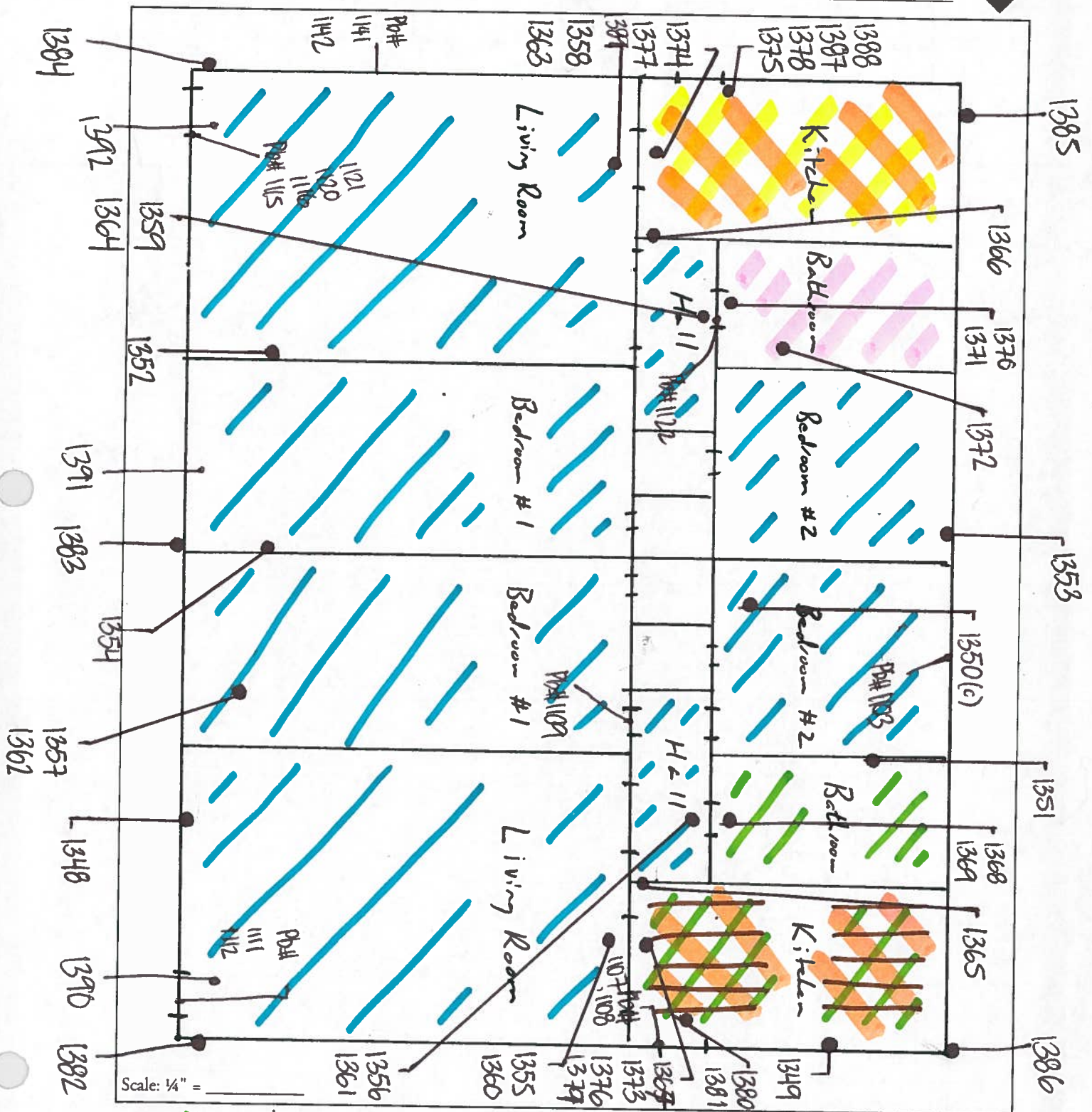
Sheet No. \_\_\_\_\_ of \_\_\_\_\_

111 - 124 FT<sup>2</sup> w/ YELLOW MASTIC, NSF 16 w/ YELLOW MASTIC, 94 FT<sup>2</sup> w/ BLACK MASTIC + WATER BARREL

Inspector: J. Magallon  
 Date: 07-31-10  
 Drawing Title: UTAH - 3315/3317  
 Street Address: UCP - Utah St.



Client: Halley & Aldrich  
 Project #: 7076.1017.0  
 Project Title: UCP - Canyon Crest Housing  
 Floor: 1st



Scale: 1/4" =

- Legend:
- ▨ = VSF (Small Rectangles / Beige, White, Brown)
  - ▨▨ = 2 Layers - 12 VFT (Beige w/Specs), 12 VFT (Brown w/Black Mastic)
  - ▨▨ = VSF (6" Square Sheet Flooring)
  - ▨▨ = VSF (Small Triangles, white)
  - ▨▨ = 2 Middle Layers - VSF (Marble Sheet Floor), VFT (Finishing Coat Floor)
  - ▨▨▨ = Bottom Layer - 12 VFT (Grey w/Black Mastic & vapor)

Sheet No. 1 of 1





Inspector: J. Magallon

Date: 08-09-18

Drawing Title: Utah 3321/3323 (offset)

Street Address: UCR - Utah Street



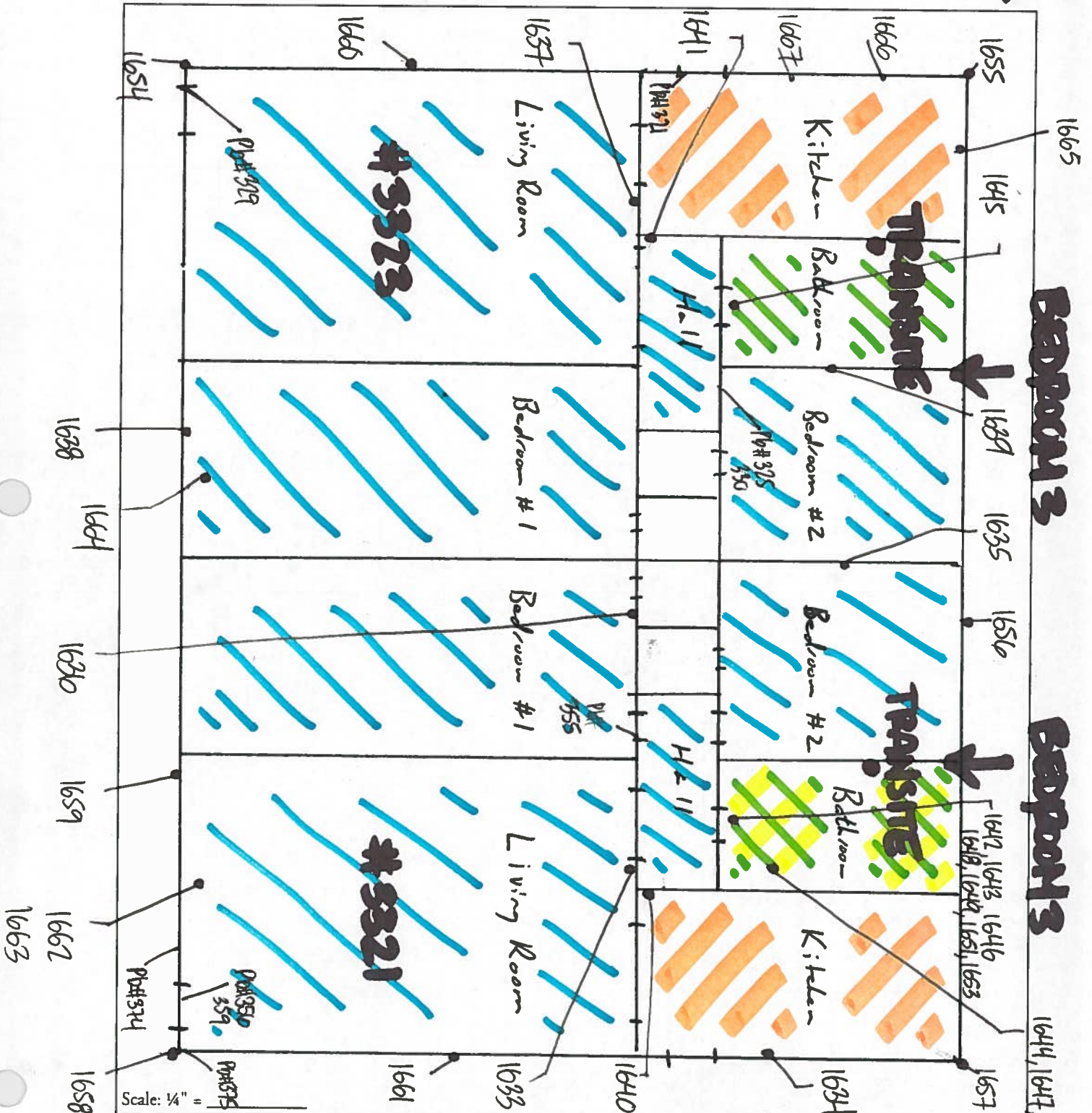
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCR - Canyon Crest Housing

Floor: 1st



Legend: = 2 Layers - 12VFT-Beige w/ Spacs, Beige Mastic, 12VFT-Brown w/ Black Mastic & Vapor. Sheet No. 1 of 1  
 = VSF (white small triangle sheet flooring, Beige Mastic)  = 7 Layers - VSF layers  
 = 3 Layers - Top Layer - VSF (white 6" square sheet flooring)  
 B. Middle Layer - VSF (yellow/brown flowers sheet flooring) - Bottom Layer - VSF (Green w/ Black Mastic)

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: 3341 UTAH

Street Address: \_\_\_\_\_



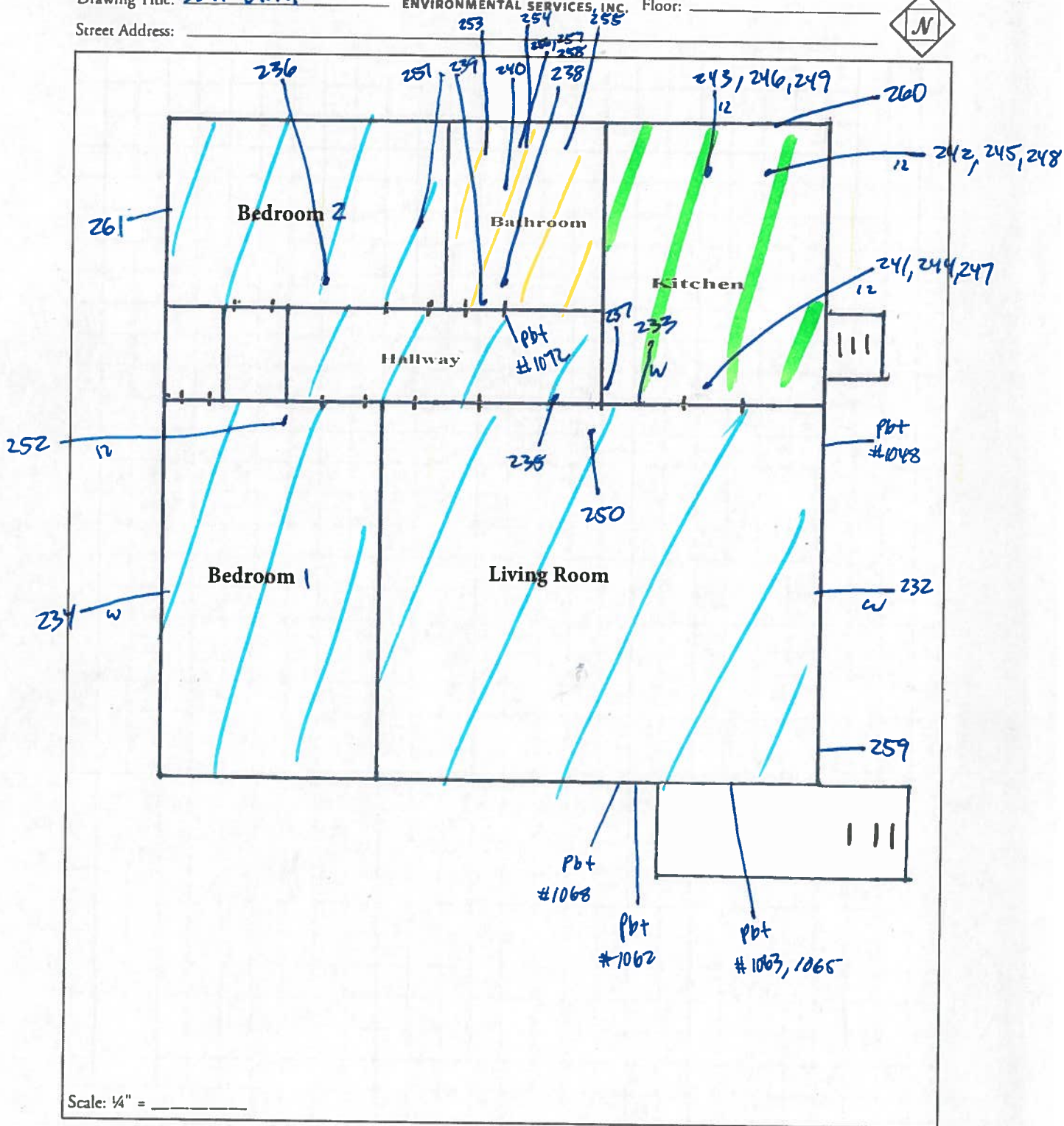
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



- Legend:
- 12VFT 2 w/ yellow mastic, VSF 7 w/ beige mastic, VSF 8 w/ black mastic + vapor barrier
  - 12VFT 2 w/ yellow mastic, 12VFT 3 w/ black mastic + vapor barrier
  - VSF 1 w/ beige mastic
- Sheet No. \_\_\_\_\_ of \_\_\_\_\_



Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3348 UTAH



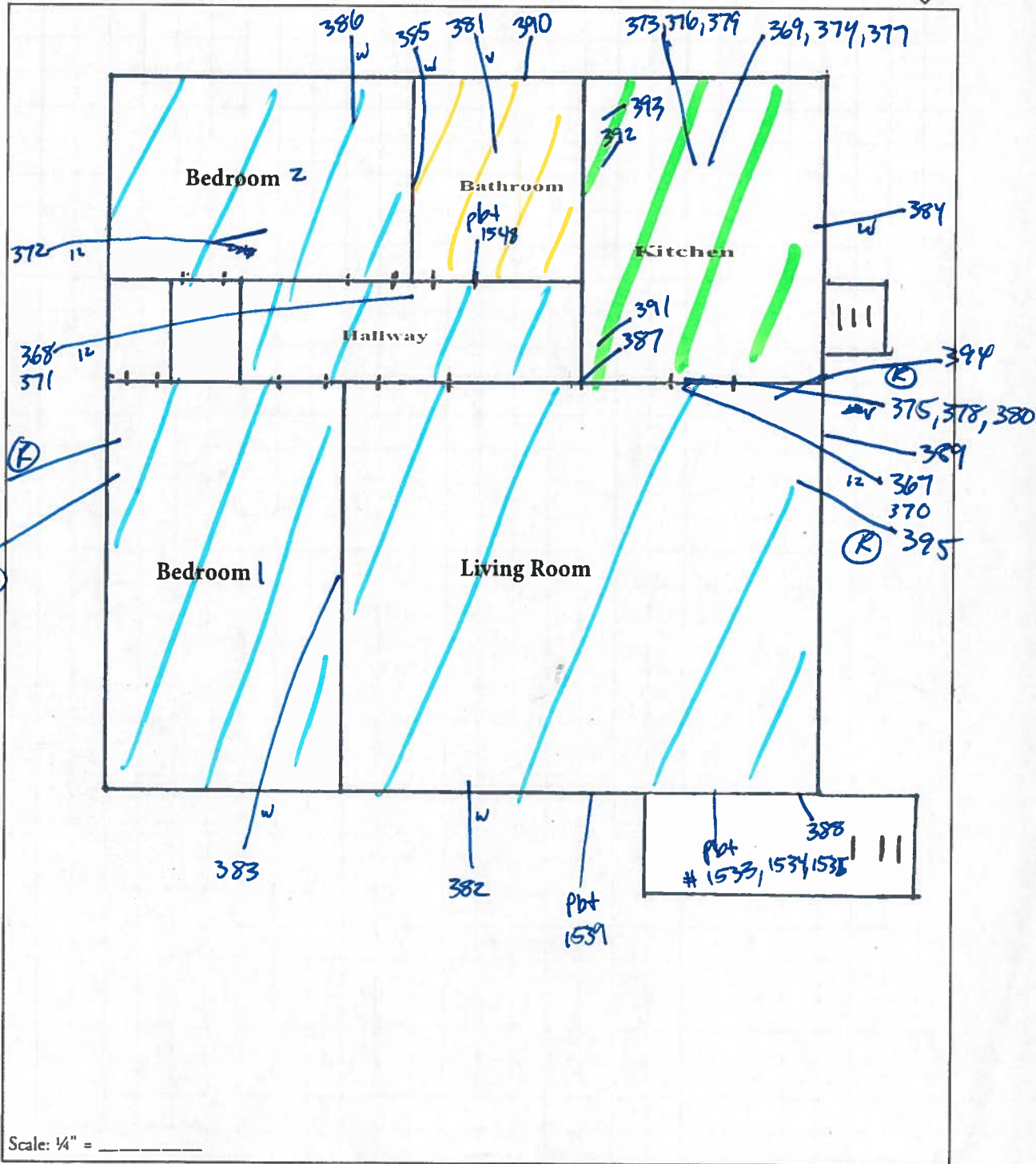
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

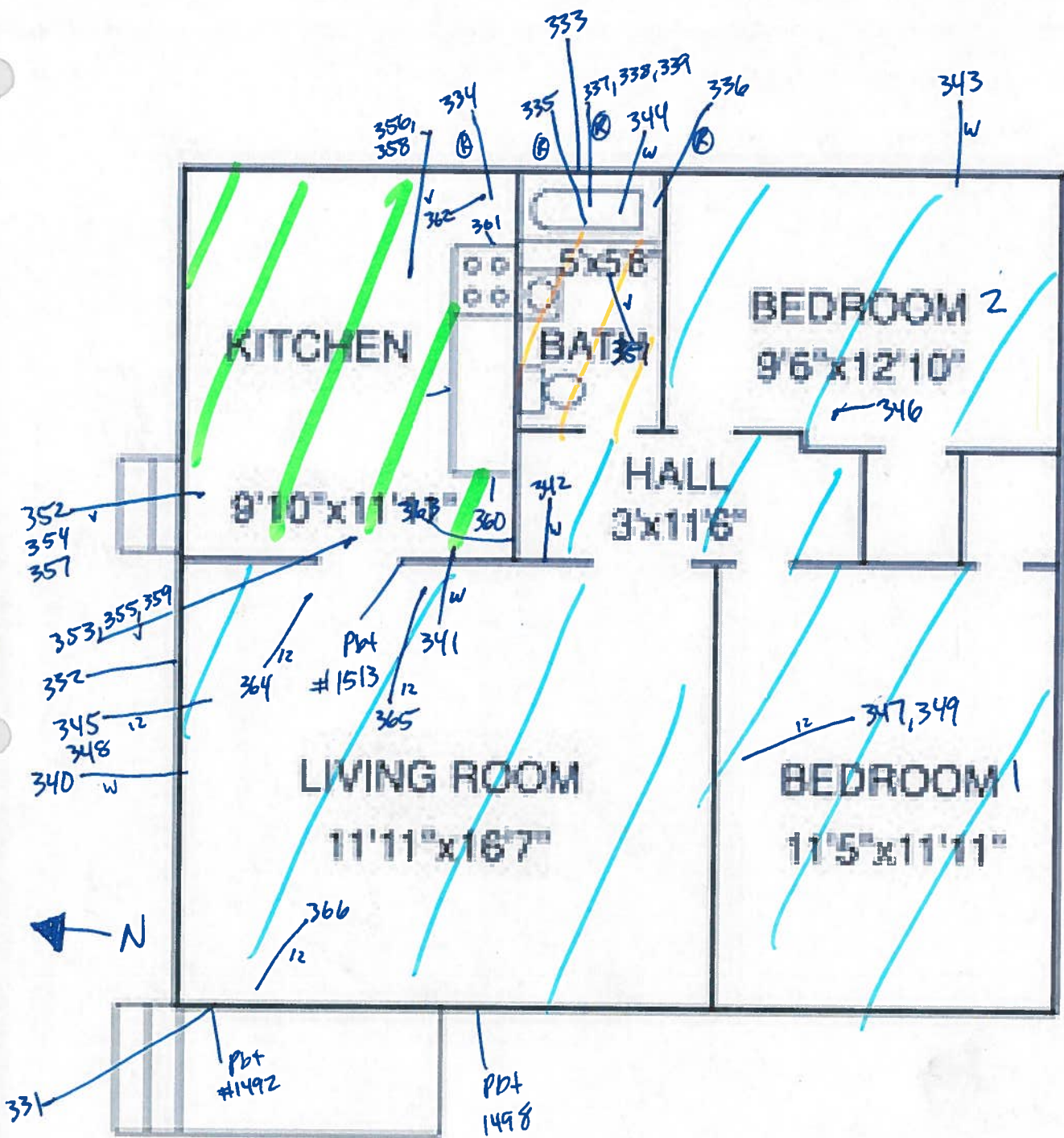
Floor: \_\_\_\_\_



Legend:

- VSF 1 w/ YELLOW MASTIC, 12VFT 2 w/ YELLOW MASTIC, VSF 3 w/ YELLOW MASTIC, VSF 6 w/ YELLOW MASTIC
- 12VFT 2 w/ YELLOW MASTIC, 12VFT 3 w/ BLACK MASTIC + VAPOR BARRIER
- VSF 1 w/ YELLOW MASTIC

Sheet No. \_\_\_\_\_ of \_\_\_\_\_



Address: 3350 UTAH

Note: \_\_\_\_\_

- /// VSF 1 w/ yellow mastic, VSF 2 w/ yellow mastic, 12VFT of w/ yellow mastic, 2VFT 2 w/ blk mastic + vapor barrier
- /// 12VFT 2 w/ yellow mastic, 2VFT 2 w/ blk mastic + vapor barrier
- /// VSF 1 w/ yellow mastic

Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3364 VTHH



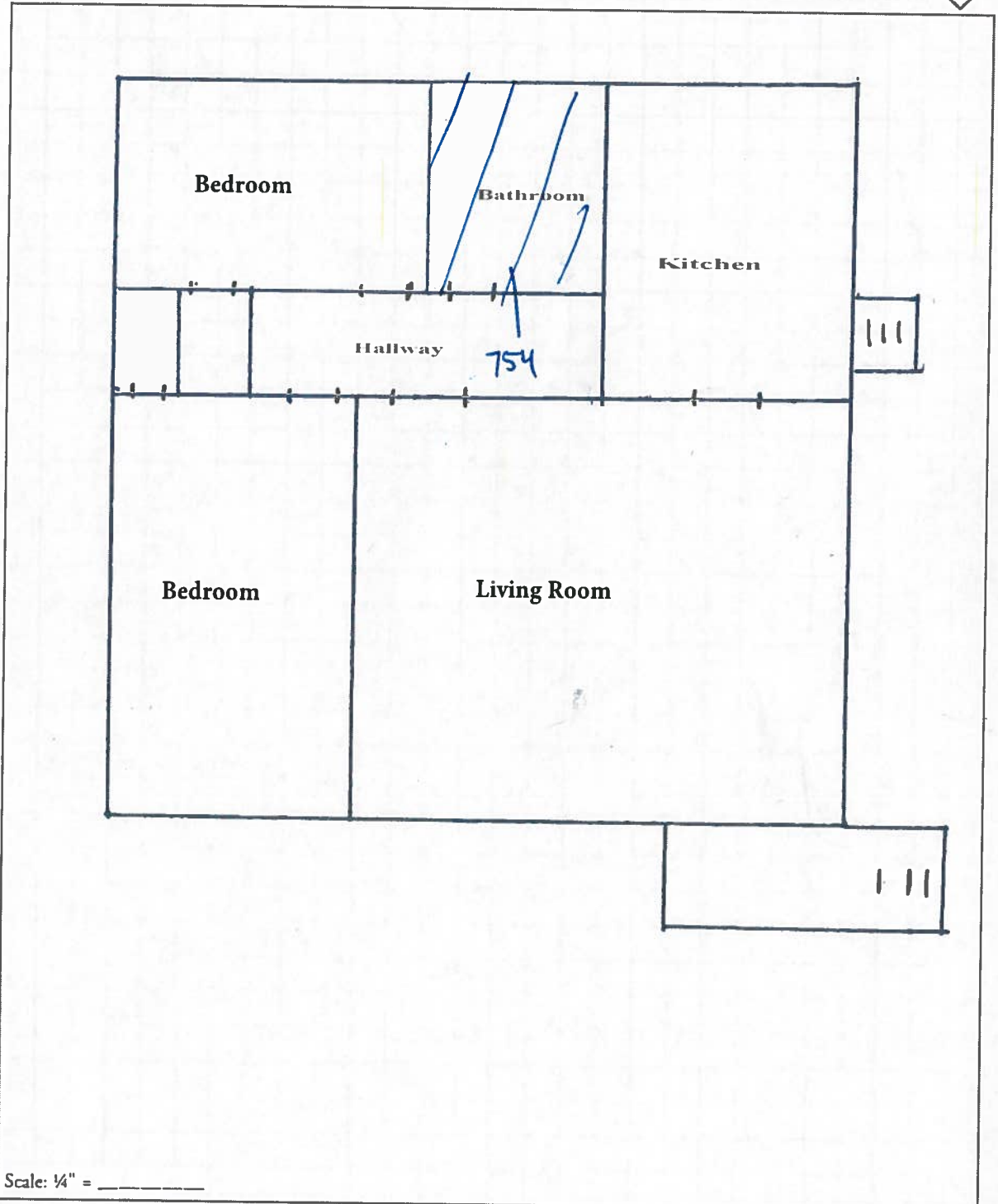
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend: /// - VSF2 w/ yellow mastic, 12VPTS w/ yellow mastic, VSF7 w/ black mastic

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. HOOD/SR

Date: \_\_\_\_\_

Drawing Title: 3367 UTAH

Street Address: \_\_\_\_\_



**CITADEL**

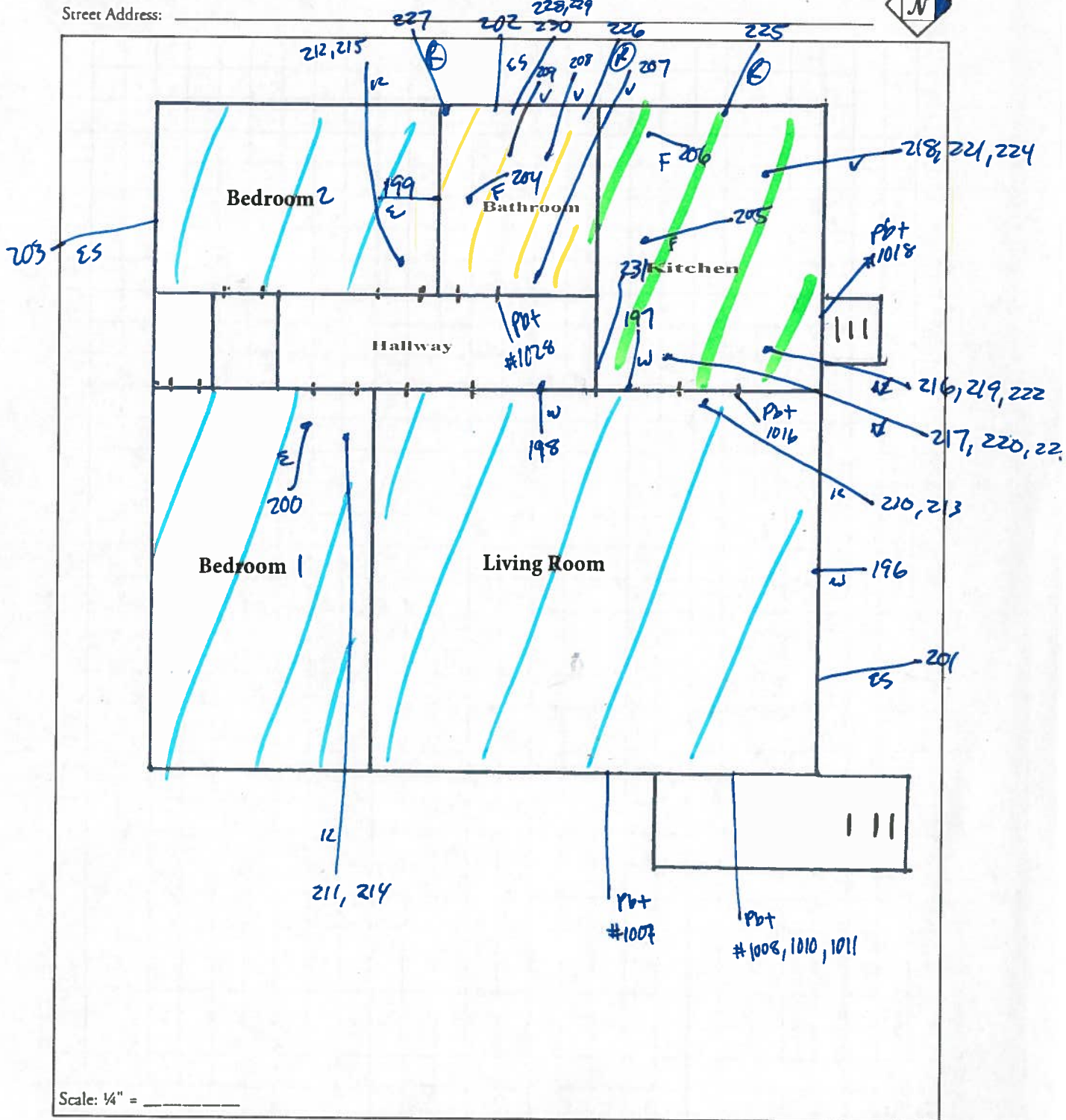
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

- Legend:
- ▬ - VSF 2 WHITE/GRAY MIXED SQUARE/TRIANGLE PATTERN, 12VFT 2 w/ YELLOW MASTIC, VSF 7 w/ BLK MASTIC, VSF 8 BLUE/BW & PINK SPECS w/ BLACK MASTIC + VAPOR BARRIER w/ WHITE MASTIC
  - ▬ - 12VFT 2 w/ YELLOW MASTIC, 12VFT 3 w/ BLK MASTIC + VAPOR BARRIER
  - ▬ - VSF 1 w/ ~~100~~ WHITE MASTIC

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3312 UTAH



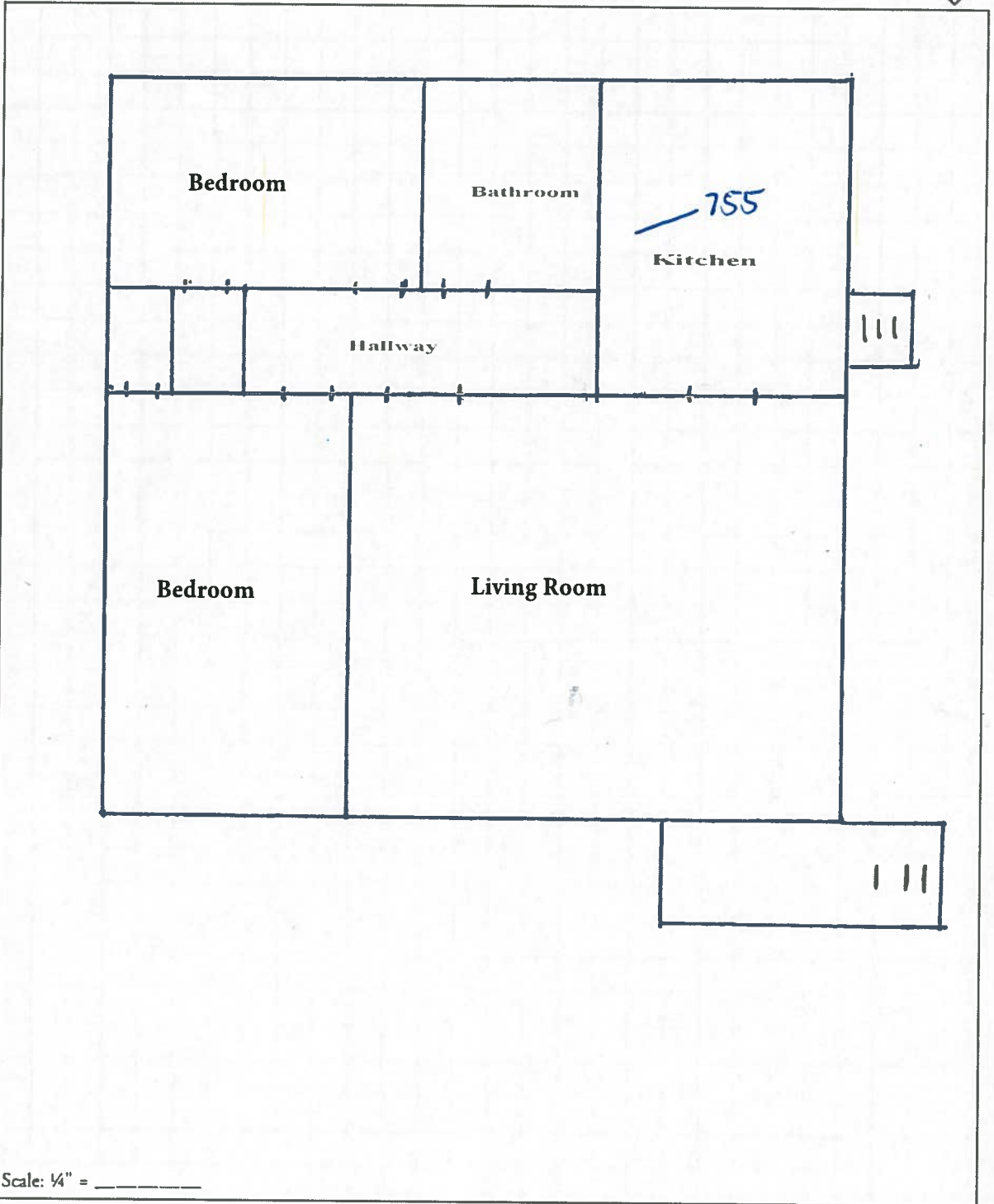
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_

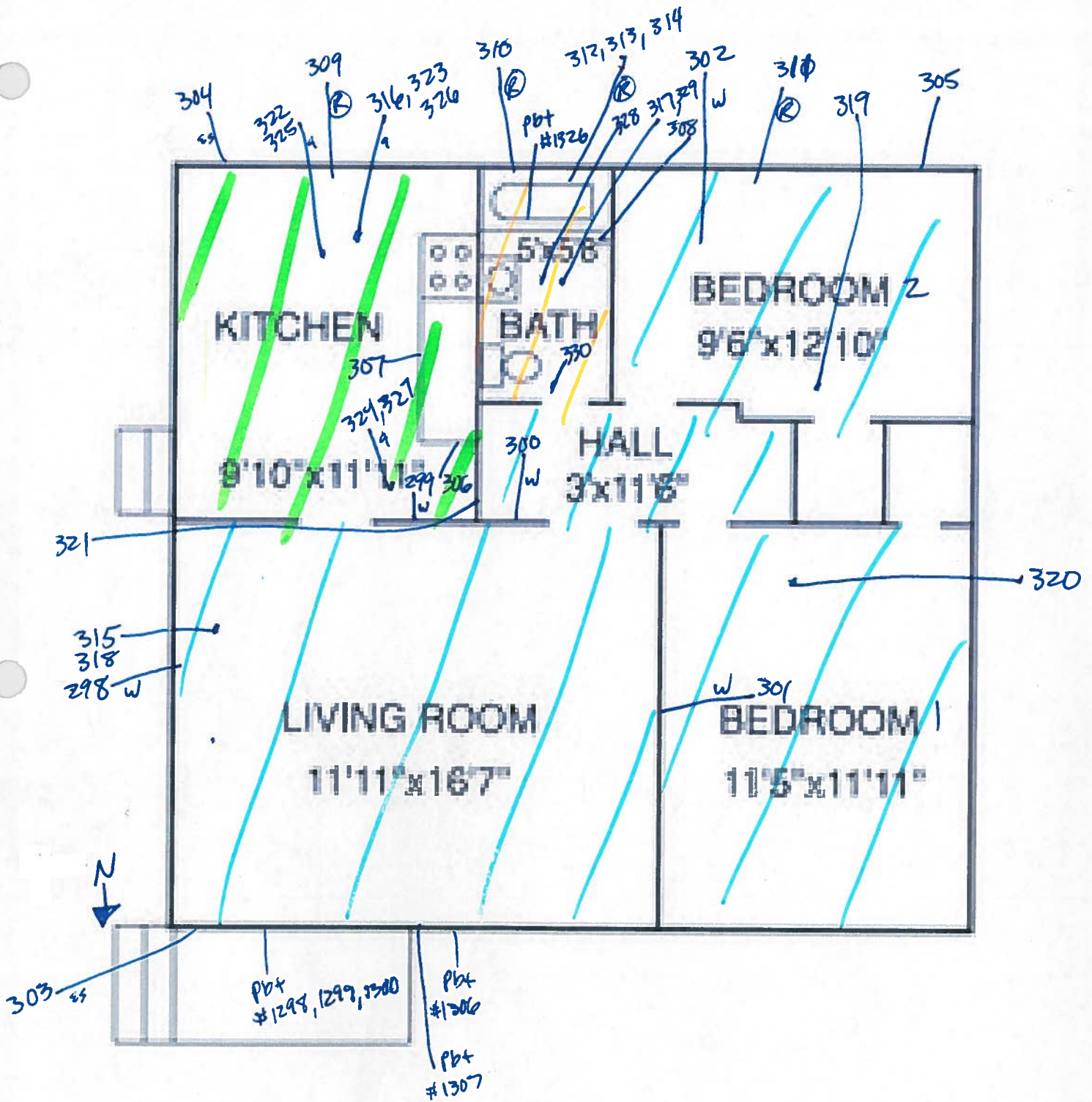


Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

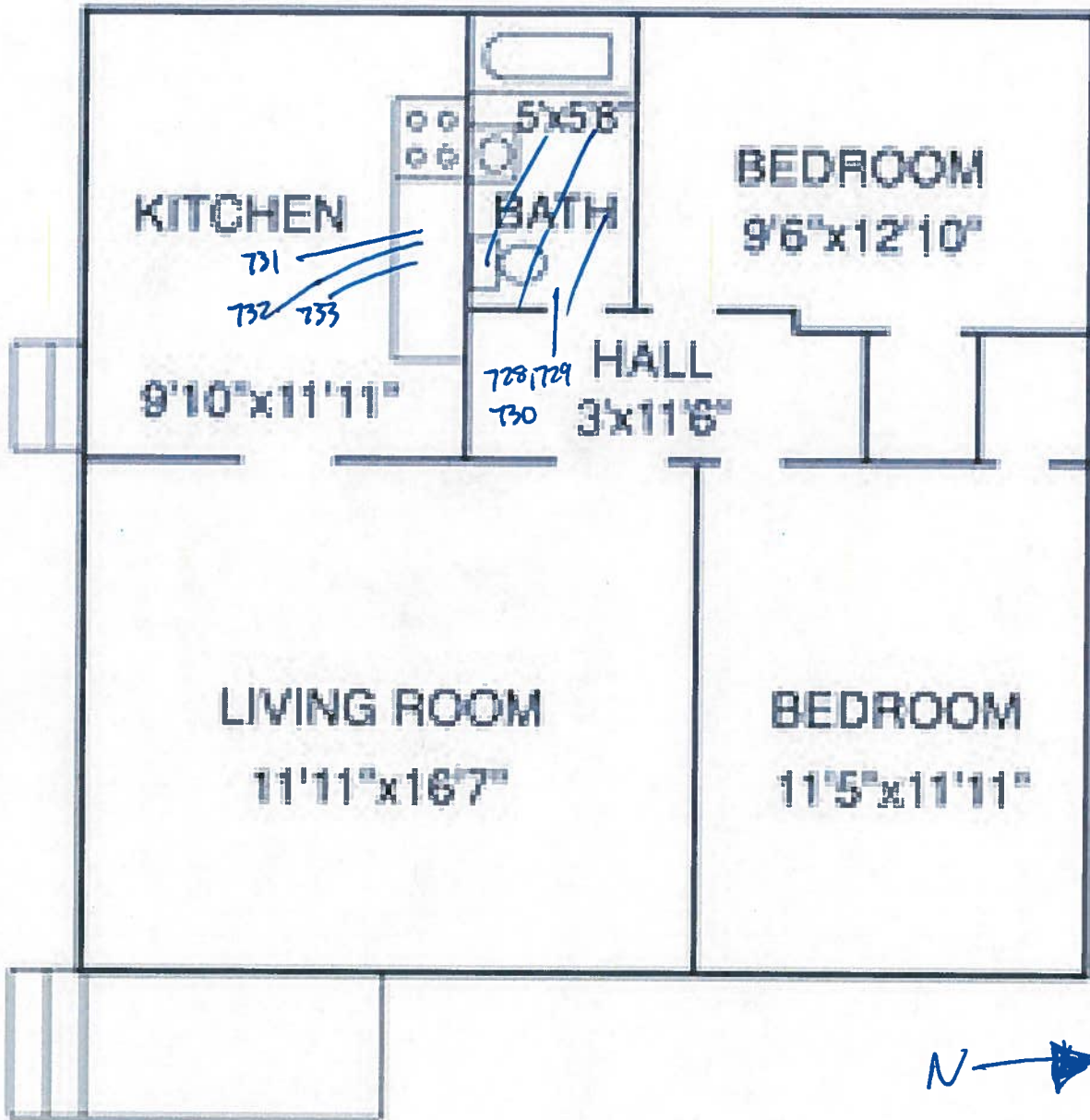




Address: 3384 UTAH

Note: \_\_\_\_\_

- /// - 12VFT 2 w/YELLOW MASTIC, 9VFT 1 GREEN w/ BLACK SPECS w/ YELLOW MASTIC, VSF 8 w/ BLK + VAPOR MASTIC BARRIER
- /// - 12VFT 2 w/YELLOW MASTIC, 12VFT 3 w/ BLACK MASTIC + VAPOR BARRIER
- /// - 12VFT 2 w/YELLOW MASTIC, VSF 6 w/YELLOW MASTIC



Address: 3403 FLORIDA

Note: \_\_\_\_\_

111 - VSF 1 w/ yellow mastic, 12VFT 2 w/ yellow mastic, VSF 6 w/ yellow mastic

Inspector: Juan Magallon

Date: 07-26-18

Drawing Title: Florida St. Unit 3408-344

Street Address: UCR - Florida St.



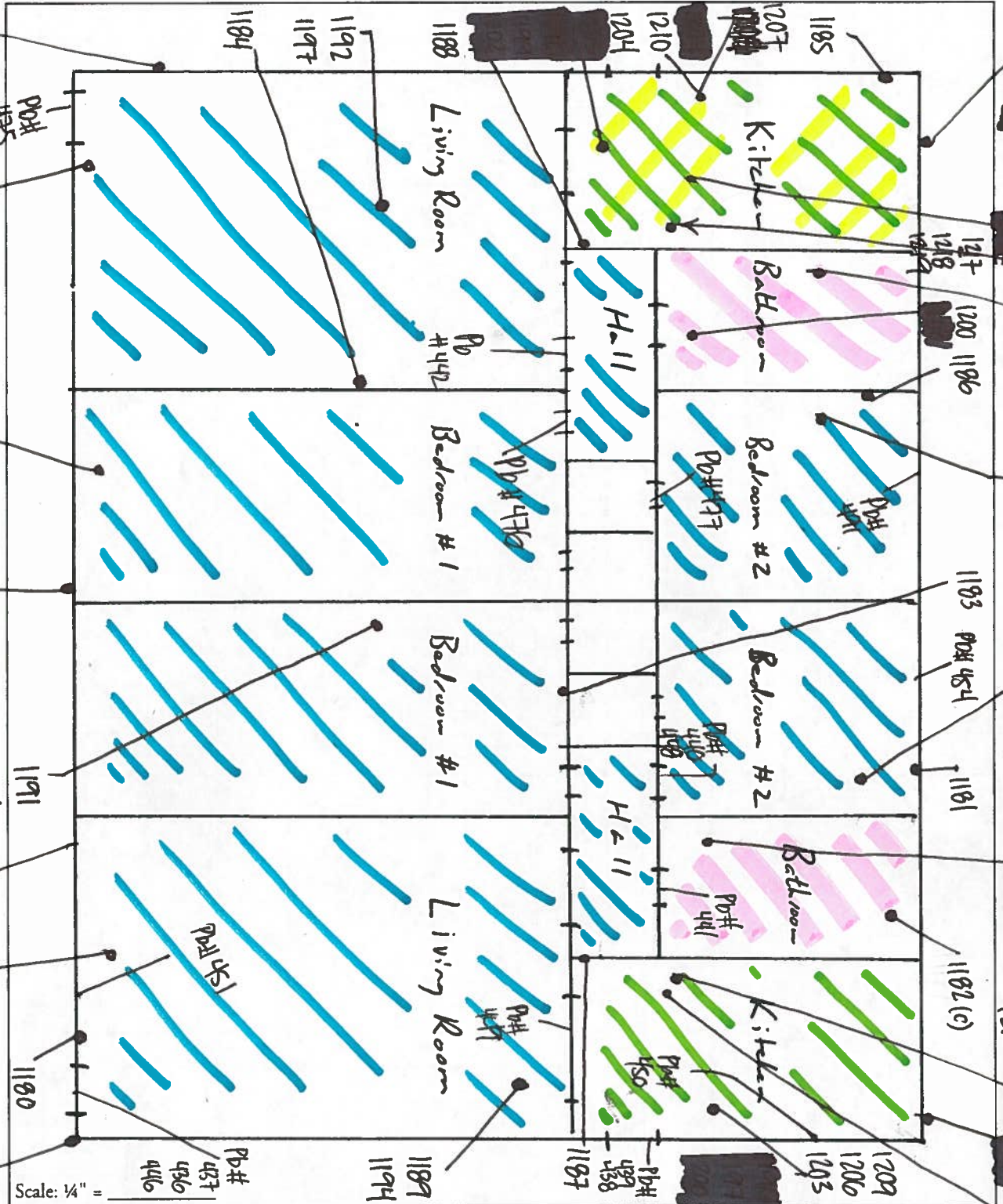
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley Aldrich

Project #: 7076.1017.0

Project Title: UCR Housing

Floor: 1st



Legend: = 3 Layers - VSF (White Triangles), VSF (Marble), 12VFT- (Beige w/ Red & Blue) Sheet No. 1 of 1  
 = 2 Layers - 12VFT (Beige w/ Specs), 12VFT (Brown, w/ Black Mastie & Vapor Paper)  
 = 1 Layer - VSF (Small Squares)  
 = Bottom Layer - VSF (Red)

Inspector: J. Hoover

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3415 FLORIDA



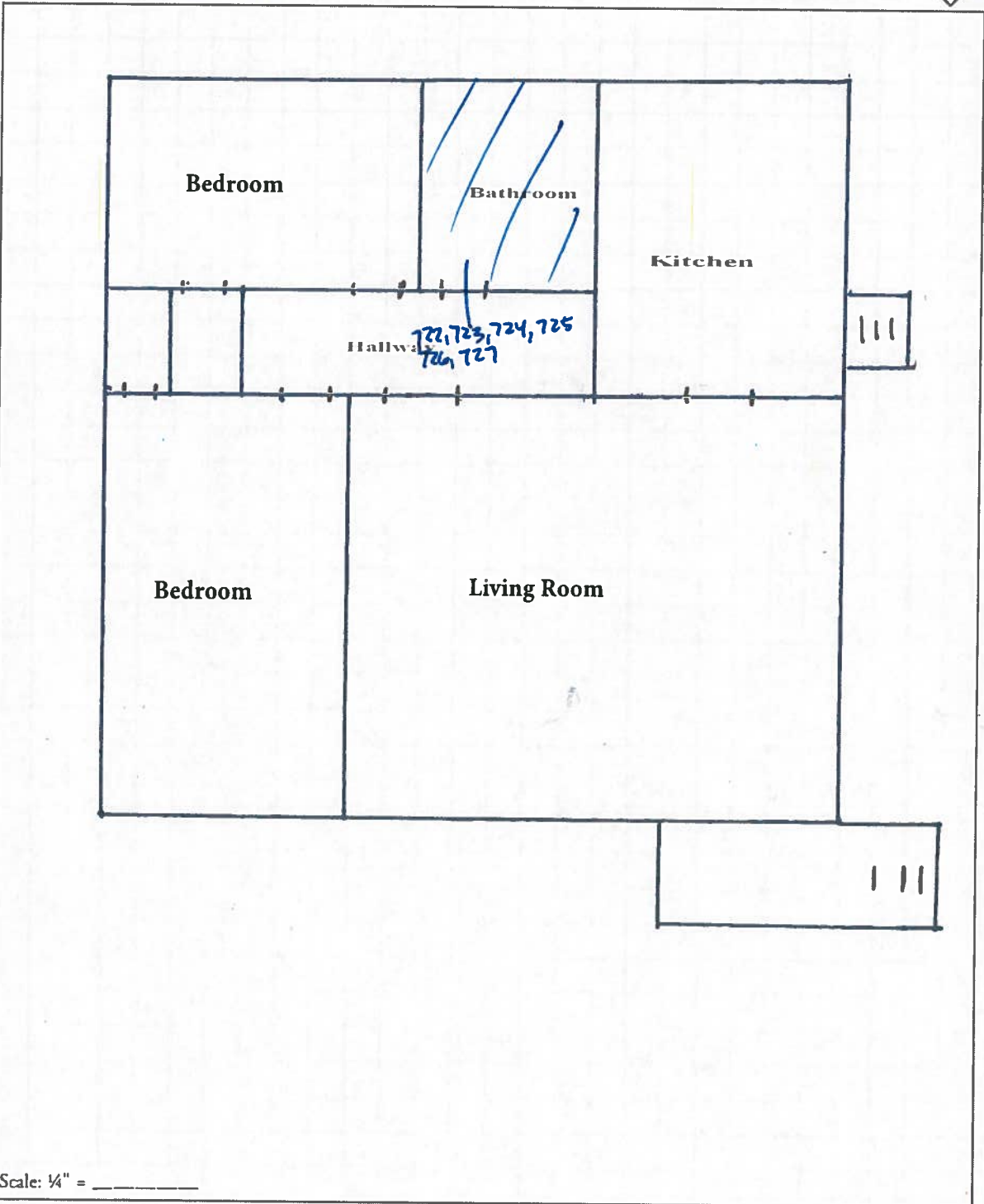
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

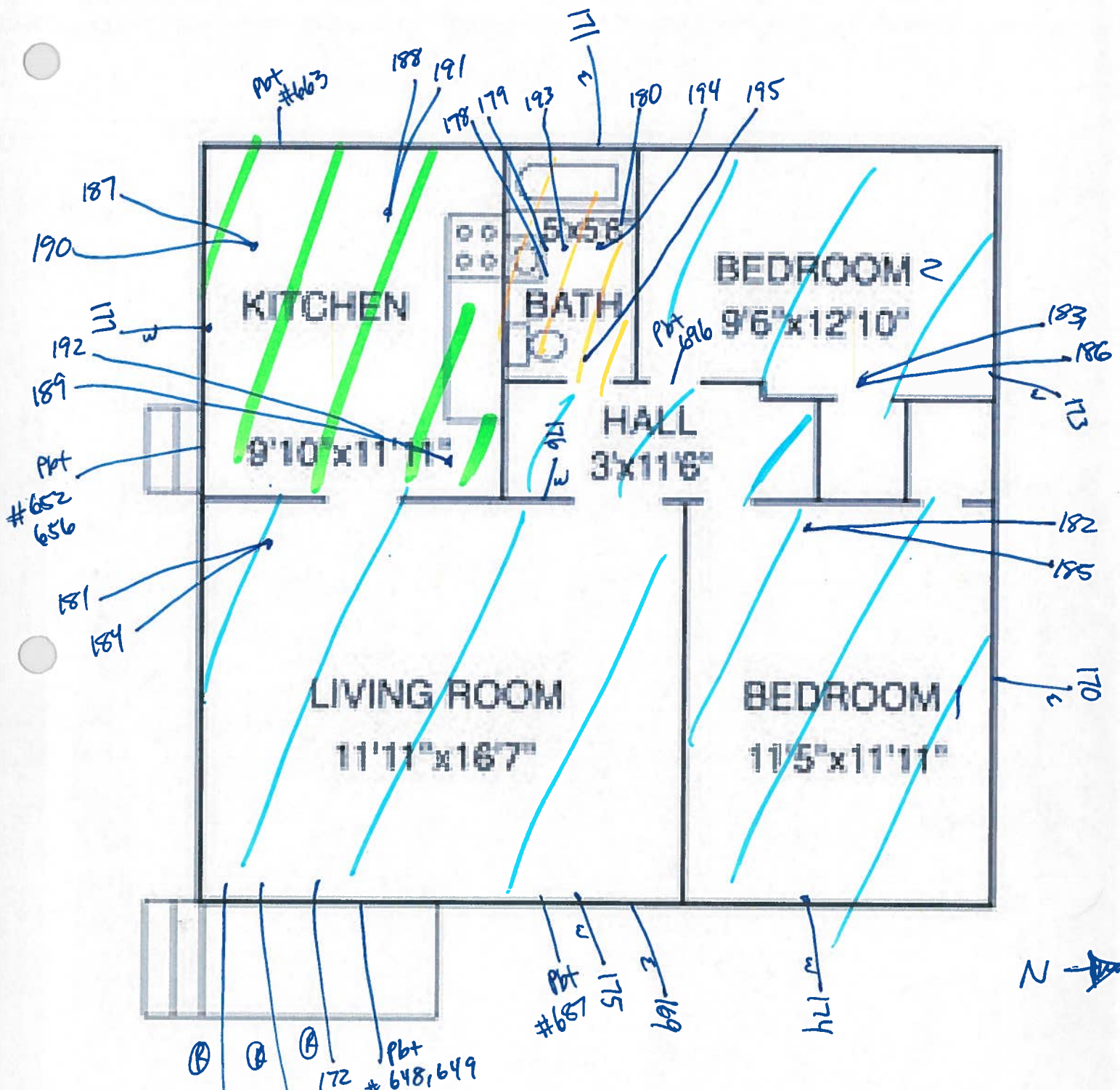
Floor: \_\_\_\_\_



Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

||| - VSF1 w/ WHITE MASTIC, VSF5 w/ YELLOW MASTIC, 12VF2 w/ YELLOW MASTIC  
 12VF1 w/ YELLOW MASTIC, VSF7 w/ YELLOW MASTIC, VSF6 w/ BLUE MASTIC WATER BARRIER



Address: 170 171

Note: 3429 FLORIDA

- /// - VSF 2 w/ YELLOW MASTIC, VSF 7 w/ WHT MASTIC, VSF 6 w/ BLK MASTIC + VAPOR BARRIER PAPER
- /// - 12VFT 2 w/ YELLOW MASTIC, 12VFT 3 w/ BLACK MASTIC + VAPOR BARRIER
- /// - 12VFT 2 w/ YELLOW MASTIC, ~~12VFT~~ VSF 3 w/ YELLOW MASTIC, VSF 6 w/ BLK MASTIC + VAPOR BARRIER

Inspector: Juan Magallon

Date: 07-27-18

Drawing Title: Florida St. Units 3475

Street Address: UCR Florida St.



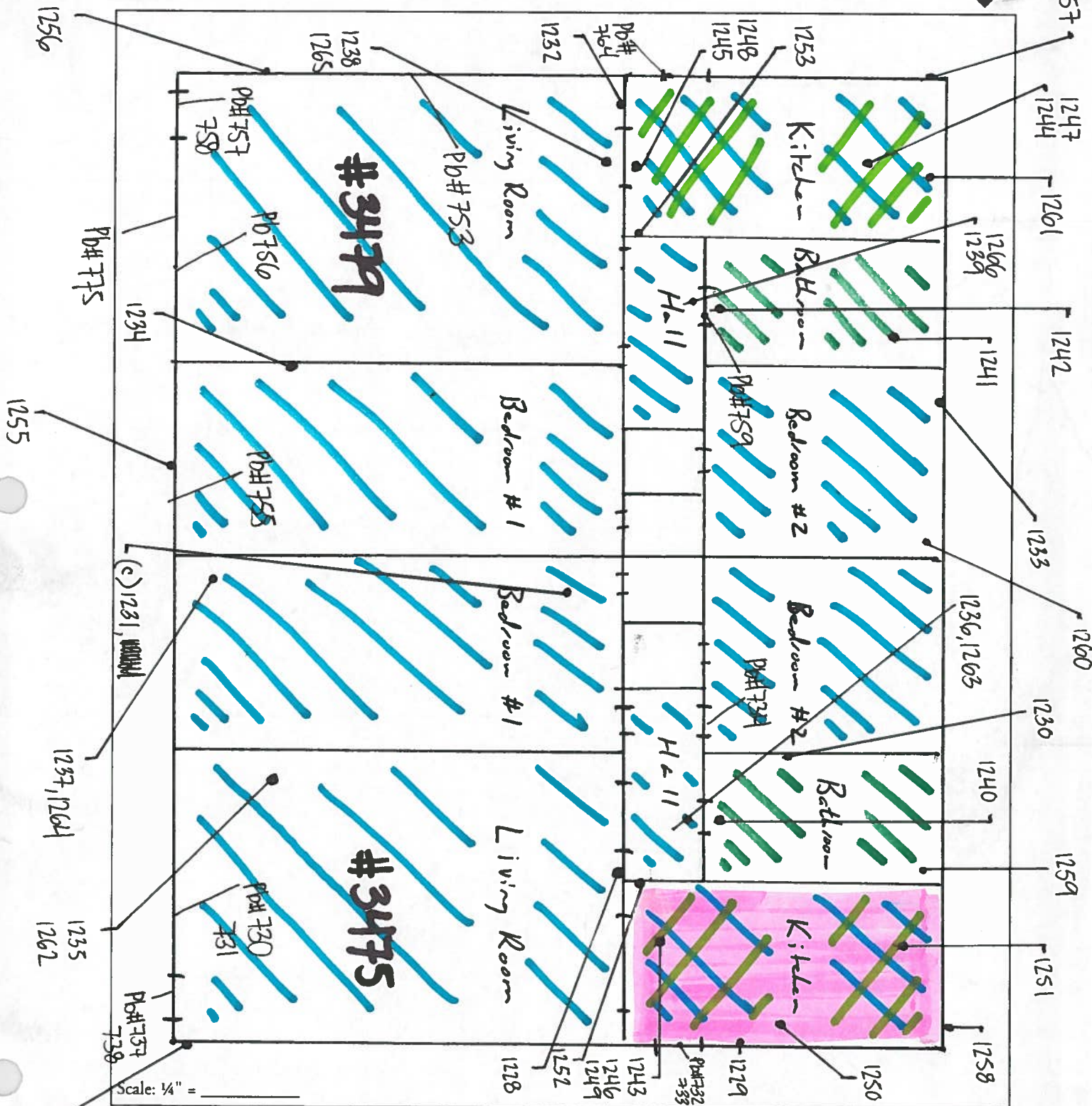
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCR Housing

Floor: 1st



- Legend:
- = 2 Layers - 12VFT (Beige w/ Specs), 12VFT (Brown w/ Black Mastic, Vapor
  - = 1 Layer - VSF (6" Square Sheet Floor w/ Beige Mastic)
  - = Bottom Layer = 12VFT (Grey w/ Black Mastic & Vapor,
  - = 2 Layers - VSF (Beige w/ Brown Pattern), VSF (Flower Pattern Sheet Floor)

Inspector: J. Magallon

Date: 08-09-18

Drawing Title: IDAHO ST. 3323/3325

Street Address: UCR - Idaho St. 3323/3325



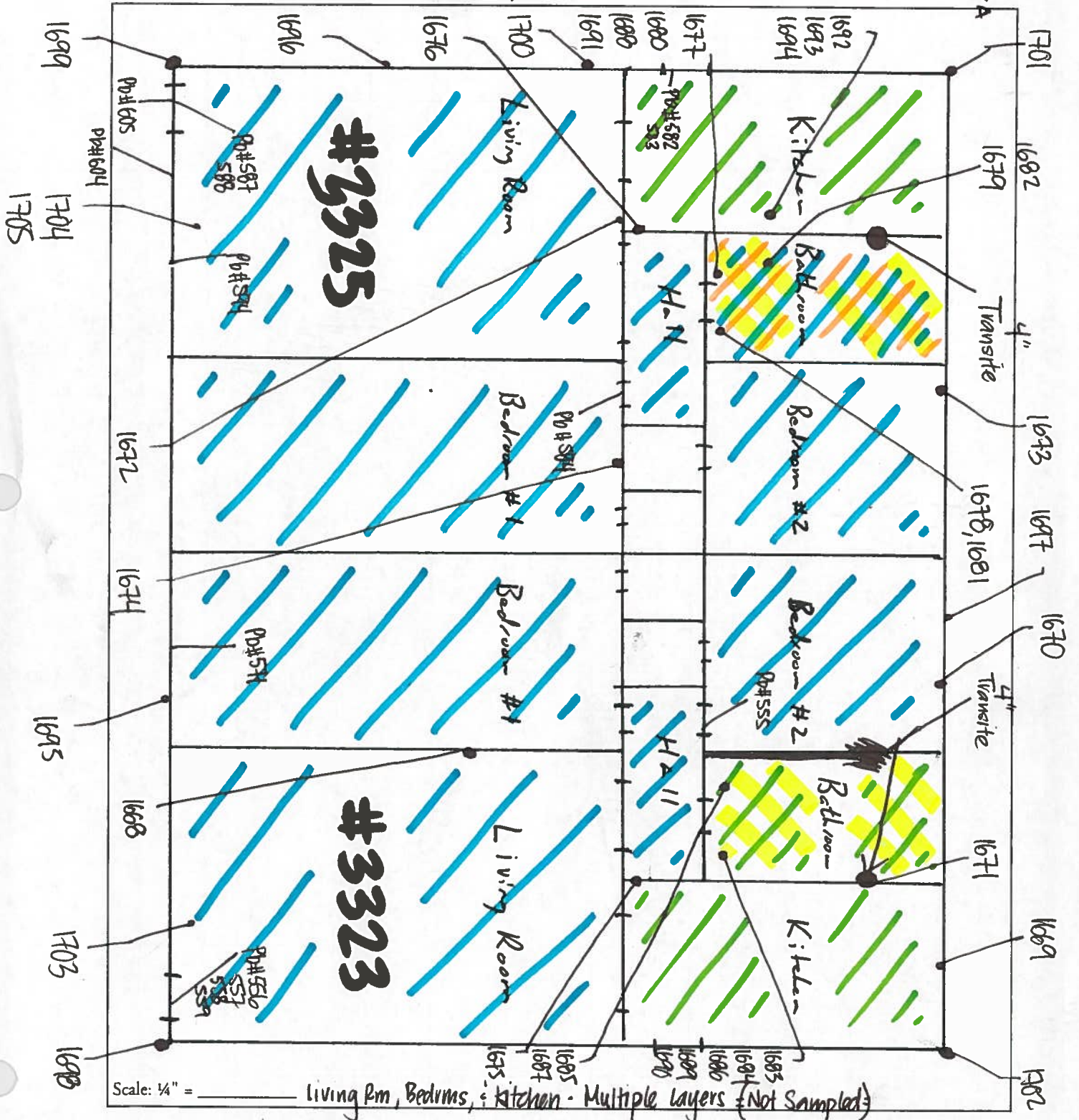
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

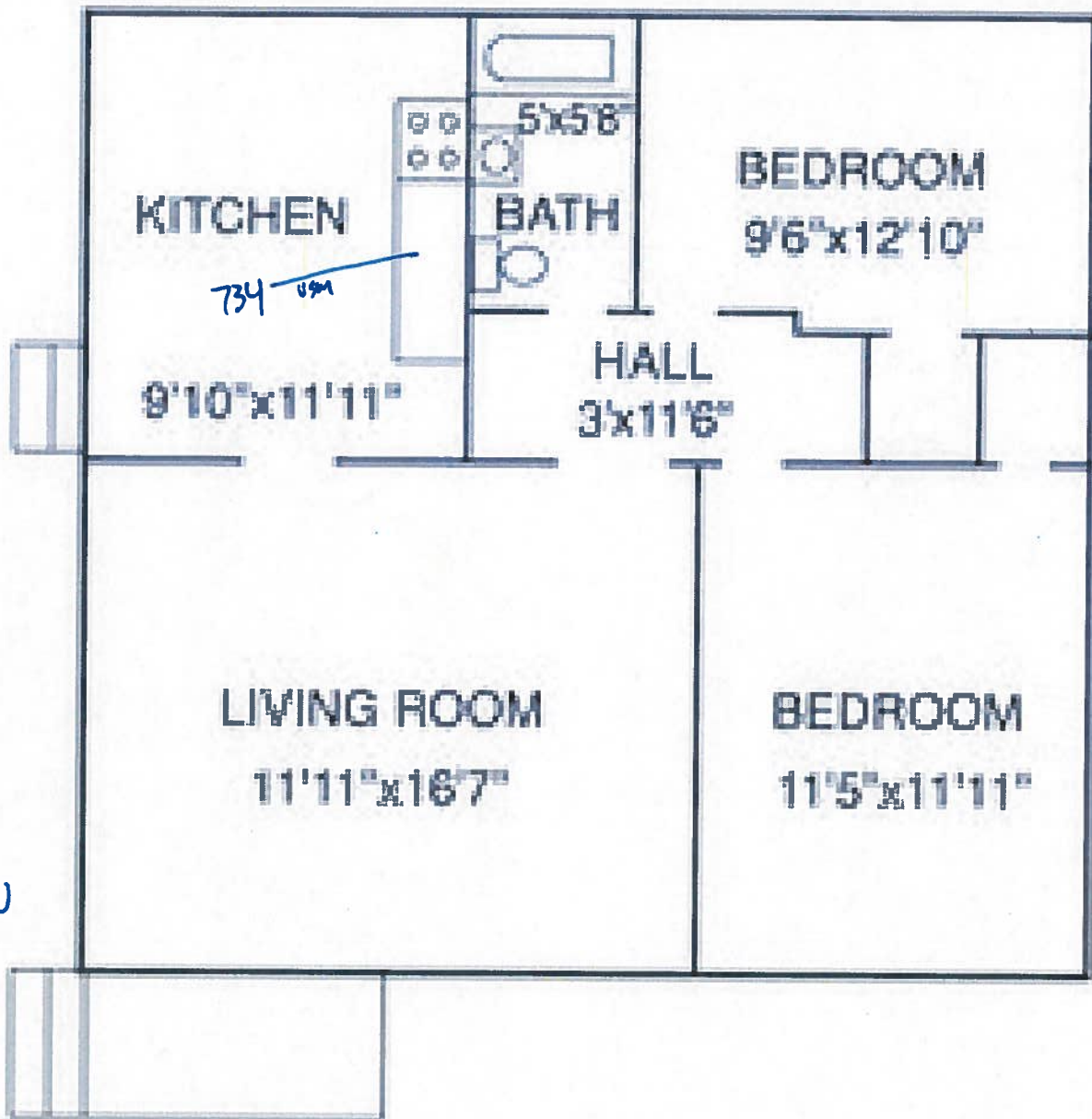
Project #: 7076.1017.0

Project Title: UCR - Canyon Crest Housing

Floor: 1st



- Legend:
- = Multiple Layers
  - = VSF - White Small Triangles Sheet Flooring
  - = 2 Layers - VSF (white w/ Brown Flowers sheet flooring), ~~12VET~~ (Tan w/ Red/Blue Spec Tile w/ Black Mastic & Vapor)
  - = VSF - Beige w/ Marble Sheet Flooring w/ Beige Mastic



Address: 3330 IDAHO

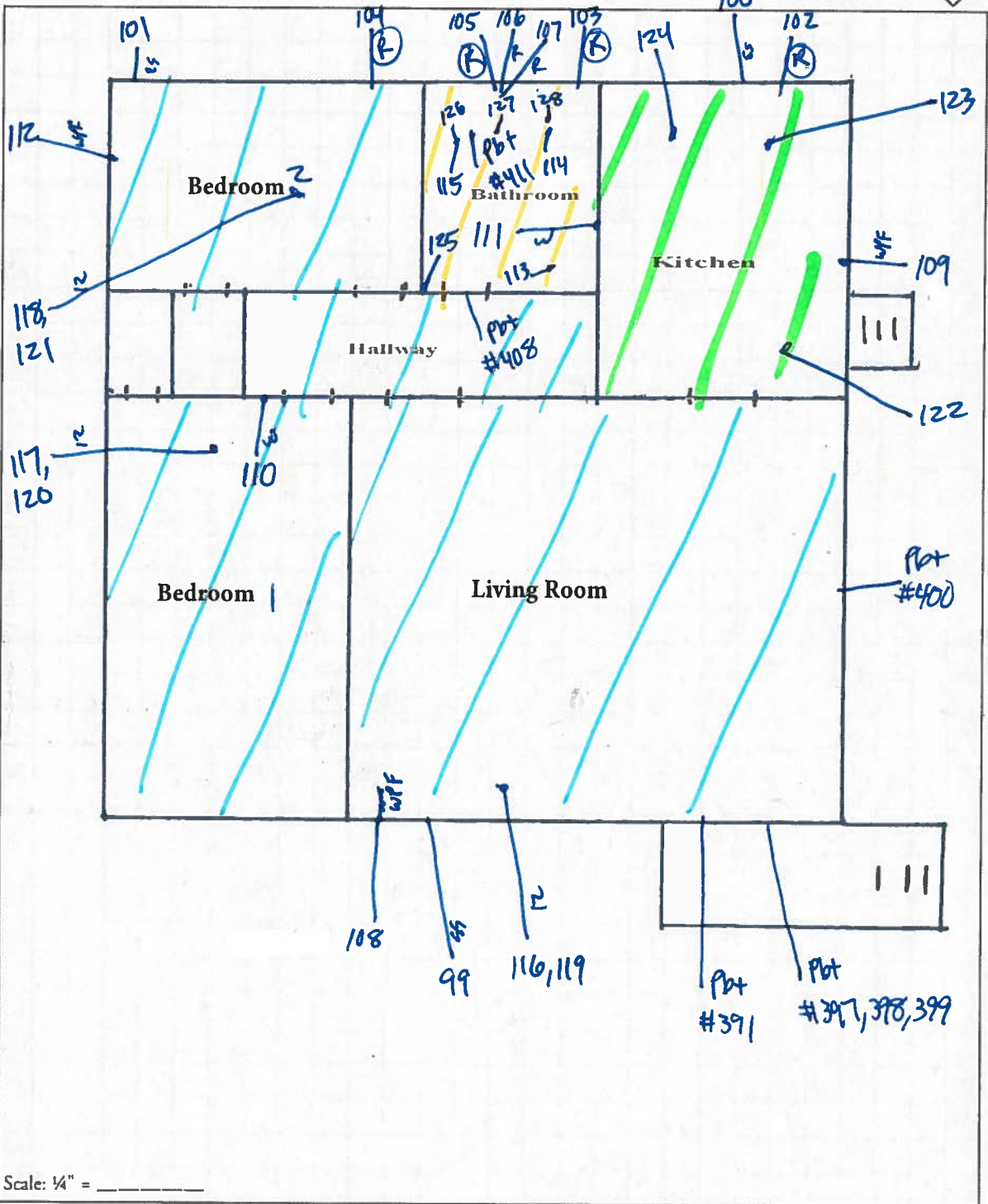
Note: USM KITCHEN (WHITE)



Inspector: J. HOOPER  
 Date: 7/26/18  
 Drawing Title: \_\_\_\_\_  
 Street Address: 3334 IDAHO



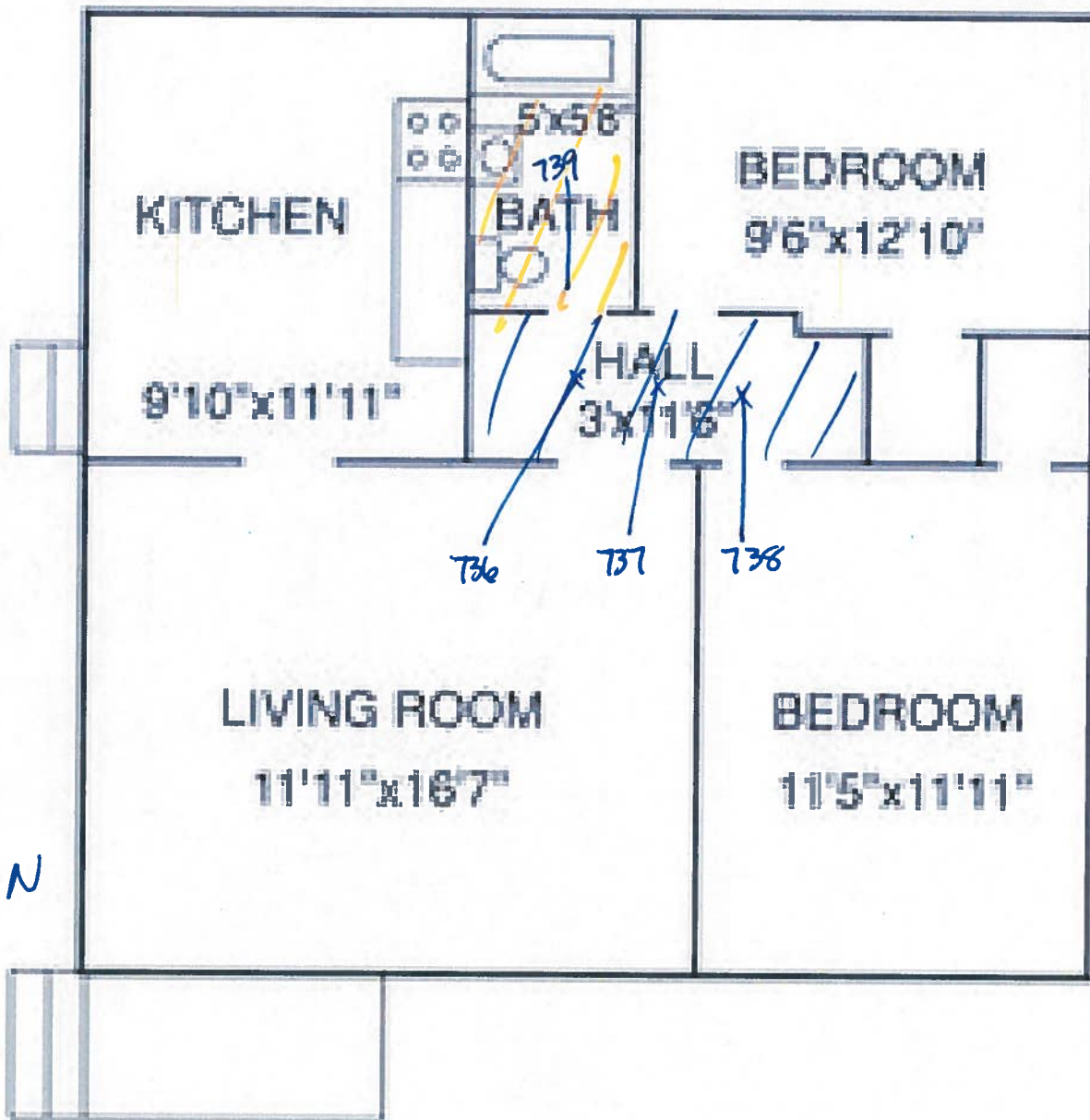
Client: \_\_\_\_\_  
 Project #: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Floor: \_\_\_\_\_



Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

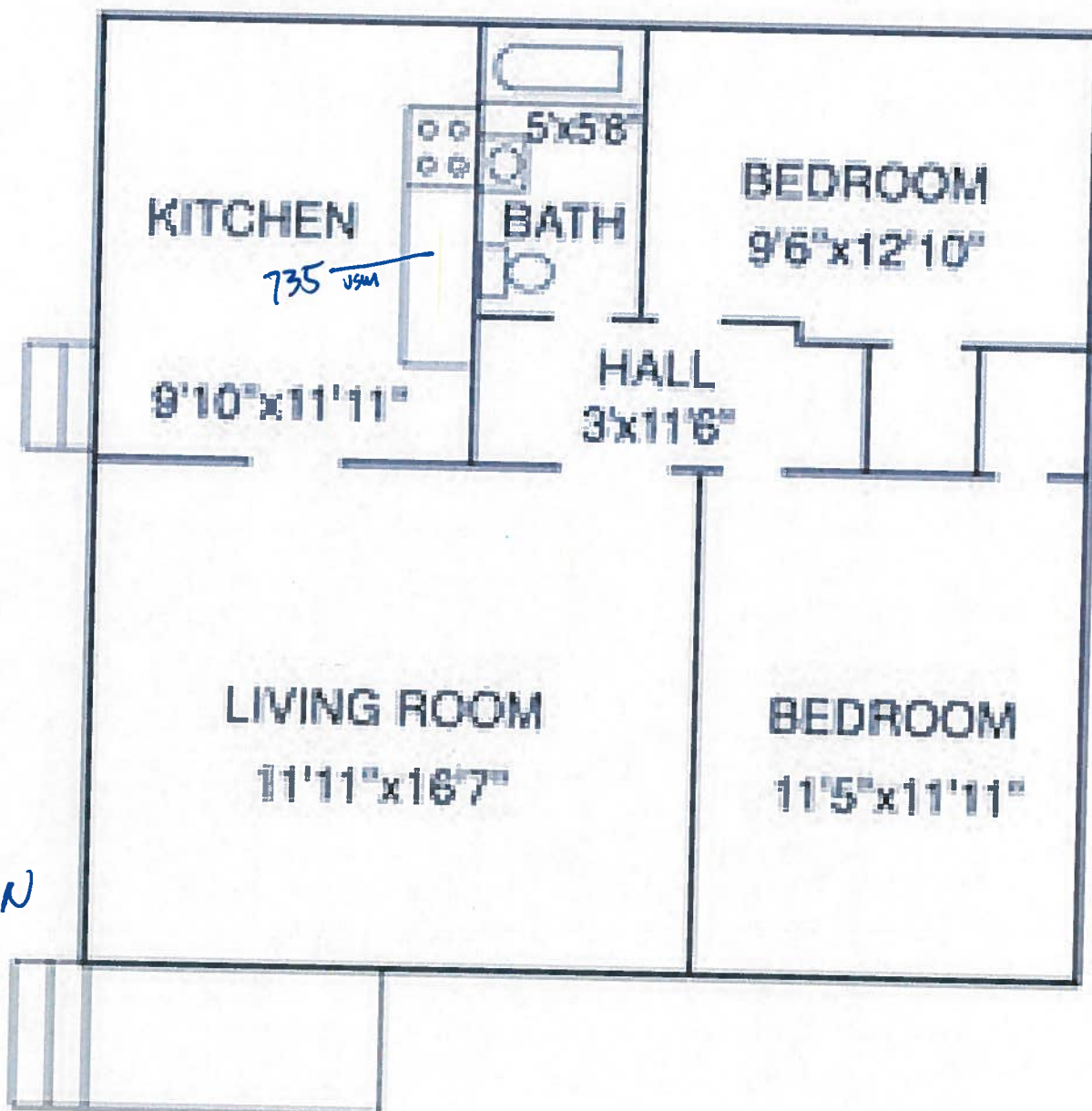
- ||| - 12VFTZ w/ yellow mastic, 12VFTZ (BOTTOM LAYER) w/ ~~BLACK~~ <sup>BROWN</sup> mastic + vapor barrier
- ||| - VSF 1 w/ yellow mastic
- ||| - 12VFTZ w/ yellow mastic, BOTTOM LAYER VSF 6-BS162 w/ brown flower pattern w/ black mastic



Address: 3340 IDAHO

Note: \_\_\_\_\_

- /// - 12VFT2 w/ YELLOW MASTIC, V&P3 w/ BLK MASTIC VAPOR BARRIER
- /// - 12VFT6 w/ YELLOW MASTIC



Address: 3360 IDAHO

Note: UNDER SINK MASTIC (WHITE) KITCHEN

Inspector: J. Magallon

Date: 08-10-18

Drawing Title: IDAHO ST. - 3359 / 3361 (OFFSET) **CITADEL ENVIRONMENTAL SERVICES, INC.**

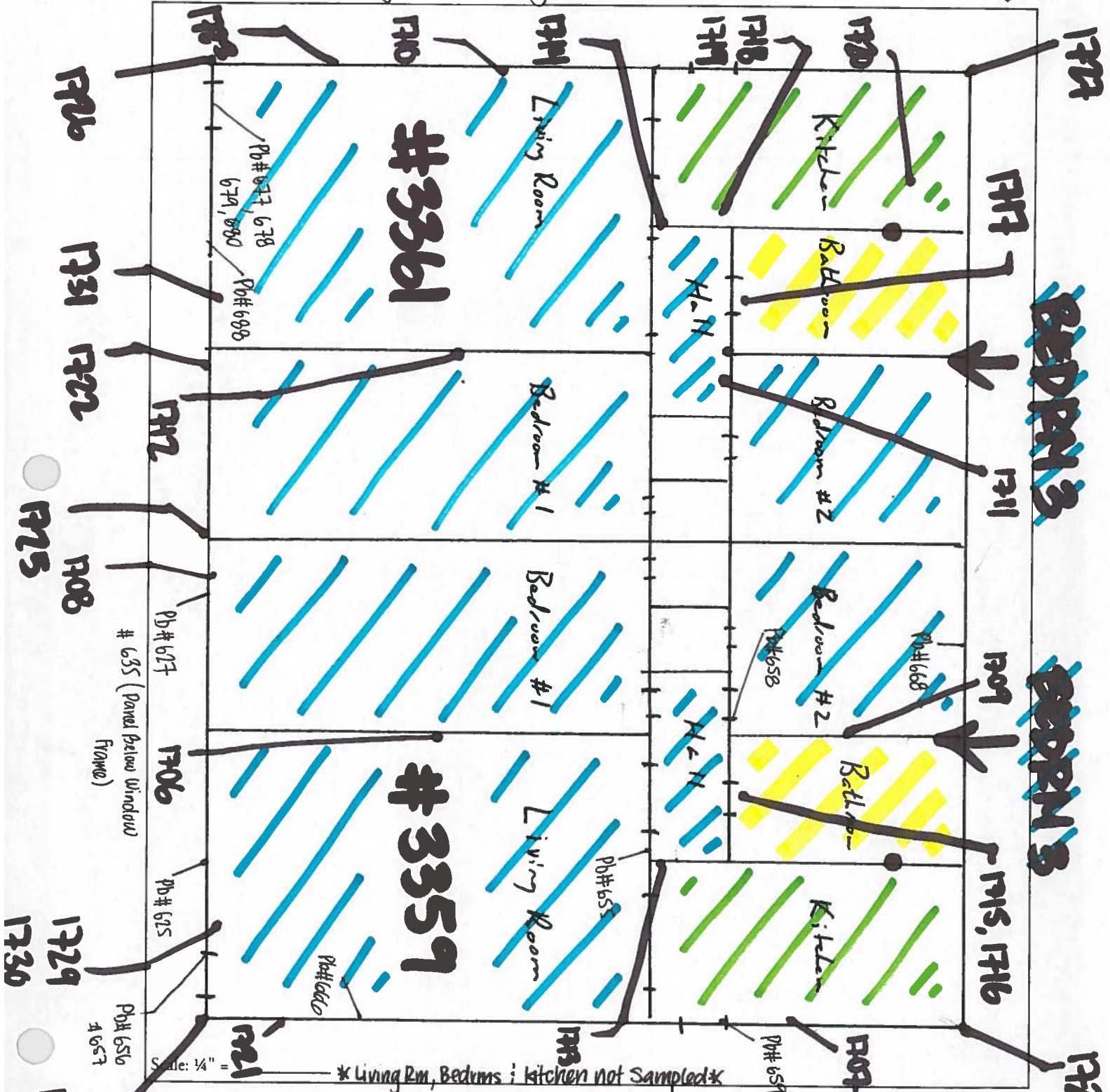
Street Address: UCR - Canyon Crest Housing - IDAHO ST.

Client: Haley & Aldrich

Project #: 7076.1017.0

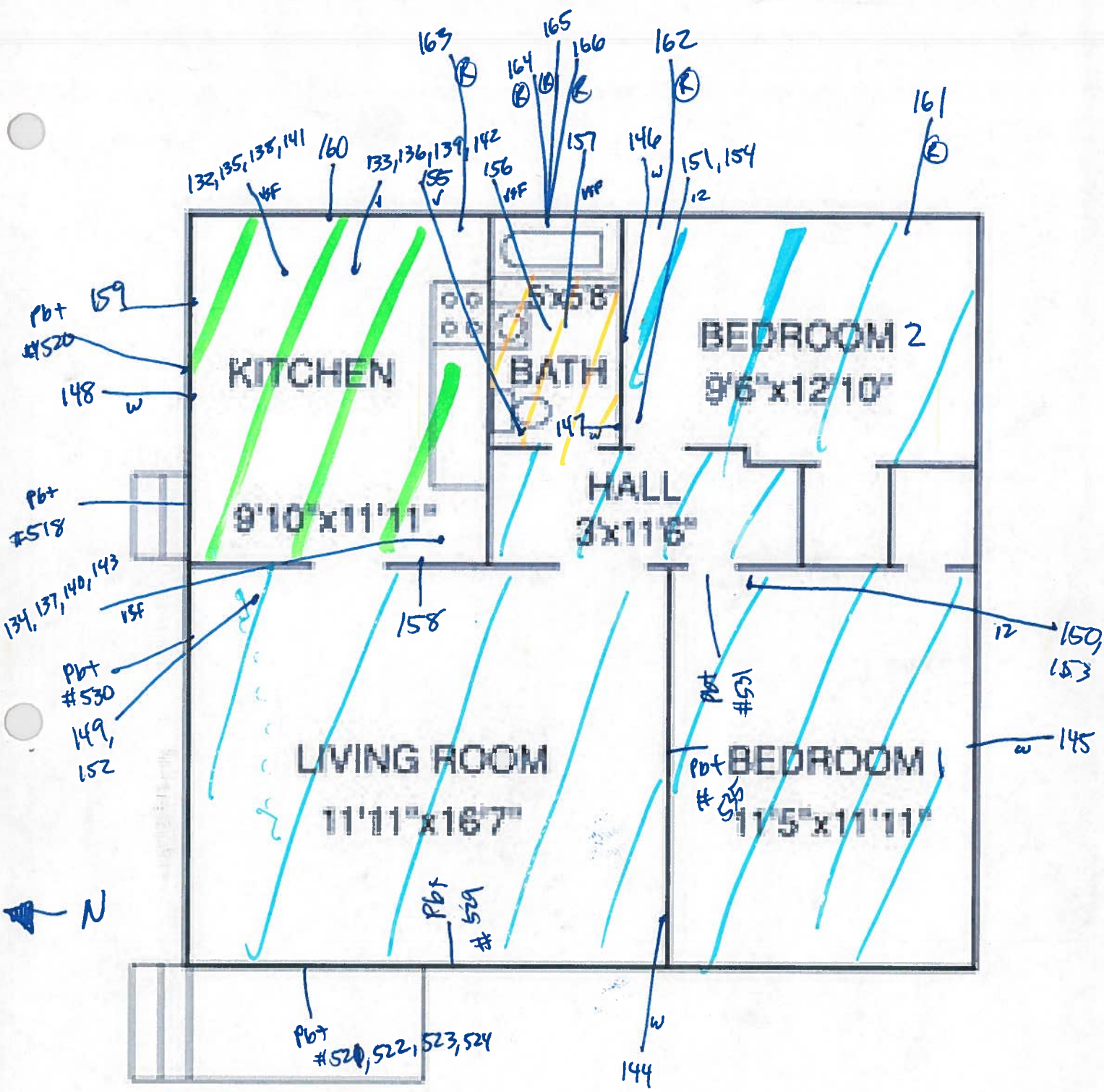
Project Title: UCR - Canyon Crest

Floor: 1st



Scale: 1/4" = 1'-0" \* Living Rm, Bedrms ; kitchen not Sampled\*

- Legend:
- // = 2 Layers - 12VFT (Beige), 12VFT (Brown)
  - // = Multiple VSF layers
  - // = VSF (6" Square Sheet Flooring, Beige Mastic)



Address: 3370 IDAHO

Note: \_\_\_\_\_

- /// - VSF 1 w/ yellow mastic,
- /// - 12VFT 2 w/ yellow mastic, 12VFT 3 w/ black mastic + vapor barrier paper
- /// - VSF 2 w/ white mastic, VSF 7 w/ white mastic, VSF 3 w/ yellow mastic, VSF 6 w/ black mastic + vapor barrier paper

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: \_\_\_\_\_

Street Address: 3374 IDAHO



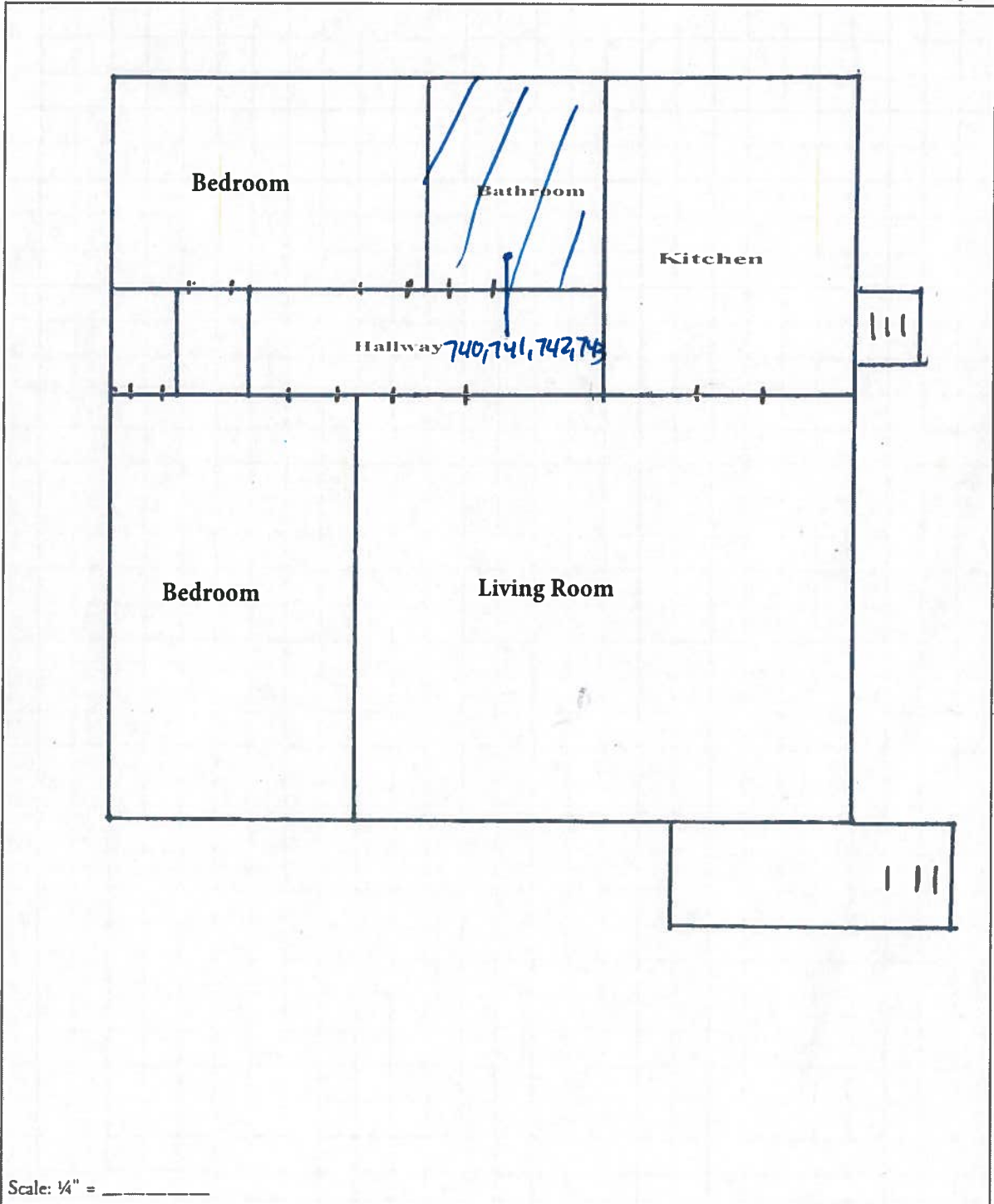
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

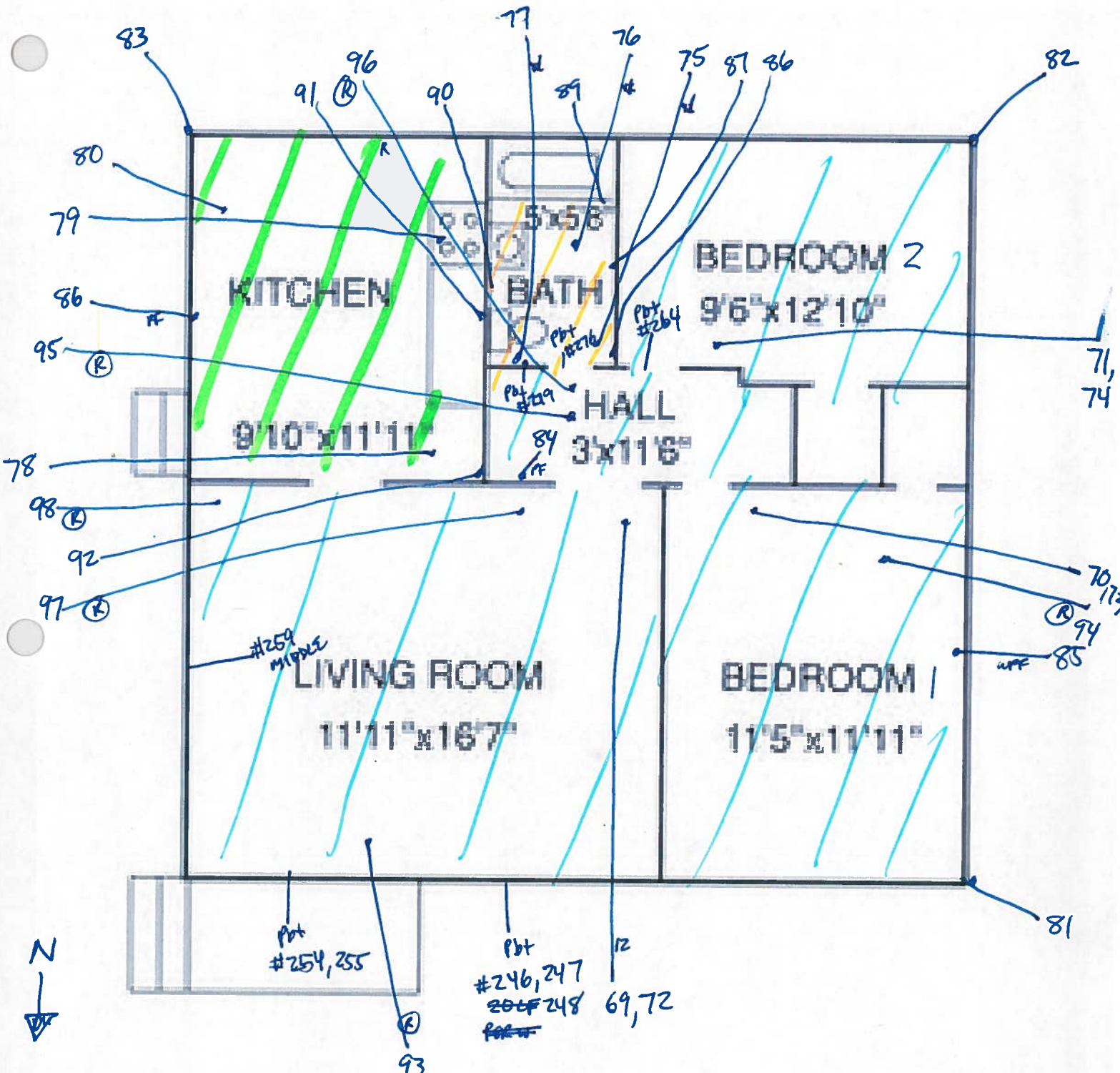
/// - VSF 1 w/WHITE MASTIC, VSF 2 w/WHITE MASTIC, 12VPT 2 w/YELLOW MASTIC,  
VSF 7 w/ YELLOW MASTIC, VSF 6 w/BLACK MASTIC



Address: 3380 IDAHO

Note: USM 3 GRAY KITCHEN

/// - VSF 2 w/ WHITE MASTIC, ~~VSF 2~~ VSF 2 w/ YELLOW MASTIC, VSF 3 w/ BLK MASTIC

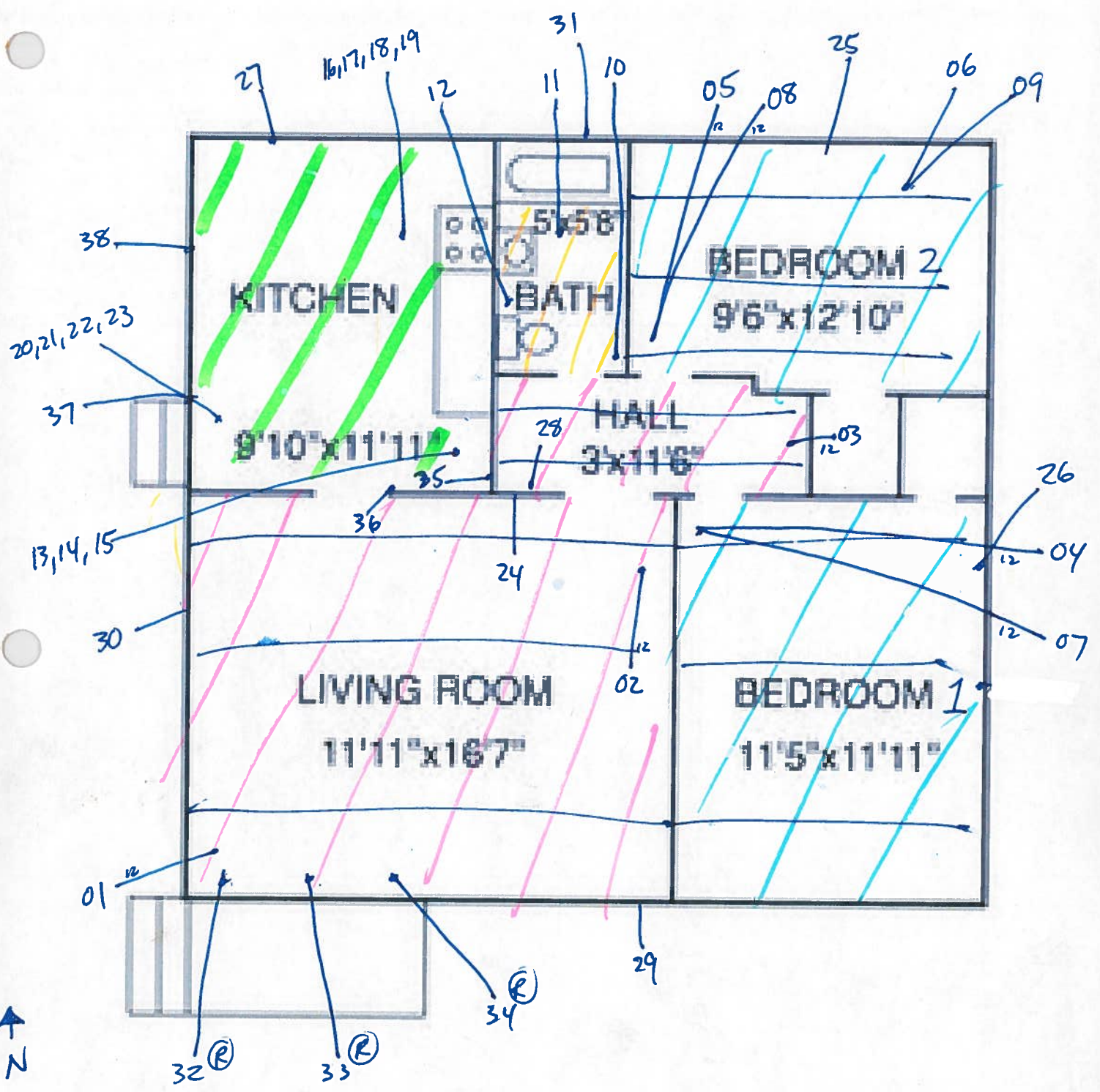


Address: 3398 IDAHO STREET

Note: \_\_\_\_\_

- /// - 12VFT 2 - w YELLOW MASTIC 12VFT 4 w/BLACK MASTIC + VAPOR BARRIER PAPER
- /// - VSF 2 - w YELLOW MASTIC
- /// - VSF 5 - WHITE/GRMY RECTANGLE PATTERN w/ BEIGE MASTIC





Address: 811 PLUM

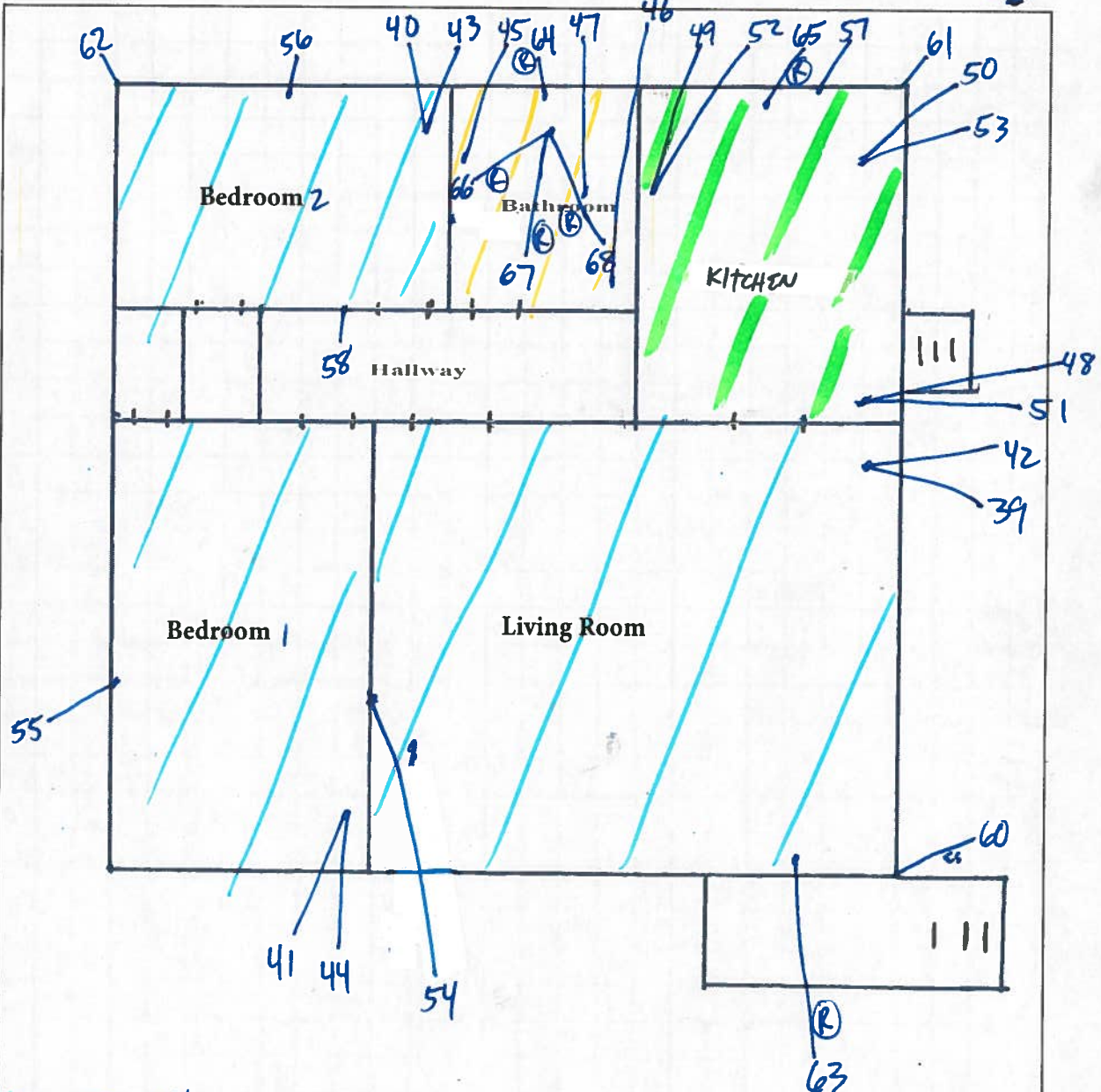
- Note:
- /// - 12VFT BEIGE w/ GRAY STREAKS + YELLOW MASTIC (12VFT 1)
  - /// - 12VFT BROWN w/ WHITE & BROWN STREAKS + YELLOW MASTIC (12VFT 2)
  - ||| - VSF WHITE GRAY 6" SQUARES w/ YELLOW MASTIC
  - ||| - VSF WHITE/GRAY MIXED SQUARE/TRIANGLE PATTERN + 2ND LAYER 12VFT BEIGE w/ YELLOW + BLACK MASTIC + 3RD LAYER 12VFT BEIGE w/ BROWN + WHITE STREAKS w/ BROWN MASTIC (UNDER PLYWOOD) w/ VAPOR BARRIER PAPER
  - == - 12VFT 3 DARK BROWN w/ BROWN STREAK + BLACK MASTIC + VAPOR BARRIER PAPER (SECOND LAYER)

4TH LAYER  
+ VSF PEBBLE  
3  
PATTERN w/  
BLACK

Inspector: J. HOOPER  
 Date: 7/23/18  
 Drawing Title: \_\_\_\_\_  
 Street Address: 622 PLUM ST



Client: \_\_\_\_\_  
 Project #: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Floor: \_\_\_\_\_



- /// 12VFT 2 - w/ yellow mastic + 12VFT 4 w/ black mastic + vapor barrier paper
  - /// VSF 1 - w/ yellow mastic
  - /// VSF 2 - w/ white mastic + 12VFT 2 w/ yellow mastic + VSF 4 (S) w/ yellow squares w/ blk mastic
- Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: Juan Magallon

Date: 07.24.18

Drawing Title: Units # 849, 851

Street Address: Duplex - Plum Street



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: UCK CanyonCrest Housing

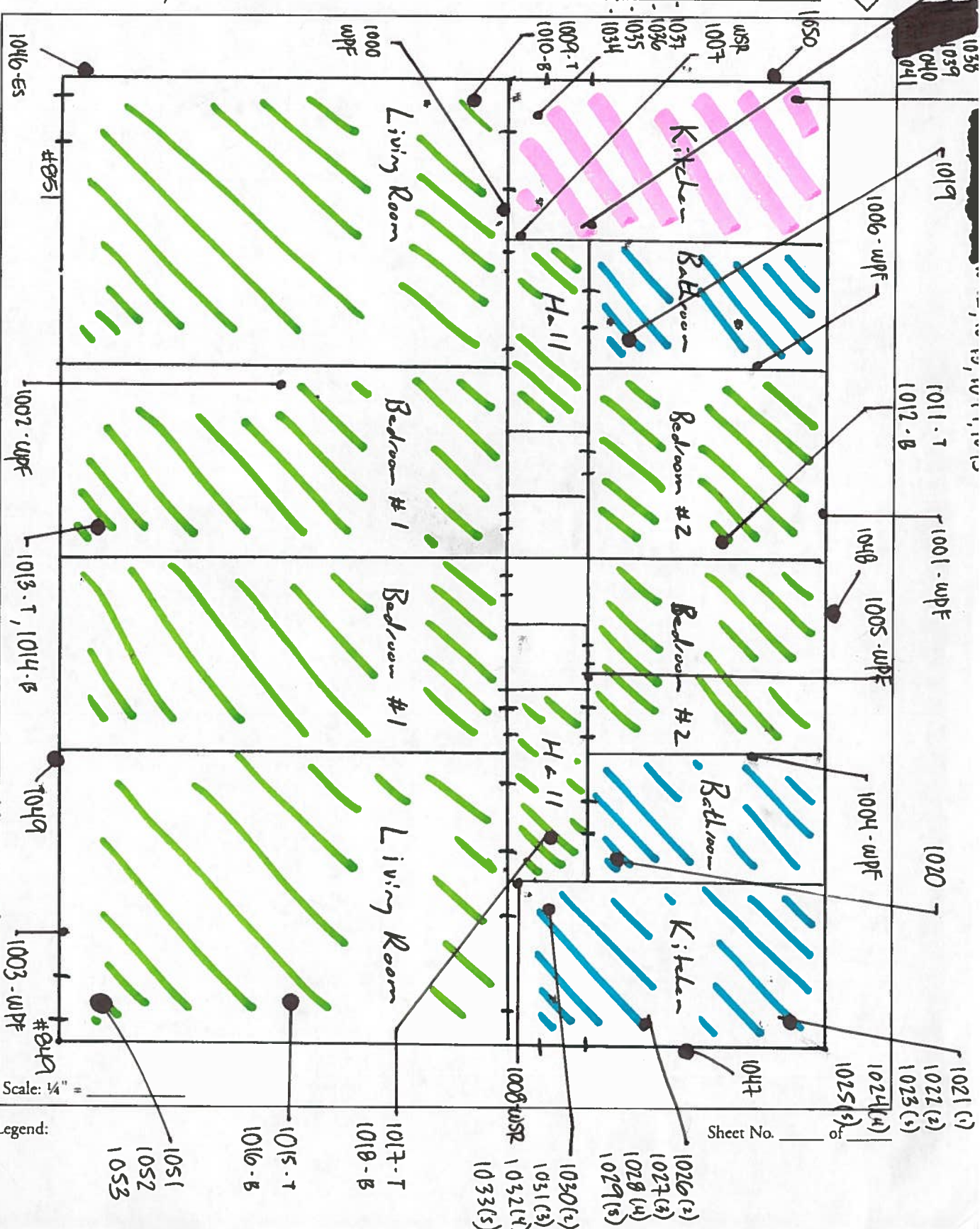
Project #: \_\_\_\_\_

Project Title: Units # 849, 851

Floor: 1<sup>st</sup>



- = (T) = VSF (Beige/Brown) (M) = 12VFT (Beige-Plum), (WH) VSF (Marine-Beige), (B) 12VFT (Red, Blue) w/ Vapor Paper
- = (4) = VSF (Squares-White), (2) = VSF (Plum-White), (3) 12VFT (Beige), (4) VSF (Tan-Marble), (5) VSF (Off White) (Vapor Paper)
- = (T=Top) - 12VFT (Beige w/ Specs) -
- (B=Bottom) - 12 VFT (Brown-No Design)



Scale: 1/4" = 1'-0"

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Magallon

Date: 08-14-18

Drawing Title: Linden St. #747/749

Street Address: UCP - Linden St.



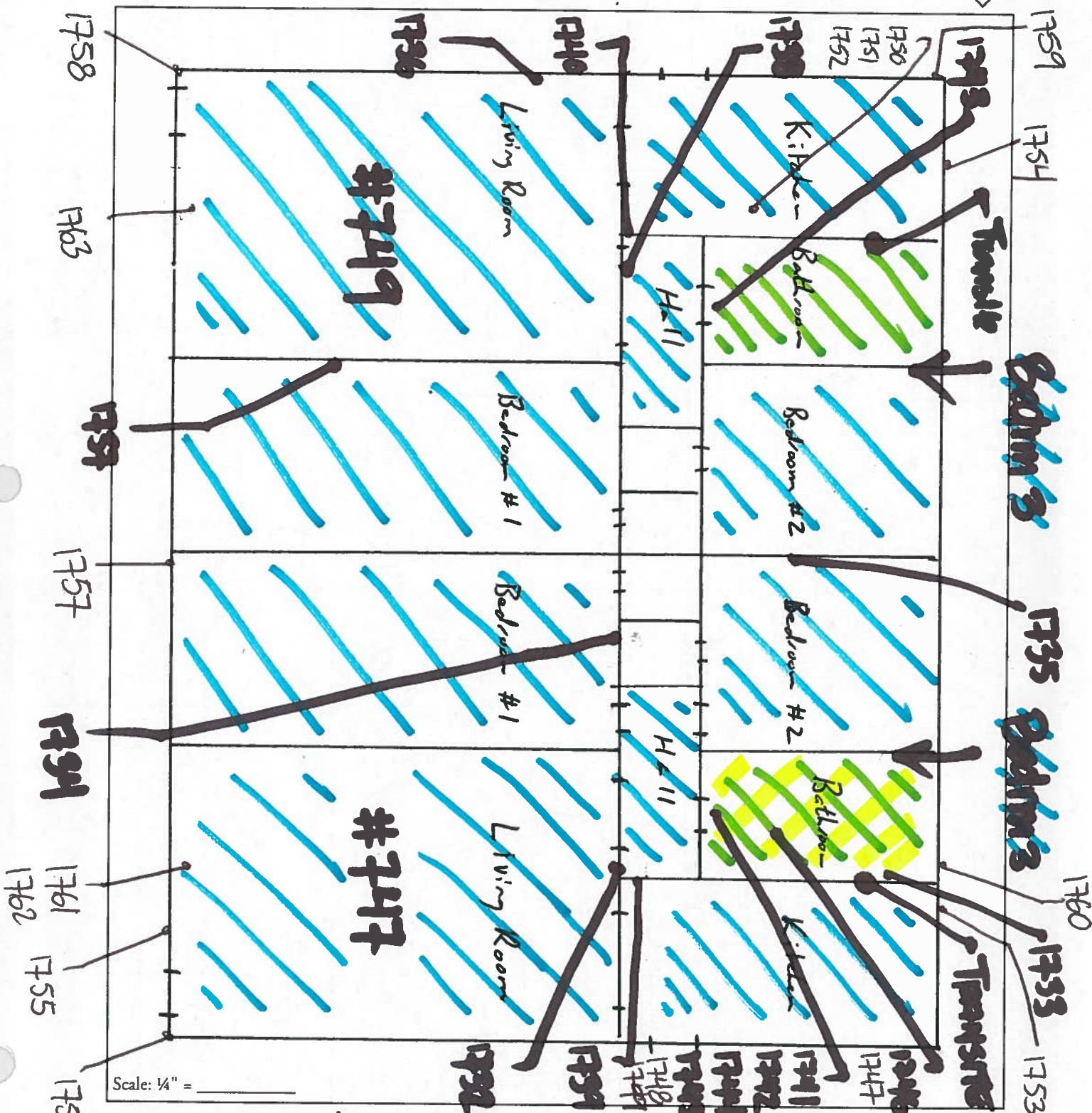
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haley & Aldrich

Project #: 7076.1017.0

Project Title: UCP - Canyon Crest

Floor: 1st



Scale: 1/4" = \_\_\_\_\_

Legend: = 2 layers - (Kitchen - Multiple Layers) - NOT SAMPLED

= VSF (6" Square Floor Sheeting)

= 2 layers (See VSF - Small Triangles Sheet Flooring, FFC - Grey w/ Vapor.)

Sheet No. 1 of 1

## *SUPPORT BUILDINGS*



*CITADEL ENVIRONMENTAL SERVICES, INC.*





Inspector: J. Magallon

Date: 08-21-18

Drawing Title: Laundry Building

Street Address: UCR - Laundry Building - 3406 Florida St.



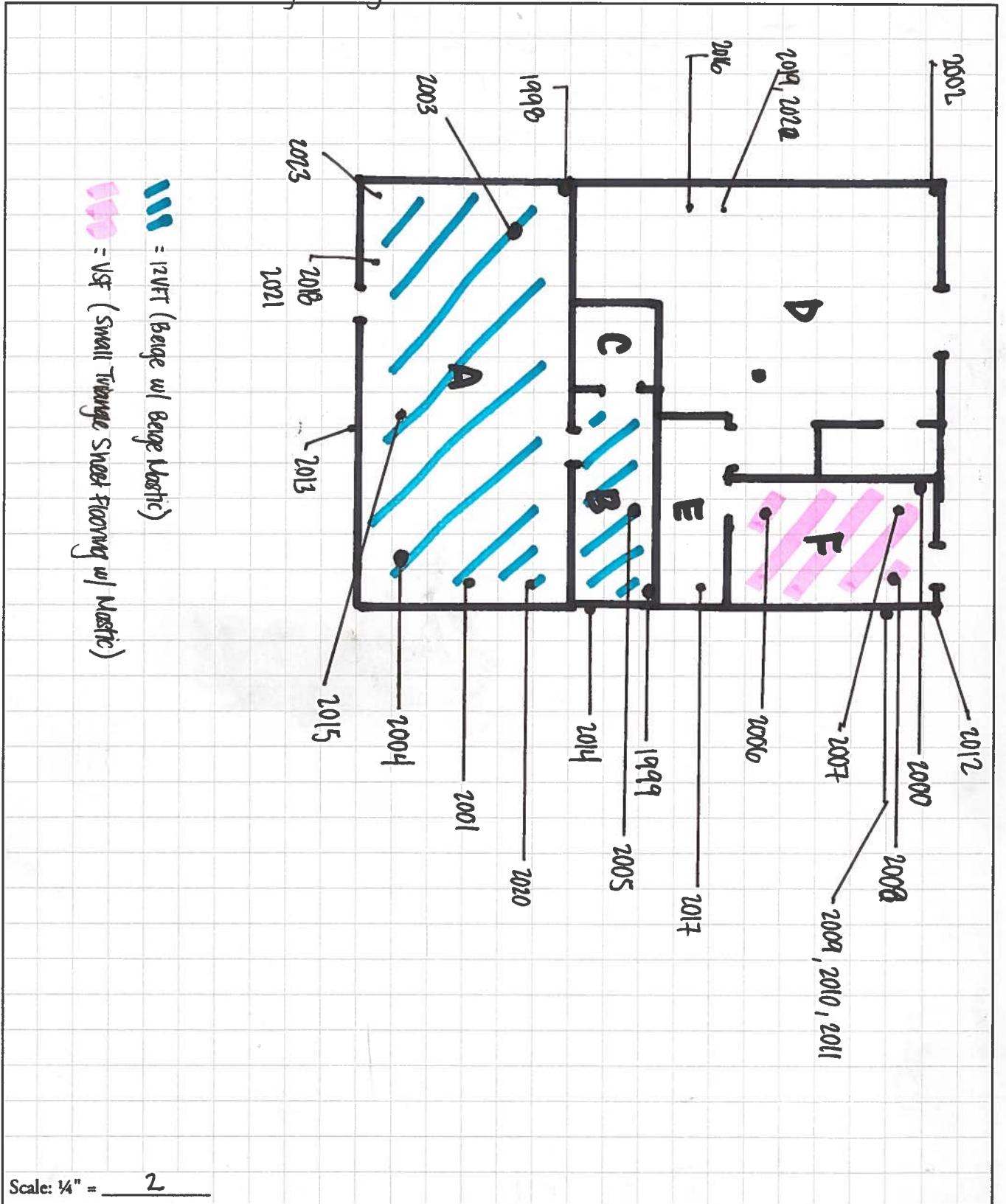
**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

Client: Haky : Aldrich

Project #: 7076.1017.0

Project Title: UCR - Canyon Crest

Floor: 1st



Scale: 1/4" = 2

Legend:

Sheet No. 1 of 1



Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: LAUNDRY ROOM

Street Address: \_\_\_\_\_



Client: \_\_\_\_\_

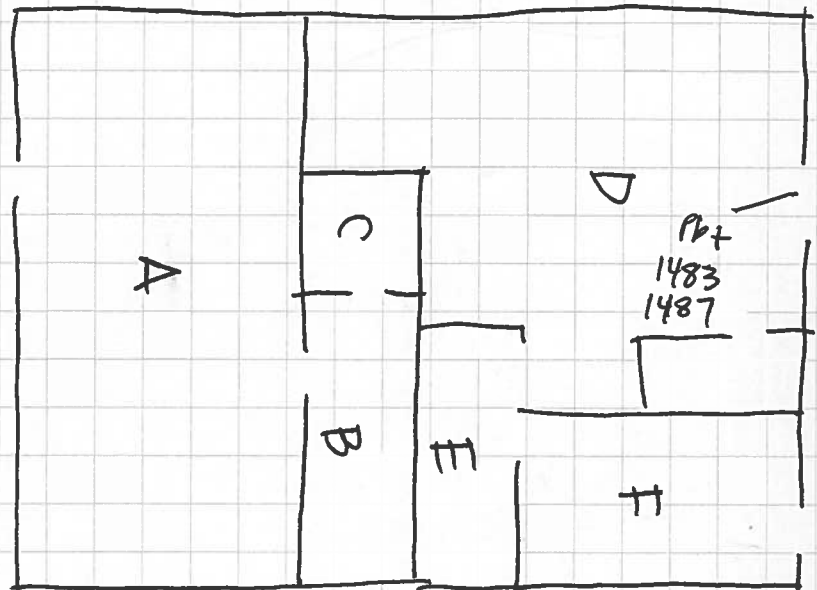
Project #: \_\_\_\_\_

Project Title: LEAD

Floor: \_\_\_\_\_



LEAD



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector:

J. Magallon

Date:

08-20-18

Drawing Title:

Maint. : Ground Shop

Street Address:

UCR - Avocado St.



CITADEL ENVIRONMENTAL SERVICES, INC.

Client:

Haley : Aldrich

Project #:

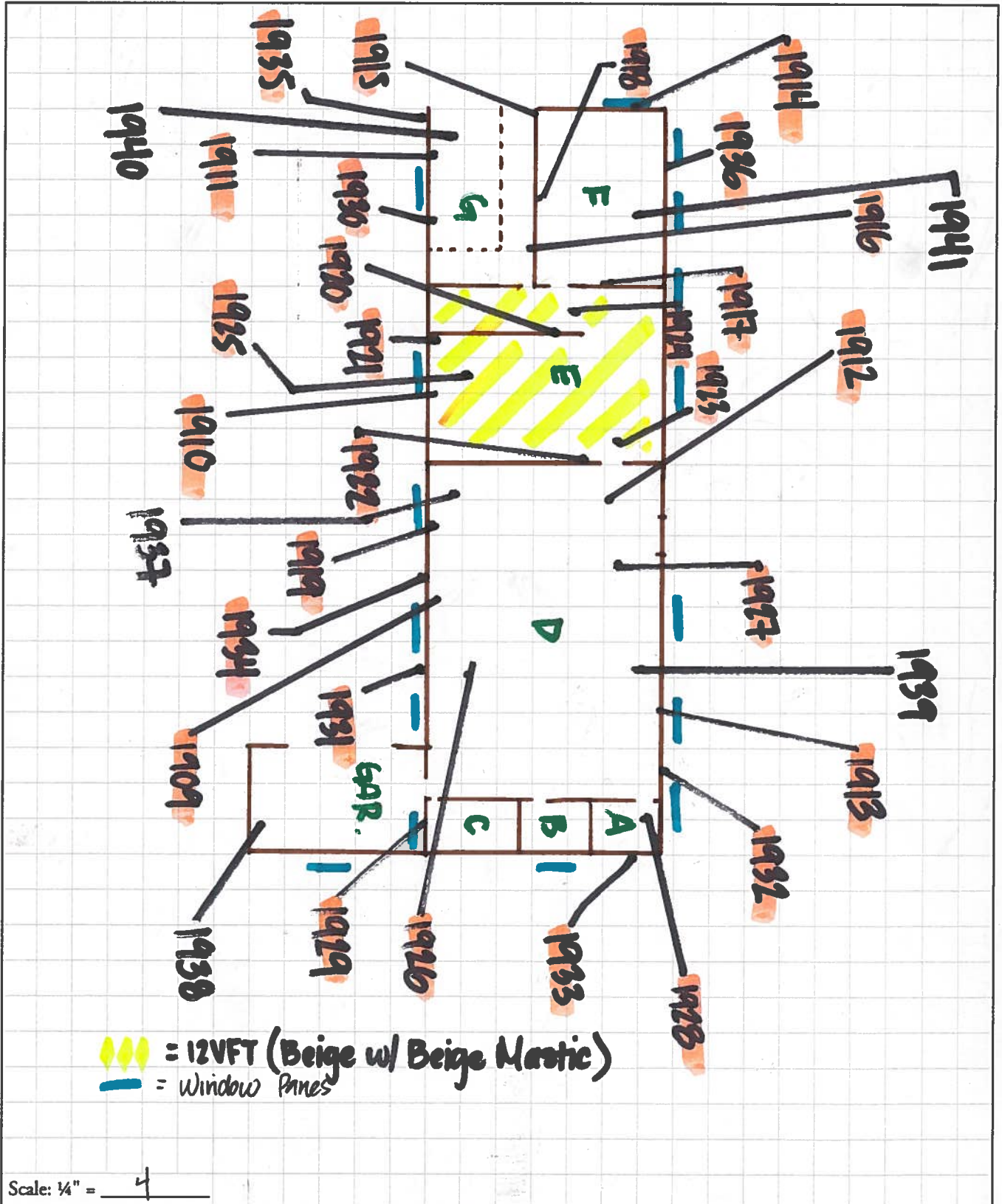
7076.1017.0

Project Title:

UCR - Canyon Crest

Floor:

1st



Legend:

Sheet No. 1 of 1

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: LEAD

Street Address: MAINTENANCE & GROUNDS SHOP

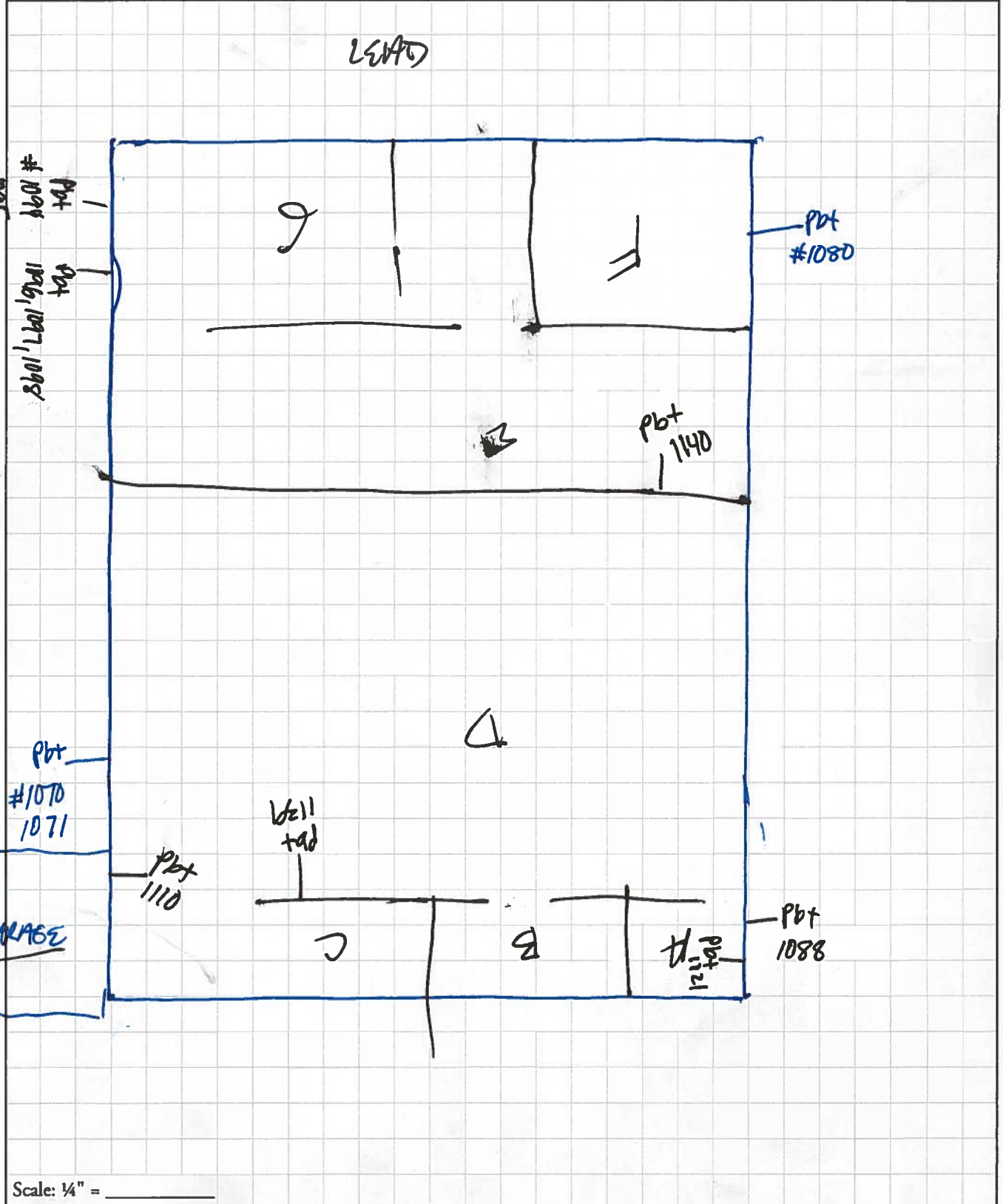


Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_



Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_

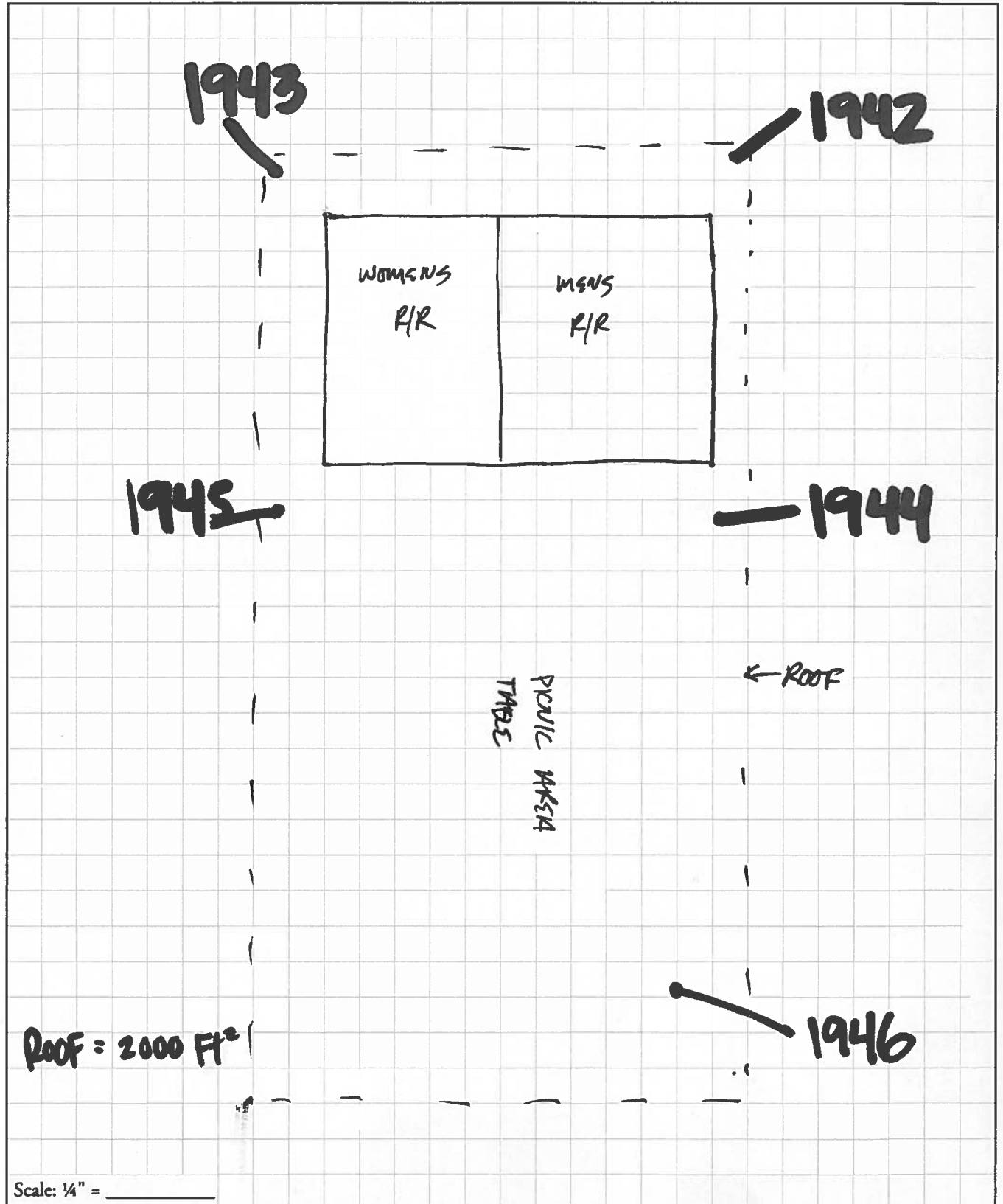


Inspector: \_\_\_\_\_

Date: \_\_\_\_\_

Drawing Title: **PARKS & RECREATION  
RESTROOMS**

Street Address: \_\_\_\_\_



Scale: 1/4" = \_\_\_\_\_

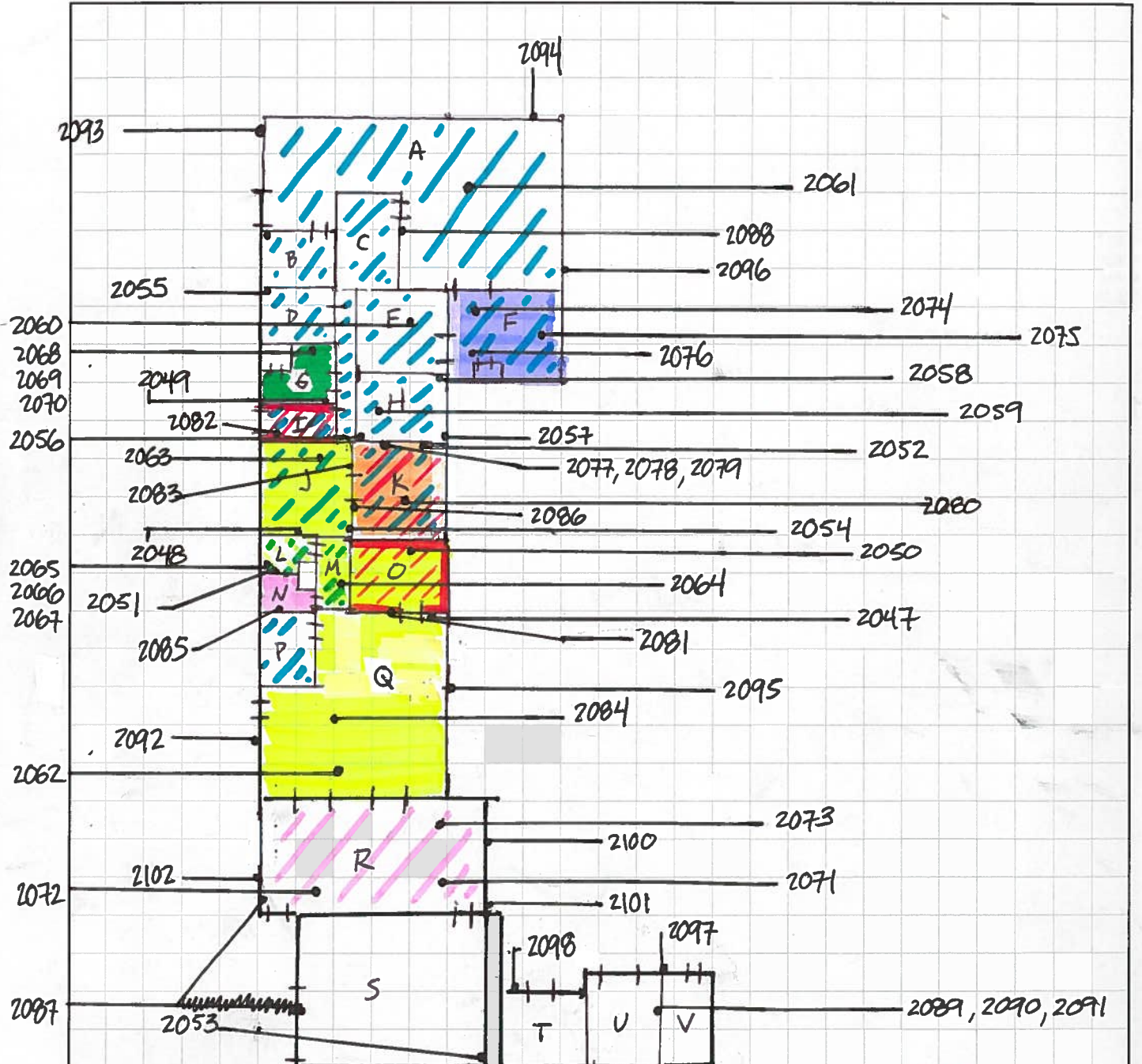
Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Magallon  
 Date: 08.22.18  
 Drawing Title: HDRS - Warehouse  
 Street Address: UCR



Client: Haley & Aldrich  
 Project #: 7076.1617.0  
 Project Title: UCR - Canyon Crest  
 Floor: 1st



- = CT (Glued on Fissured)
- = 12VFT (Beige w/Specs w/ Barrier Vapor)
- = VSF (White Small Triangle Sheet Flooring)
- = Bottom layer VSF (Black/White w/Specs Sheet Flooring)
- = 12VFT (Light Beige w/ Mastic)
- = Transite Wall Panels
- = 12VFT (White w/ Beige Specs)
- = Transite Floor Panels
- = VSF (White 6" Square Sheet Flooring)
- = Top layer 12VFT (white w/ Brown) Bottom layer VSF (Marble w/ Vapor)

Scale: 1/4" = 6'

Legend:  = Bottom layer 12VFT (white w/ Brown & Barrier Vapor)

Sheet No. \_\_\_\_ of \_\_\_\_

Inspector: **J. Hoover / J. Magallon**

Date: **08-22-18**

Drawing Title: **HDRS - Warehouse - Roof Top**

Street Address: **UCR**

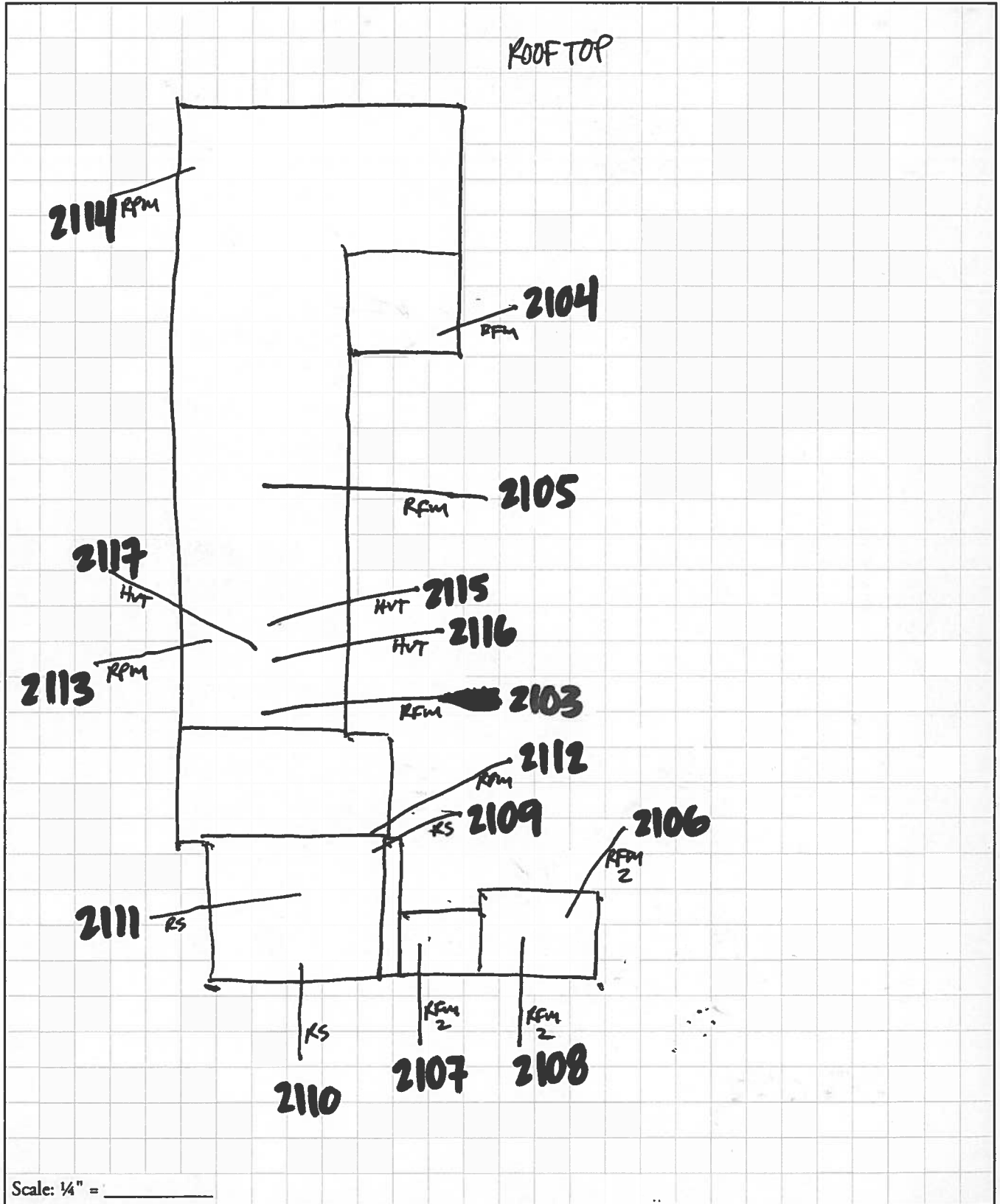


Client: **Haley & Aldrich**

Project #: **7076.1017.0**

Project Title: **UCR - Canyon Crest**

Floor: **1st**



Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. HOOPER

Date: \_\_\_\_\_

Drawing Title: LEAD

Street Address: HDR FACILITIES WAREHOUSE

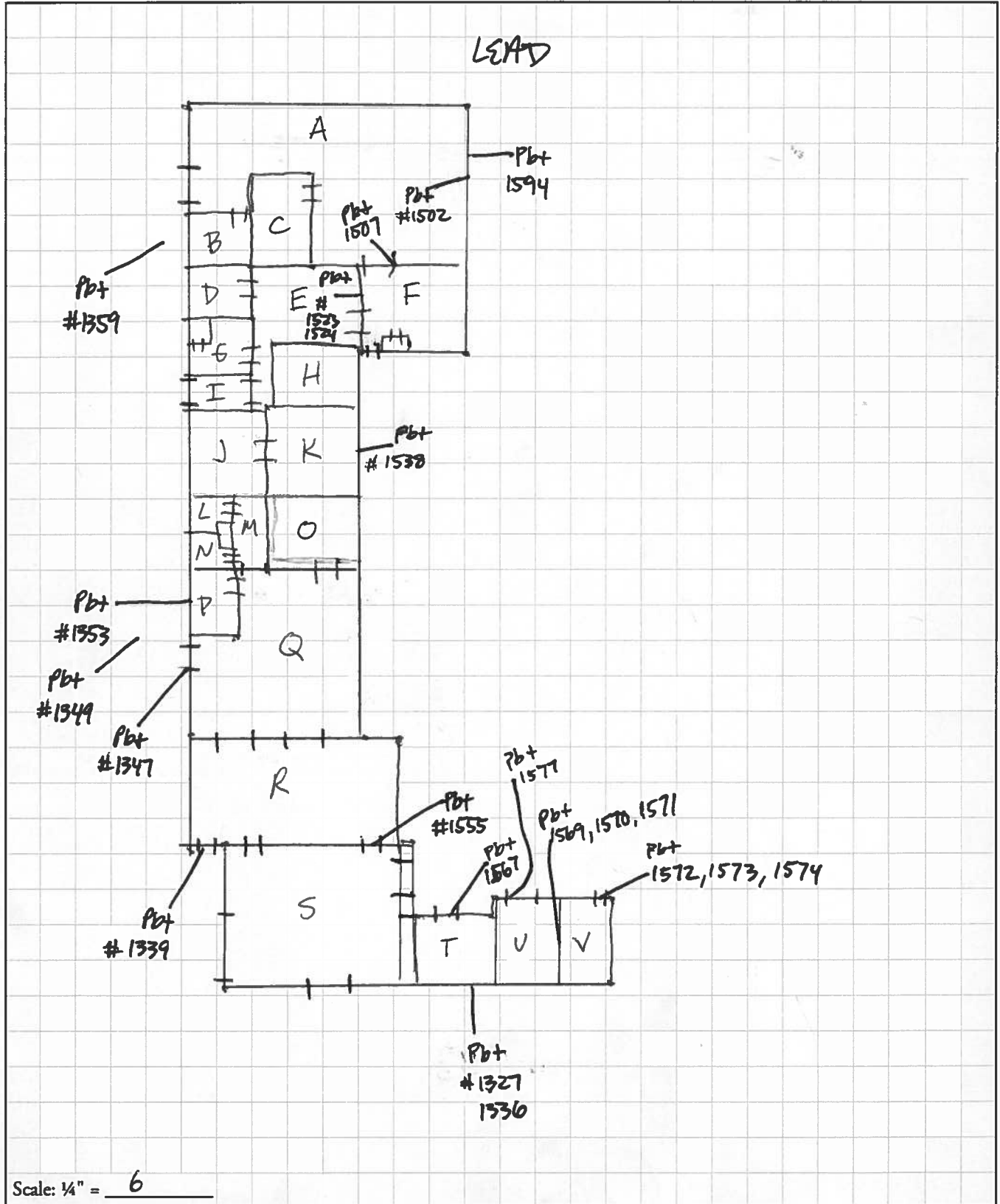


Client: \_\_\_\_\_

Project #: \_\_\_\_\_

Project Title: \_\_\_\_\_

Floor: \_\_\_\_\_



Scale: 1/4" = 6

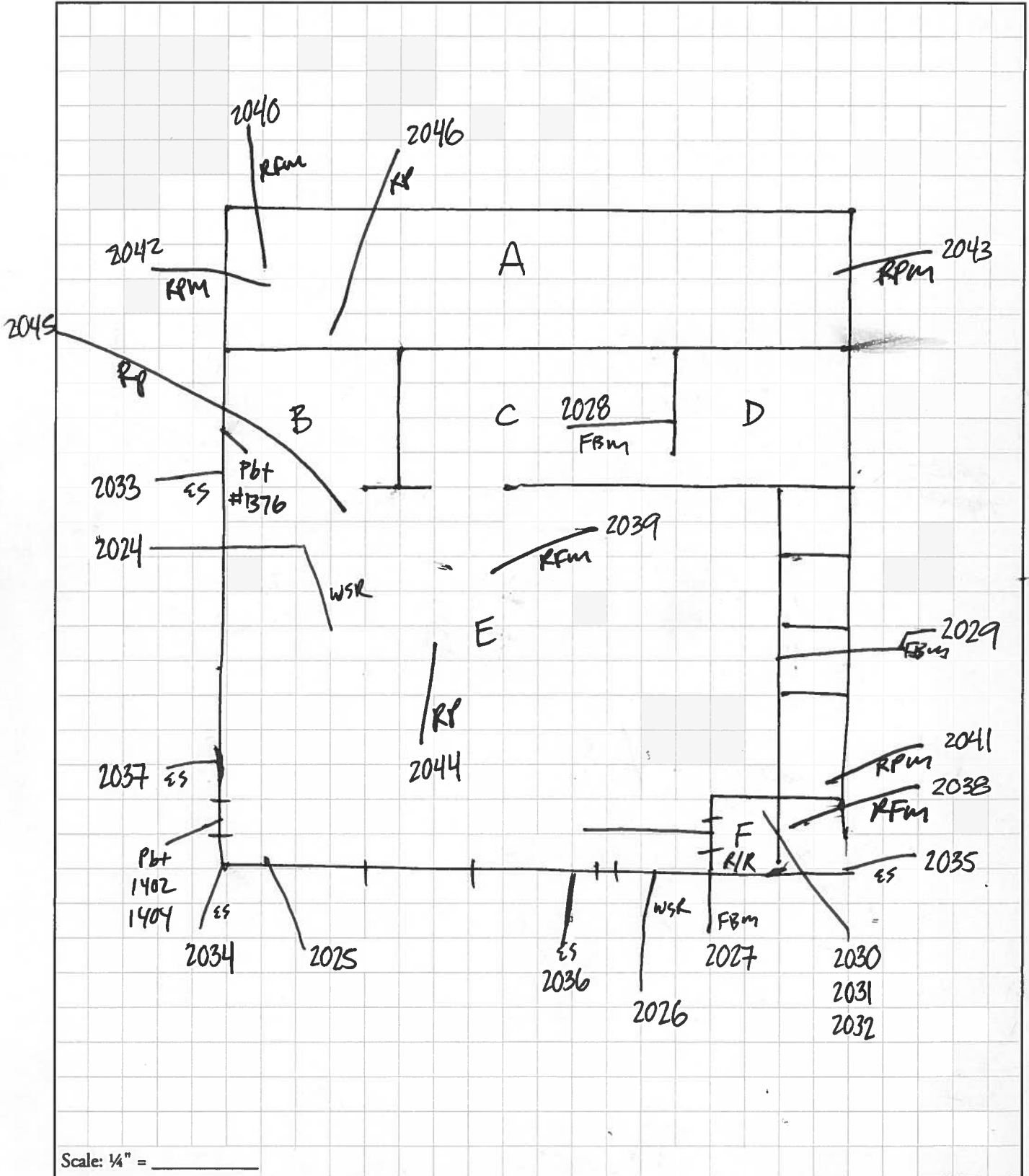
Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_

Inspector: J. Hoover / J. Magallon  
 Date: 08-21-18  
 Drawing Title: 3358 Utah - Carpenter B.  
 Street Address: UCP - 3358 Utah St.



Client: Haley & Aldrich  
 Project #: 7076-1017.0  
 Project Title: UCP - Canyon Crest  
 Floor: 1st



Scale: 1/4" = \_\_\_\_\_

Legend:

Sheet No. \_\_\_\_\_ of \_\_\_\_\_





**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix C**

## **Table 1.0 - Bulk Sample Results**

*HOUSING UNITS*



*CITADEL ENVIRONMENTAL SERVICES, INC.*

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		01-Floor Tile
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		01-Mastic
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room NE	Non-ACM	ND		02-Floor Tile
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room NE	Non-ACM	ND		02-Mastic
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Hallway East	Non-ACM	ND		03-Floor Tile
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Hallway East	Non-ACM	ND		03-Mastic
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		04-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		04-Mastic
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		05-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		05-Mastic
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		06-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		06-Mastic
12VFT3	<b>Dark Brown 12" w/ Brown Streaks &amp; Black Mastic &amp; Moisture Barrier Paper ( Bottom Layer)</b>	<b>811 Plum St Bathroom 1 NW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>07-Floor Tile</b>
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bathroom 1 NW	Non-ACM	ND		07-Mastic
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bathroom 1 NW	Non-ACM	ND		07-Felt
12VFT3	<b>Dark Brown 12" w/ Brown Streaks &amp; Black Mastic &amp; Moisture Barrier Paper ( Bottom Layer)</b>	<b>811 Plum St Bedroom 2 SW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>08-Floor Tile</b>
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		08-Mastic
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		08-Felt
12VFT3	<b>Dark Brown 12" w/ Brown Streaks &amp; Black Mastic &amp; Moisture Barrier Paper ( Bottom Layer)</b>	<b>811 Plum St Bedroom 2 NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>09-Floor Tile</b>
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		09-Mastic
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		09-Felt
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		010-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		010-Mastic
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom North	Non-ACM	ND		010-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom North	Non-ACM	ND		11-Mastic
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom West	Non-ACM	ND		12-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom West	Non-ACM	ND		12-Mastic
VSF1	Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		13-Vinyl Sheet Flooring
VSF1	Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		13-Mastic
12VFT4	Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	811 Plum St Kitchen SE	Non-ACM	ND		14-Vinyl Floor Tile
12VFT4	Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	811 Plum St Kitchen SE	Non-ACM	ND		14-Mastic
12VFT5	Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	811 Plum St Kitchen SE	Non-ACM	ND		15-Vinyl Floor Tile
12VFT5	Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	811 Plum St Kitchen SE	Non-ACM	ND		15-Mastic
VSF2	White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen NE	Non-ACM	ND		16-Vinyl Sheet Flooring
VSF2	White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen NE	Non-ACM	ND		16-Mastic
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		17-Vinyl Floor Tile
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		17-Mastic
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen NE	Non-ACM	ND		18-Vinyl Floor Tile
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen NE	Non-ACM	ND		18-Mastic
<b>VSF3</b>	<b>White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic</b>	<b>811 Plum St Kitchen NE</b>	<b>ACM</b>	<b>18%</b>	<b>Chrysotile</b>	<b>19-Vinyl Sheet Flooring 1</b>
VSF3	White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		19-Vinyl Sheet Flooring 2
VSF2	White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen SW	Non-ACM	ND		20-Vinyl Sheet Flooring
VSF2	White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen SW	Non-ACM	ND		20-Mastic
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen SW	Non-ACM	ND		21-Vinyl Floor Tile
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen SW	Non-ACM	ND		21-Mastic
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen SW	Non-ACM	ND		22-Vinyl Floor Tile
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen SW	Non-ACM	ND		22-Mastic

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF3	White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic	811 Plum St Kitchen SW	ACM	15%	Chrysotile	23
WPF1	White Plaster	811 Plum St Living Room North	Non-ACM	ND		24
WPF1	White Plaster	811 Plum St Bedroom 2 North	Non-ACM	ND		25
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		26
WPF1	White Plaster	811 Plum St Kitchen North	Non-ACM	ND		27
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		28
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior South	Non-ACM	ND		29
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior West	Non-ACM	ND		30
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior North	Non-ACM	ND		31
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Shingle 1
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Vapor Barrier Paper
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Shingle 1
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Vapor Barrier Paper
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Shingle 1
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Vapor Barrier Paper
WS/J1	White Smooth Dry Wall	811 Plum St Kitchen SE	Non-ACM	ND		35-Joint Compound
WS/J1	White Smooth Dry Wall	811 Plum St Kitchen SE	Non-ACM	ND		35-Drywall
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen SE	Non-ACM	ND		FBM 1 - 36
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen SW	Non-ACM	ND		FBM 1 - 37
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen West	Non-ACM	ND		FBM 1 - 38
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		39-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		39-Mastic
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		40-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		40-Mastic
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		41-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		41-Mastic
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	Non-ACM	ND		42-Mastic 1
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	ACM	4%	Chrysotile	42-Vinyl Floor Tile
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	ACCM	<1%	Chrysotile	42-Mastic 2
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	Non-ACM	ND		42-Vapor Barrier Paper
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 2 SW	ACM	3%	Chrysotile	43-Vinyl Floor Tile
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 2 SW	ACCM	<1%	Chrysotile	43-Mastic
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 2 SW	Non-ACM	ND		43-Vapor Barrier Paper
RVFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 1 NW	ACM	3%	Chrysotile	44-Vinyl Floor Tile
RVFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 1 NW	ACCM	<1%	Chrysotile	44-Mastic
RVFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 1 NW	Non-ACM	ND		44-Vapor Barrier Paper
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		45-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		45-Mastic
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom NW	Non-ACM	ND		46-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom NW	Non-ACM	ND		46-Mastic
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SW	Non-ACM	ND		47-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SW	Non-ACM	ND		47-Mastic
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen NW	Non-ACM	ND		48-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen NW	Non-ACM	ND		48-Mastic

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		49-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		49-Mastic
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SW	Non-ACM	ND		50-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SW	Non-ACM	ND		50-Mastic
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen NW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>51-Vinyl Sheet Flooring 1</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen NW	Non-ACM	ND		51-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen NW	Non-ACM	ND		51-Mastic
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen SE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>52-Vinyl Sheet Flooring 1</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SE	Non-ACM	ND		52-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SE	Non-ACM	ND		52-Mastic
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen SW</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>53-Vinyl Sheet Flooring 1</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SW	Non-ACM	ND		53-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SW	Non-ACM	ND		53-Mastic
WPF1	White Plaster	811 Plum St Living Room East	Non-ACM	ND		54-Skim Coat
WPF1	White Plaster	811 Plum St Living Room East	Non-ACM	ND		54-Plaster
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		55-Plaster
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		55-Drywall
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Skim Coat
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Plaster
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Drywall
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Skim Coat
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Plaster
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Drywall
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Skim Coat
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Plaster
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Drywall
WS/J1	White Drywall Smooth	811 Plum St Kitchen NE	Non-ACM	ND		59-Joint Compound
WS/J1	White Drywall Smooth	811 Plum St Kitchen NE	Non-ACM	ND		59-Drywall
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior NW	Non-ACM	ND		60-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior NW	Non-ACM	ND		60-Stucco
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SW	Non-ACM	ND		61-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SW	Non-ACM	ND		61-Stucco
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SE	Non-ACM	ND		62-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SE	Non-ACM	ND		62-Stucco
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Shingle 1
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Shingle 2
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Vapor Barrier
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - South	Non-ACM	ND		64-Shingle
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - South	Non-ACM	ND		64-Vapor Barrier
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - SW	Non-ACM	ND		65-Shingle
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - SW	Non-ACM	ND		65-Vapor Barrier
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>822 Plum ST - Roof - South</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>66</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>822 Plum ST - Roof - South</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>67</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>822 Plum ST - Roof - South</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>68</b>
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		69-Floor Tile
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		69-Mastic
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		70-Floor Tile

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		70-Mastic
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		71-Floor Tile
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		71-Mastic
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Living room - SW</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>72-Floor Tile</b>
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Living room - SW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>72-Mastic 2</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Mastic 3
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 1 - South</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>73-Floor Tile</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 2
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 3
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>74-Floor Tile</b>
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>74-Mastic 2</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Mastic 3
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - NW	Non-ACM	ND		75-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - NW	Non-ACM	ND		75-Mastic
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		76-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		76-Mastic
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - East	Non-ACM	ND		77-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - East	Non-ACM	ND		77-Mastic
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		78-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		78-Mastic
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		79-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		79-Mastic
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		80-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		80-Mastic
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - NW	Non-ACM	ND		81-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - NW	Non-ACM	ND		81-Stucco
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SW	Non-ACM	ND		82-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SW	Non-ACM	ND		82-Stucco
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SE	Non-ACM	ND		83-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SE	Non-ACM	ND		83-Stucco
WPF1	Plaster	3398 Idaho - Level 1 - Hall - North	Non-ACM	ND		84-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Hall - North	Non-ACM	ND		84-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 1 - West	Non-ACM	ND		85-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 1 - West	Non-ACM	ND		85-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		86-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		86-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bath Rm - N.West	Non-ACM	ND		87-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bath Rm - N.West	Non-ACM	ND		87-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 2 - East	Non-ACM	ND		88-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 2 - East	Non-ACM	ND		88-Drywall
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Bathroom - SW	Non-ACM	ND		89- Mastic

**TABLE 1.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Bath Rm - West	Non-ACM	ND		90- Mastic
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Kitchen - West	Non-ACM	ND		91-Mastic
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Kitchen - West	Non-ACM	ND		91-Drywall
WS/J1	Smooth drywall	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		92-Joint Compound
WS/J1	Smooth drywall	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		92-Drywall
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- -Roofing
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- -Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- -Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- -Styrofoam
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- -Roofing
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- -Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- -Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- -Styrofoam
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Roofing
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Styrofoam
RPM1	Roof penetration mastic	3398 Idaho - Roof - South central	Non-ACM	ND		96-Mastic 1
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3398 Idaho - Roof - South central</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>96-Mastic 2</b>
RPM1	Roof penetration mastic	3398 Idaho - Roof - Central	Non-ACM	ND		97
RPM1	Roof penetration mastic	3398 Idaho - Roof - East	Non-ACM	ND		98
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior West	Non-ACM	ND		99
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior SE	Non-ACM	ND		100
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior NE	Non-ACM	ND		101
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 3
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Vapor Barrier
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3334 Idaho - Roof - South</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>105</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3334 Idaho - Roof - South</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>106</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3334 Idaho - Roof - South</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>107</b>
WPF1	Plaster	3334 Idaho - Level 1 - Living room - NW	Non-ACM	ND		108-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Living room - NW	Non-ACM	ND		108-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Kitchen - South	Non-ACM	ND		109-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Kitchen - South	Non-ACM	ND		109-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		110-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		110-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		111-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		111-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Skim Coat
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Plaster

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CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Drywall
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		113-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		113-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom East	Non-ACM	ND		114-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom East	Non-ACM	ND		114-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		115-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		115-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		116-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		116-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		117-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		117-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		118-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		118-Mastic
<b>12VFT4</b>	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Living room - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>119-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Mastic 2
<b>12VFT4</b>	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Bedroom 1 - East</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>120-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Mastic 2
<b>12VFT4</b>	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Bedroom 2 - Central</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>121-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		121-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		121-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		121-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		122-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>122-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		122-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		123-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - SE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>123-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		123-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		124-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>124-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic (bottom layer)	3334 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		124-Mastic 2
WSJ1	Smooth drywall	3334 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		125
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		126-Baseboard
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		126-Mastic
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom - E	Non-ACM	ND		127-Baseboard
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom - SE	Non-ACM	ND		128-Mastic
ES1	Stucco Skim Coat	3370 Idaho - Level 1 - Exterior SW	Non-ACM	ND		129
ES1	Stucco Skim Coat	3370 Idaho - Level 1 - Exterior SE	Non-ACM	ND		130
<b>ES1</b>	<b>Stucco Skim Coat</b>	<b>3370 Idaho - Level 1 - Exterior West</b>	<b>ACCM</b>	<b>0.30%</b>	<b>Chrysotile PCV</b>	<b>131</b>
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		132-Sheet Flooring
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		132-Mastic
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		133-Mastic
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		134-Sheet Flooring
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		134-Mastic



**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Mastic 1
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Mastic 2
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Mastic 1
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Mastic 2
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		137-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		137-Mastic
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		138-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>138-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		138-Mastic 2
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		139-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>139-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		139-Mastic 2
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>140-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		140-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>141-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Mastic 1
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Mastic 2
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>142-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Mastic 1
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Mastic 2
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>143-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		143-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		143-Mastic 2
WPF1	Plaster	3370 Idaho - Level 1 - Living room - SW	Non-ACM	ND		144-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Living room - SW	Non-ACM	ND		144-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		145-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		145-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 2- North	Non-ACM	ND		146-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 2- North	Non-ACM	ND		146-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		147-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		147-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		148-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		148-Drywall
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Living room - NE	Non-ACM	ND		149-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Living room - NE	Non-ACM	ND		149-Mastic
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		150-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		150-Mastic
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		151-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		151-Mastic
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Mastic 1
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper</b>	<b>3370 Idaho - Level 1 - Living room NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>152-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Vapor Barrier Paper

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Mastic 1
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper</b>	<b>3370 Idaho - Level 1 - Bedroom 1 - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>153-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Vapor Barrier Paper
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper</b>	<b>3370 Idaho - Level 1 - Bedroom 2- NW</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>154-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Mastic 2
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NW	Non-ACM	ND		155-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NW	Non-ACM	ND		155-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		156-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		156-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom East	Non-ACM	ND		157-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom East	Non-ACM	ND		157-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		158-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		159-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		160-Mastic
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - SE	Non-ACM	ND		161-Roof Shingle
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - SE	Non-ACM	ND		161-Vapor Barrier Paper
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - East	Non-ACM	ND		162-Roof Shingle
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - East	Non-ACM	ND		162-Vapor Barrier Paper
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - NE	Non-ACM	ND		163-Vapor Barrier Paper
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3370 Idaho - Roof - East</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>164</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3370 Idaho - Roof - East</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>165</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3370 Idaho - Roof - East</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>166</b>
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior East	Non-ACM	ND		167-Skim Coat
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior East	Non-ACM	ND		167-Stucco
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior North	Non-ACM	ND		168-Skim Coat
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior North	Non-ACM	ND		168-Stucco
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior West	Non-ACM	ND		169
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Shingle 1
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Vapor Barrier
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Shingle 1
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Vapor Barrier
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Shingle 1
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Vapor Barrier
WPF1	Plaster	3429 Florida - Level 1- Bedroom 2 - North	Non-ACM	ND		173-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Bedroom 2 - North	Non-ACM	ND		173-Plaster
WPF1	Plaster	3429 Florida - Level 1- Bedroom 2 - North	Non-ACM	ND		173-Drywall
WPF1	Plaster	3429 Florida - Level 1- Bedroom 1- East	Non-ACM	ND		174-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Bedroom 1- East	Non-ACM	ND		174-Plaster
WPF1	Plaster	3429 Florida - Level 1- Bedroom 1- East	Non-ACM	ND		174-Drywall
WPF1	Plaster	3429 Florida - Level 1- Living room - NE	Non-ACM	ND		175-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Living room - NE	Non-ACM	ND		175-Plaster

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UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	3429 Florida - Level 1- Living room - NE	Non-ACM	ND		175-Drywall
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Plaster
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Drywall
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Plaster
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Drywall
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- South	Non-ACM	ND		178-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- South	Non-ACM	ND		178-Mastic
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- West	Non-ACM	ND		179-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- West	Non-ACM	ND		179-Mastic
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- NW	Non-ACM	ND		180-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- NW	Non-ACM	ND		180-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		181-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		181-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		182-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		182-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 2 - East	Non-ACM	ND		183-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 2 - East	Non-ACM	ND		183-Mastic
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)</b>	<b>3429 Florida - Level 1- Living room - SW</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>184-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Mastic 2
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)</b>	<b>3429 Florida - Level 1- Bedroom 1- West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>185-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Mastic 2
<b>12VFT3</b>	<b>12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)</b>	<b>3429 Florida - Level 1- Bedroom 2- East</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>186-Floor Tile</b>
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Mastic 2
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		187-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		187-Sheet Flooring
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		188-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		188-Sheet Flooring
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		189-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		189-Sheet Flooring
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		190-Mastic 1
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen SW</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>190-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		190-Mastic 2
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		191-Mastic 1
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen West</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>191-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		191-Mastic 2
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen NE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>192-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		192-Mastic
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - West	Non-ACM	ND		193-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - West</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>193-Sheet Flooring</b>

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - West	Non-ACM	ND		193-Mastic 2
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - NW	Non-ACM	ND		194-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - NW</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>194-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - NW	Non-ACM	ND		194-Mastic 2
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - East</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>195-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - East	Non-ACM	ND		195-Mastic
WPF1	Plaster	3367 Utah - Level 1 - Living room - North	Non-ACM	ND		196-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Living room - North	Non-ACM	ND		196-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Drywall
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Drywall
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Drywall
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Skim Coat
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Plaster
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Drywall
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - NE	Non-ACM	ND		201-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - West	Non-ACM	ND		202-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - SW	Non-ACM	ND		203-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - SW	Non-ACM	ND		203-Stucco
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Bathroom - South	Non-ACM	ND		204-Baseboard
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Bathroom - South	Non-ACM	ND		204-Mastic
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Kitchen - South	Non-ACM	ND		205-Mastic
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		206-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - East	Non-ACM	ND		207-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - East	Non-ACM	ND		207-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - NW	Non-ACM	ND		208-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - NW	Non-ACM	ND		208-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - West	Non-ACM	ND		209-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - West	Non-ACM	ND		209-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		210-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		210-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		211-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		211-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		212-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		212-Mastic
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>3367 Utah - Level 1 - Living room - NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>213-Floor Tile</b>
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 3
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>3367 Utah - Level 1 - Bedroom 1 - NW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>214-Floor Tile</b>

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 3
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>3367 Utah - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>215-Floor Tile</b>
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>3367 Utah - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>215-Mastic 2</b>
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Mastic 3
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		216-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		216-Mastic
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Mastic
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Floor Tile
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		218-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		218-Mastic
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		219-Mastic
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		219-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		220-Mastic
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		220-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Mastic 1
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Mastic 1
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Mastic
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Vapor Barrier
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3367 Utah - Roof - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>228</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3367 Utah - Roof - Roof - West</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>229</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3367 Utah - Roof - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>230</b>
WSJ1	Smooth drywall	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		231-Joint Compound
WSJ1	Smooth drywall	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		231-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Skim Coat

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Drywall
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Skim Coat
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Plaster
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Drywall
WSJ1	Smooth drywall	3341 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		237-Joint Compound
WSJ1	Smooth drywall	3341 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		237-Drywall
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Mastic 1
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Mastic 2
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		239-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		239-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - West	Non-ACM	ND		240-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - West	Non-ACM	ND		240-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		241-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		241-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		242-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		242-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		243-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		243-Mastic
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		244-Vinyl Floor Tile
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		245-Vinyl Floor Tile
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		246-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Mastic 1
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Vinyl Floor Tile
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		248-Vinyl Floor Tile
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		248-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		249-Sheet Flooring
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Living room - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>250-Vinyl Floor Tile</b>
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Living room - West</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>250-Mastic 2</b>
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Bedroom 2 - North</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>251-Vinyl Floor Tile</b>
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Bedroom 2 - North</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>251-Mastic 2</b>

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Bedroom 1 - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>252-Floor Tile</b>
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>3341 Utah - Level 1 - Bedroom 1 - West</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>252-Mastic 2</b>
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Mastic 3
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 1
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 2
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 3
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Vapor Barrier
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 1
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 2
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 3
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Vapor Barrier
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		255-Shingle
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		255-Vapor Barrier
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>3341 Utah - Roof - West</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>256</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 3341 Utah - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>257</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 3341 Utah - Roof - West</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>258</b>
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NE	Non-ACM	ND		259-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NE	Non-ACM	ND		259-Stucco
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NW	Non-ACM	ND		260-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NW	Non-ACM	ND		260-Stucco
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior SW	Non-ACM	ND		261-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior SW	Non-ACM	ND		261-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Skim Coat
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Plaster
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Skim Coat
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Plaster
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SE	Non-ACM	ND		264
WSJ1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Joint Compound
WSJ1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Skim Coat
WSJ1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Drywall
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		266
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		267
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		268
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Plaster

**TABLE 1.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Drywall
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Skim Coat
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Plaster
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Drywall
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		274-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Kitchen - South	Non-ACM	ND		275-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Bathroom - South	Non-ACM	ND		276-Mastic
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		277-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		277-Mastic
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - North East	Non-ACM	ND		278-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - North East	Non-ACM	ND		278-Mastic
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		279-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		279-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Mastic 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Mastic 2
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Mastic 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Mastic 2
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		282-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		282-Mastic
VSF4	Sheet flooring squares w/ yellow mastic (3rd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		283-Mastic
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>283-Sheet Flooring</b>
VSF4	Sheet flooring squares w/ yellow mastic (3rd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		284-Mastic
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>284-Sheet Flooring</b>
VSF4	Sheet flooring squares w/ yellow mastic (3rd layer)	Unit 3308 Utah - Level 1 - Kitchen - East	ACM	25%	Chrysotile	285-Sheet Flooring
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>285-Mastic</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>287-Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Mastic 2
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>288-Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 1
<b>12VFT3</b>	<b>12" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3308 Utah - Level 1 - Living room - NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>289-Floor Tile</b>
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 1



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	ACM	3%	Chrysotile	290-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	ACM	6%	Chrysotile	291-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	ACCM	<1%	Chrysotile	291-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Mastic 3
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		294-Shingle
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		294-Roofing
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	295
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	296
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	297
WPF1	Plaster	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		298-Joint Compound
WPF1	Plaster	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		298-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Drywall
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Skim Coat
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Plaster
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Drywall
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - NE	Non-ACM	ND		303-Skim Coat
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - NE	Non-ACM	ND		303-Stucco
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SE	Non-ACM	ND		304-Skim Coat
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SE	Non-ACM	ND		304-Stucco
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SW	Non-ACM	ND		305-Skim Coat
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SW	Non-ACM	ND		305-Stucco
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		306
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Kitchen - West	Non-ACM	ND		307
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Bathroom SW	Non-ACM	ND		308
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 3
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Vapor Barrier

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 3
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Vapor Barrier
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		312
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		313
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		314
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		315-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		315-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Kitchen - South	Non-ACM	ND		316-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Kitchen - South	Non-ACM	ND		316-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Bathroom South	Non-ACM	ND		317-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Bathroom South	Non-ACM	ND		317-Mastic
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Living room - East</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>318-Floor Tile</b>
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Mastic 2
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Bedroom 2 - N</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>319-Floor Tile</b>
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Mastic 2
<b>12VFT3</b>	<b>12" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Bedroom 1 - S</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>320-Floor Tile</b>
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		320-Mastic
WSJ1	Drywall smooth	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		321-Joint Compound
WSJ1	Drywall smooth	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		321-Drywall
<b>9VFT1</b>	<b>9" Floor tile w/ black specs w/ yellow mastic (2nd layer)</b>	<b>Unit 3384 Utah - Level 1 - Kitchen - S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>322-Floor Tile</b>
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		322-Mastic
<b>9VFT1</b>	<b>9" Floor tile w/ black specs w/ yellow mastic (2nd layer)</b>	<b>Unit 3384 Utah - Level 1 - Kitchen - SW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>323-Floor Tile</b>
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		323-Mastic
<b>9VFT1</b>	<b>9" Floor tile w/ black specs w/ yellow mastic (2nd layer)</b>	<b>Unit 3384 Utah - Level 1 - Kitchen - NW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>324-Floor Tile</b>
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		324-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		325-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		325-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		326-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		326-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		327-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		327-Vapor Barrier
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern (bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Bathroom S</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>328-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom S	Non-ACM	ND		328-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern (bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Bathroom SW</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>329-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom SW	Non-ACM	ND		329-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern (bottom layer)</b>	<b>Unit 3384 Utah - Level 1 - Bathroom N</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>330-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom N	Non-ACM	ND		330-Mastic
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - NW	Non-ACM	ND		331-Skim Coat

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - NW	Non-ACM	ND		331-Stucco
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - N	Non-ACM	ND		332-Skim Coat
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - N	Non-ACM	ND		332-Stucco
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - E	Non-ACM	ND		333-Skim Coat
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - E	Non-ACM	ND		333-Stucco
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Roof Single 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Roof Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Vapor Barrier
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Roof Shingle 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Roof Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Vapor Barrier
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Shingle 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Vapor Barrier
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 3350 Utah - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>337</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 3350 Utah - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>338</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 3350 Utah - Roof - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>339</b>
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Drywall
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Skim Coat
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Plaster
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Drywall
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		345-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		345-Mastic
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		346-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		346-Mastic
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		347-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		347-Mastic
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3350 Utah - Level 1 - Living room - N</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>348-Vinyl Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3350 Utah - Level 1 - Bedroom 1 - N</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>349-Vinyl Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 3

**TABLE 1.0  
BULK SAMPLE RESULTS  
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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	ACM	4%	Chrysotile	350-Floor Tile
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Mastic 1
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Mastic 2
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bathroom - E	Non-ACM	ND		351-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bathroom - E	Non-ACM	ND		351-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		352-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		352-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		353-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		353-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Vinyl Floor Tile
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		355-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		355-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		356-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		356-Mastic
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Mastic 1
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Mastic 2
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Vinyl Sheet Flooring
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Mastic
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		359-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		359-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		360-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		361-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		362-Mastic
WSJ1	Smooth drywall	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		363-Joint Compound
WSJ1	Smooth drywall	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		363-Drywall
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NE	Non-ACM	ND		364-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NE	Non-ACM	ND		364-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - E	Non-ACM	ND		365-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - E	Non-ACM	ND		365-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NW	Non-ACM	ND		366-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NW	Non-ACM	ND		366-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		367-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		367-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		368-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		368-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		369-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		369-Mastic
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 1
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	ACM	3%	Chrysotile	370-Vinyl Floor Tile
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 3

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Hallway E</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>371-Vinyl Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 3
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Bedroom 2 - W</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>372-Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 3
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		373-Mastic 1
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>373-Vinyl Sheet Flooring</b>
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		373-Mastic 2
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		374-Mastic 1
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>28%</b>	<b>Chrysotile</b>	<b>374-Vinyl Sheet Flooring</b>
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		374-Mastic 2
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - E</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>375-Sheet Flooring</b>
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - E</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>375-Mastic</b>
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>376-Sheet Flooring</b>
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>376-Vinyl Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		376-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>377-Sheet Flooring</b>
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>32%</b>	<b>Chrysotile</b>	<b>377-Vinyl Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		377-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - E</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>378-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		378-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		379-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		379-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		380-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		380-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Bathroom - E	Non-ACM	ND		381-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Bathroom - E	Non-ACM	ND		381-Mastic
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Drywall
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Skim Coat
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Plaster
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Drywall

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J1	Smooth drywall	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		387-Joint Compound
WS/J1	Smooth drywall	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		387-Drywall
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Stucco
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Plaster
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - S	Non-ACM	ND		389-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - S	Non-ACM	ND		389-Stucco
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - E	Non-ACM	ND		390-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - E	Non-ACM	ND		390-Stucco
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		391
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - N	Non-ACM	ND		392
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		393
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Styrofoam
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Styrofoam
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Styrofoam
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		397
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		398
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		399
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Tar
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Vapor Barrier
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Styrofoam
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Tar
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Vapor Barrier
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Styrofoam
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Roofing 1
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Roofing 2
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Styrofoam
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 766 Grape - Roof - Central</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>403</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 766 Grape - Roof - S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>404</b>
<b>RPM1</b>	<b>Roof penetration mastic</b>	<b>Unit 766 Grape - Roof - SW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>405</b>
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - NW	Non-ACM	ND		406
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - NE	Non-ACM	ND		407
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - SE	Non-ACM	ND		408
WPF1	Plaster	Unit 766 Grape - Level 1 - Living room - E	Non-ACM	ND		409-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Living room - E	Non-ACM	ND		409-Drywall

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		410-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		410-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 2 - E	Non-ACM	ND		411-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 2 - E	Non-ACM	ND		411-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 1 - S	Non-ACM	ND		412-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 1 - S	Non-ACM	ND		412-Drywall
WPF1	Plaster Ceiling	Unit 766 Grape - Level 1 - Bathroom - S	Non-ACM	ND		413
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - N	Non-ACM	ND		414
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		415
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		416
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - N	Non-ACM	ND		417-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - N	Non-ACM	ND		417-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		418-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		418-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 2- N central	Non-ACM	ND		419-Floor Tile 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 2- N central	Non-ACM	ND		419-Mastic 1
<b>12VFT2</b>	<b>12" Floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>Unit 766 Grape - Level 1 - Bedroom 2- N central</b>	<b>ACM</b>	<b>6%</b>	<b>Chrysotile</b>	<b>419-Floor Tile 2</b>
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	ACM	4%	Chrysotile	420-Floor Tile
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	ACCM	<1%	Chrysotile	420-Mastic
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		420-Vapor Barrier
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Living room - NE	ACM	4%	Chrysotile	421-Floor Tile
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Living room - NE	ACCM	<1%	Chrysotile	421-Mastic
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		421-Vapor Barrier
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Kitchen	Non-ACM	ND		422-Floor Tile
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Kitchen	Non-ACM	ND		422-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		423-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		423-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - SW	Non-ACM	ND		424-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - SW	Non-ACM	ND		424-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Hallway Center	Non-ACM	ND		425-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Hallway Center	Non-ACM	ND		425-Mastic
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - S	Non-ACM	ND		426- Sheet Flooring
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - NE	Non-ACM	ND		427- Sheet Flooring
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - N	Non-ACM	ND		428-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - SE	Non-ACM	ND		429- Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		430- Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - N	Non-ACM	ND		431-Sheet Flooring
<b>VSF9</b>	<b>Sheet flooring flower frame design w/ yellow mastic (2nd layer)</b>	<b>Unit 766 Grape - Level 1 - Bathroom - N</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>432- Sheet Flooring</b>
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - E	ACM	20%	Chrysotile	433-Sheet Flooring
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - E	ACCM	<1%	Chrysotile	433-Mastic
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - N	ACM	15%	Chrysotile	434-Sheet Flooring
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - N	ACCM	<1%	Chrysotile	434-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - SE	Non-ACM	ND		435-Mastic
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ brown mastic</b>	<b>Unit 766 Grape - Level 1 - Kitchen - SE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>435-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		436-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ brown mastic</b>	<b>Unit 766 Grape - Level 1 - Kitchen - E</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>436-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		436-Mastic 2

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Bathroom - N	ACM	15%	Chrysotile	437-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Bathroom - N	Non-ACM	ND		437-Mastic
WS/J1	Drywall Smooth	Unit 766 Grape - Level 1 - Kitchen - NE	Non-ACM	ND		438-Joint Compound
WS/J1	Drywall Smooth	Unit 766 Grape - Level 1 - Kitchen - NE	Non-ACM	ND		438-Drywall
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		439-Floor Tile
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		439-Mastic
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		440-Floor Tile
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		440-Mastic
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 1 S	ACM	3%	Chrysotile	440-Floor Tile 2
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 2 - W	Non-ACM	ND		441-Floor Tile
12VFT2	12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 2 - W	Non-ACM	ND		441-Mastic
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		442-Mastic 1
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	ACM	3%	Chrysotile	442-Floor Tile
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	ACM	3%	Chrysotile	442-Mastic 2
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		442-Vapor Barrier
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 1 S	ACCM	<1%	Chrysotile	443-Mastic1
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 1 S	ACM	3%	Chrysotile	443-Floor Tile
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 1 S	ACM	4%	Chrysotile	443-Mastic 2
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		443-Vapor Barrier
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 2 W	ACM	4%	Chrysotile	444-Floor Tile
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 2 W	ACM	2%	Chrysotile	444-Mastic
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 2 W	Non-ACM	ND		444-Vapor Barrier
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Sheet Flooring
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Mastic
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Backing
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		446- Sheet Flooring
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		447-Sheet Flooring
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen S	ACCM	<1%	Chrysotile	448-Mastic
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen S	ACM	20%	Chrysotile	448-Sheet Flooring
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen S	ACCM	<1%	Chrysotile	449-Mastic
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen S	ACM	20%	Chrysotile	449-Sheet Flooring
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		450-Mastic
VSF3	Sheet flooring pebble pattern w/ mastic (3rd layer)	873 Grape - Level 1 - Kitchen N	ACM	20%	Chrysotile	450-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	ACCM	<1%	Chrysotile	451-Mastic 1
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451- Vapor Barrier
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451- Mastic 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	ACM	20%	Chrysotile	452- Sheet Flooring 1
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	ACCM	<1%	Chrysotile	452- Mastic 1
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452-- Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452- Vapor Barrier
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452- Mastic 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	ACM	20%	Chrysotile	453-Sheet Flooring 1
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Mastic
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Vapor Barrier
WPF1	Plaster	873 Grape - Level 1 - Kitchen E	Non-ACM	ND		454-Plaster



**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	873 Grape - Level 1 - Kitchen E	Non-ACM	ND		454-Drywall
WPF1	Plaster	873 Grape - Level 1 - Bedroom 1 W	Non-ACM	ND		455-Plaster
WPF1	Plaster	873 Grape - Level 1 - Bedroom 1 W	Non-ACM	ND		455-Drywall
WPF1	Plaster	873 Grape - Level 1 - Bedroom 2 W	Non-ACM	ND		456-Plaster
WPF1	Plaster	873 Grape - Level 1 - Living room W	Non-ACM	ND		457-Plaster
WPF1	Plaster	873 Grape - Level 1 - Living room W	Non-ACM	ND		457-Drywall
WPF1	Plaster Ceiling	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		458
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Kitchen W	Non-ACM	ND		459
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Kitchen NW	Non-ACM	ND		460
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Bathroom N	Non-ACM	ND		461
WS/J1	Smooth drywall	873 Grape - Level 1 - Kitchen SW	Non-ACM	ND		462-Joint Compound
WS/J1	Smooth drywall	873 Grape - Level 1 - Kitchen SW	Non-ACM	ND		462-Drywall
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior SE	Non-ACM	ND		463
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior SW	Non-ACM	ND		464
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior NW	Non-ACM	ND		465
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		466
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		467
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		468
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	469
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	470
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	471
WPF1	Plaster	786 Blaine - Level 1 - Living room E	Non-ACM	ND		472-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Living room E	Non-ACM	ND		472-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 1 E	Non-ACM	ND		473-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 1 E	Non-ACM	ND		473-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		474-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		474-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		475-Drywall
WPF1	Plaster ceiling	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		476
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		477-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		477-Mastic
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		478-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		478-Mastic
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		479-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		479-Mastic
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		480-Mastic 1
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	ACM	4%	Chrysotile	480-Floor Tile
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	ACCM	<1%	Chrysotile	480-Mastic 2
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		480-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		481-Mastic 1
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	ACM	4%	Chrysotile	481-Floor Tile
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	ACM	2%	Chrysotile	481-Mastic 2
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		481-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 2 E	ACM	5%	Chrysotile	482-Floor Tile
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 2 E	ACCM	<1%	Chrysotile	482-Mastic
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Mastic

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Backing
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Mastic
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Backing
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		485-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		485-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		486-Floor Tile
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen E	ACCM	<1%	Chrysotile	486-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen E	ACM	20%	Chrysotile	486-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen N	ACCM	<1%	Chrysotile	487-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen N	ACM	20%	Chrysotile	487-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen N	ACM	30%	Chrysotile	488-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	ACM	20%	Chrysotile	489-Sheet Flooring 1
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	ACCM	<1%	Chrysotile	489-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		489-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		489-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	ACM	20%	Chrysotile	490-Sheet Flooring 1
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	ACCM	<1%	Chrysotile	490-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		490-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		490-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	ACM	35%	Chrysotile	491-Sheet Flooring 1
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Mastic
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen SE	Non-ACM	ND		492
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		493
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		494
WS/J1	Drywall smooth	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		495-Joint Compound
WS/J1	Drywall smooth	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		495-Drywall
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior NW	Non-ACM	ND		496-Skim Coat
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior NW	Non-ACM	ND		496-Stucco
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior SW	Non-ACM	ND		497-Skim Coat
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior SW	Non-ACM	ND		497-Stucco
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior E	Non-ACM	ND		498
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SE	Non-ACM	ND		499-Roof Shingle
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SE	Non-ACM	ND		499-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SW	Non-ACM	ND		501-Shingle
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SW	Non-ACM	ND		501-Vapor Barrier
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	3%	Chrysotile	502
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	3%	Chrysotile	503
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	5%	Chrysotile	504
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Skim Coat
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Drywall

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Skim Coat
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Drywall
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Skim Coat
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Drywall
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 1 - W	Non-ACM	ND		508-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 1 - W	Non-ACM	ND		508-Drywall
WPF1	Plaster ceiling	861 Cherry - Level 1 - Bathroom N	Non-ACM	ND		509-Plaster
WPF1	Plaster ceiling	861 Cherry - Level 1 - Bathroom N	Non-ACM	ND		509-Drywall
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		510-Floor Tile
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		510-Mastic
<b>12VFT2</b>	<b>12" floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>861 Cherry - Level 1 - Living room - NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>510-Floor Tile</b>
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 1 - SW	Non-ACM	ND		511-Floor Tile
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 1 - SW	Non-ACM	ND		511-Mastic
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 2 - NE	Non-ACM	ND		512-Floor Tile
<b>12VFT2</b>	<b>12" floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>861 Cherry - Level 1 - Bedroom 2 - NE</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>512-Mastic</b>
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>861 Cherry - Level 1 - Living room - NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>513-Floor Tile</b>
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Mastic 2
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Vapor Barrier
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>861 Cherry - Level 1 - Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>514-Floor Tile</b>
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 2
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Vapor Barrier
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 3
<b>12VFT3</b>	<b>9" Floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>861 Cherry - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>515-Floor Tile</b>
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 2 - NE	Non-ACM	ND		515-Mastic
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 2 - NE	Non-ACM	ND		515-Vapor Barrier
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		516-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		516-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		517-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		517-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - S	Non-ACM	ND		518-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - S	Non-ACM	ND		518-Mastic
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - NE	Non-ACM	ND		519-Mastic
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - E	Non-ACM	ND		520-Mastic
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - SE	Non-ACM	ND		521
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Texture
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Skim Coat
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Stucco
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Texture
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Skim Coat
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Stucco
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Skim Coat 1
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Skim Coat 2
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Stucco

**TABLE 1.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		525-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		525-Mastic
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		526-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		526-Mastic
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		527-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		527-Mastic
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		528-Floor Tile
<b>VSF7</b>	<b>Sheet flooring w/ brown specks w/ mastic (3rd layer)</b>	<b>861 Cherry - Level 1 - Kitchen NW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>528-Mastic</b>
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		528-Sheet Flooring
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		529-Floor Tile
<b>VSF7</b>	<b>Sheet flooring w/ brown specks w/ mastic (3rd layer)</b>	<b>861 Cherry - Level 1 - Kitchen W</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>529-Mastic</b>
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		529-Sheet Flooring
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		530-Mastic
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		530-Sheet Flooring
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		531-Sheet Flooring
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		531-Mastic
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		532-Sheet Flooring
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		532-Mastic
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		533-Sheet Flooring 1
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		533-Mastic
<b>VSF3</b>	<b>Sheet floor w/ pebble pattern w/ mastic (4th mastic)</b>	<b>861 Cherry - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>533-Sheet Flooring 2</b>
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen NW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>534-Sheet Flooring</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Floor Tile
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Vapor Barrier 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Mastic 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Vapor Barrier 2
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen W</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>535-Sheet Flooring</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Floor Tile
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Vapor Barrier 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Mastic 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Vapor Barrier 2
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>536-Sheet Flooring 1</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Sheet Flooring 2
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Vapor Barrier
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Mastic
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NE	Non-ACM	ND		539-Shingle
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NE	Non-ACM	ND		539-Vapor Barrier
<b>RPM1</b>	<b>Penetration mastic</b>	<b>861 Cherry - Roof - N</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>540</b>
<b>RPM1</b>	<b>Penetration mastic</b>	<b>861 Cherry - Roof - N</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>541</b>
<b>RPM1</b>	<b>Penetration mastic</b>	<b>861 Cherry - Roof - N</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>542</b>
WS/J1	Drywall smooth	861 Cherry - Roof -Kitchen SE	Non-ACM	ND		543

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Living room - E	Non-ACM	ND		544-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Living room - E	Non-ACM	ND		544-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Hallway NW	Non-ACM	ND		545-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Hallway NW	Non-ACM	ND		545-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		546-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		546-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Texture
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Drywall
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Texture
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Plaster
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Drywall
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -NE	Non-ACM	ND		549-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -NE	Non-ACM	ND		549- Stucco
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SW	Non-ACM	ND		550-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SW	Non-ACM	ND		550- Stucco
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SE	Non-ACM	ND		551-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SE	Non-ACM	ND		551-Stucco
WSJ1	Drywall w/ heavy texture	3419 Kentucky - Level 1 - Kitchen	Non-ACM	ND		552
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Floor Tile 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Mastic 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	ACM	4%	Chrysotile	553-Floor Tile 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	ACCM	<1%	Chrysotile	553-Mastic 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Mastic 3
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		554-Mastic 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	ACM	4%	Chrysotile	554-Floor Tile
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	ACCM	<1%	Chrysotile	554-Mastic 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		554-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	ACM	4%	Chrysotile	555-Floor Tile
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	ACCM	<1%	Chrysotile	555-Mastic
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	Non-ACM	ND		555-Vapor Barrier
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		556-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		556-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		557-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		557-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		558-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		558-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		559-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		559-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		560-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		560-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		561-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		561-Mastic
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Mastic 1
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Sheet Flooring

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562- Mastic 2
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Mastic 1
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Sheet Flooring
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563- Mastic 2
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Mastic
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Sheet Flooring
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		565-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		565-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Sheet Flooring 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Sheet Flooring 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Mastic
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Sheet Flooring
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Mastic
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Sheet Flooring 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Vapor Barrier 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Mastic 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Sheet Flooring 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Vapor Barrier 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Mastic 2
WP1	Window putty	3419 Kentucky - Level 1 - Exterior E	Non-ACM	ND		571
WP1	Window putty	3419 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		572
WP1	Window putty	3419 Kentucky - Level 1 - Exterior N	Non-ACM	ND		573
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - SE	Non-ACM	ND		574-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - SE	Non-ACM	ND		574-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - E	Non-ACM	ND		575-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - E	Non-ACM	ND		575-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - NE	Non-ACM	ND		576-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - NE	Non-ACM	ND		576-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Roof Shingle 1
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Roof Shingle 2
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 1
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 2
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 3
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		579-Shingle

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		579-Vapor Barrier
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	4%	Chrysotile	580
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	4%	Chrysotile	581
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	3%	Chrysotile	582
WPF1	Plaster	3434 Kentucky - Level 1 - Living room SW	Non-ACM	ND		583-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Living room SW	Non-ACM	ND		583-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Kitchen N	Non-ACM	ND		584-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Kitchen N	Non-ACM	ND		584-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Hall NW	Non-ACM	ND		585-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Hall NW	Non-ACM	ND		585-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Bedroom 2 E	Non-ACM	ND		586-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Bedroom 2 E	Non-ACM	ND		586-Drywall
WPF1	Plaster ceiling	3434 Kentucky - Level 1 - Bathroom SE	Non-ACM	ND		587-Plaster
WPF1	Plaster ceiling	3434 Kentucky - Level 1 - Bathroom SE	Non-ACM	ND		587-Drywall
WSU1	Drywall smooth	3434 Kentucky - Level 1 - Kitchen SW	Non-ACM	ND		588
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NW	Non-ACM	ND		589-Skim Coat
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NW	Non-ACM	ND		589-Stucco
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NE	Non-ACM	ND		590-Skim Coat
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NE	Non-ACM	ND		590-Stucco
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		591-Skim Coat
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		591-Stucco
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen SW	Non-ACM	ND		592
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen S	Non-ACM	ND		593
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen SE	Non-ACM	ND		594
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		595-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		595-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		596-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		596-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		597-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		597-Mastic
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Texture
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Texture
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Texture
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Texture
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Drywall
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Texture
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Plaster
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Drywall
WP1	Window putty	890 Blaine - Level 1 - N	Non-ACM	ND		603
WP1	Window putty	890 Blaine - Level 1 - W	Non-ACM	ND		604

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WP1	Window putty	890 Blaine - Level 1 - SW	Non-ACM	ND		605
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior NW	Non-ACM	ND		606
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior SW	Non-ACM	ND		607
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior S	Non-ACM	ND		608
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		609-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		609-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		610-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		610-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		611-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		611-Mastic
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Tar
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Felt
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Styrofoam
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Tar
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Felt
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Styrofoam
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Tar
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Styrofoam
WP1	Window putty	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		615
WP1	Window putty	3446 Avocado - Level 1 - Exterior W	Non-ACM	ND		616
WP1	Window putty	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		617
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen W	Non-ACM	ND		618-Baseboard
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen W	Non-ACM	ND		618-Mastic
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		619-Mastic
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Bathroom NE	Non-ACM	ND		620
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SW	Non-ACM	ND		621-Skim Coat
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SW	Non-ACM	ND		621-Stucco
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		622-Skim Coat
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		622-Stucco
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		623-Skim Coat 1
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		623-Skim Coat 2
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		625-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		625-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Plaster



**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Drywall
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - SE	Non-ACM	ND		629-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - SE	Non-ACM	ND		629-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - NW	Non-ACM	ND		630-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - NW	Non-ACM	ND		630-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - N	Non-ACM	ND		631-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - N	Non-ACM	ND		631-Vapor Barrier
RPM1	<b>Penetration mastic</b>	<b>3446 Avocado - Roof - N</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>632</b>
RPM1	<b>Penetration mastic</b>	<b>3446 Avocado - Roof - N</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>633</b>
RPM1	<b>Penetration mastic</b>	<b>3446 Avocado - Roof - N</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>634</b>
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		635-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		635-Mastic
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		636-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		636-Mastic
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		637-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		637-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		638-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		638-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		639-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		639-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		640-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		640-Mastic
VSF6	<b>Sheet flooring brown flower pattern w/ black mastic</b>	<b>3446 Avocado - Level 1 - Bathroom N</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>641-Sheet Flooring</b>
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		641-Mastic
VSF6	<b>Sheet flooring brown flower pattern w/ black mastic</b>	<b>3446 Avocado - Level 1 - Bathroom N</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>642-Sheet Flooring</b>
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		642-Mastic
VSF6	<b>Sheet flooring brown flower pattern w/ black mastic</b>	<b>3446 Avocado - Level 1 - Bathroom N</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>643-Sheet Flooring</b>
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		643-Mastic
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Drywall
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Skim Coat
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Plaster
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Drywall
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Tar

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Styrofoam
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Tar
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Styrofoam
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Tar
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Styrofoam
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		652
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		653
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		654
ES1	Stucco skim coat	3452 Avocado - Level 1 - NW	Non-ACM	ND		655-Skim Coat
ES1	Stucco skim coat	3452 Avocado - Level 1 - NW	Non-ACM	ND		655-Stucco
ES1	Stucco skim coat	3452 Avocado - Level 1 - SW	Non-ACM	ND		656-Skim Coat
ES1	Stucco skim coat	3452 Avocado - Level 1 - SW	Non-ACM	ND		656-Stucco
ES1	Stucco skim coat	3452 Avocado - Level 1 - S	Non-ACM	ND		657
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		658-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		658-Mastic
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		659-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		659-Mastic
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		660-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		660-Mastic
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Mastic
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Sheet Flooring 1
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>661-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Vapor Barrier
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Mastic
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Sheet Flooring 1
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>662-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Vapor Barrier
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Sheet Flooring 1
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Mastic
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>663-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Vapor Barrier
<b>9VFT2</b>	<b>9" floor tile w/ small brown speck pattern w/ blk mastic &amp; vapor barrier &amp; brown insulation (bottom l</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>664-Floor Tile</b>
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Mastic 1
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Vapor Barrier
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Mastic 2
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Insulation
<b>9VFT2</b>	<b>9" floor tile w/ small brown speck pattern w/ blk mastic &amp; vapor barrier &amp; brown insulation (bottom l</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>665-Floor Tile</b>
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Mastic 1
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Vapor Barrier

**TABLE 1.0**  
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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Mastic 2
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Insulation
9VFT2	<b>9" floor tile w/ small brown speck pattern w/ blk mastic &amp; vapor barrier &amp; brown insulation (bottom l</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>666-Floor Tile</b>
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Mastic
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Vapor Barrier
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom l	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Insulation
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		667-Caulk
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		667-Mastic
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		668-Baseboard
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		668-Mastic
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Bathroom SE	Non-ACM	ND		669
WS/J1	Drywall smooth	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		670-Joint Compound
WS/J1	Drywall smooth	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		670-Drywall
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		671-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		671-Mastic
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		672-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		672-Mastic
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom- SW	Non-ACM	ND		673-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom- SW	Non-ACM	ND		673-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Vapor Barrier
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Vapor Barrier
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Mastic 1
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Sheet Flooring 1
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Mastic 2
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Sheet Flooring 2
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Vapor Barrier
WPF1	Plaster	810 Peach - Level 1 - Kitchen W	Non-ACM	ND		677-Plaster
WPF1	Plaster	810 Peach - Level 1 - Kitchen W	Non-ACM	ND		677-Drywall
WPF1	Plaster	810 Peach - Level 1 - Bathroom 1 NE	Non-ACM	ND		678-Plaster
WPF1	Plaster	810 Peach - Level 1 - Bathroom 1 NE	Non-ACM	ND		678-Drywall
WPF1	Plaster	810 Peach - Level 1 - Bedroom 2 - S	Non-ACM	ND		679-Plaster
WPF1	Plaster	810 Peach - Level 1 - Bedroom 2 - S	Non-ACM	ND		679-Drywall
WPF1	Plaster	810 Peach - Level 1 - Hallway NW	Non-ACM	ND		680-Plaster
WPF1	Plaster	810 Peach - Level 1 - Hallway NW	Non-ACM	ND		680-Drywall
WPF1	Plaster ceiling	810 Peach - Level 1 - Bedroom 1 SE	Non-ACM	ND		681-Plaster
WPF1	Plaster ceiling	810 Peach - Level 1 - Bedroom 1 SE	Non-ACM	ND		681-Drywall
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior NW	Non-ACM	ND		682-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior NW	Non-ACM	ND		682- Stucco
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior SW	Non-ACM	ND		683-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior SW	Non-ACM	ND		683- Stucco
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior S	Non-ACM	ND		684-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior S	Non-ACM	ND		684-Stucco

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen NE	Non-ACM	ND		685
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen Central	Non-ACM	ND		686
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen SE	Non-ACM	ND		687-Baseboard
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen SE	Non-ACM	ND		687-Mastic
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Vapor Barrier
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 3
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Vapor Barrier
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Vapor Barrier
<b>RPM1</b>	<b>Penetration mastic</b>	<b>810 Peach - Roof - S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>691</b>
<b>RPM1</b>	<b>Penetration mastic</b>	<b>810 Peach - Roof - S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>692</b>
<b>RPM1</b>	<b>Penetration mastic</b>	<b>810 Peach - Roof - S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>693</b>
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Drywall
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Paint/Coating
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Plaster
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Drywall
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior NW	Non-ACM	ND		699
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Skim Coat 1
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Skim Coat 2
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Stucco
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SE	Non-ACM	ND		701-Skim Coat
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SE	Non-ACM	ND		701-Stucco
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		702-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		702-Vapor Barrier
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		703-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		703-Vapor Barrier
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		704-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		704-Vapor Barrier
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 Kitchen East	Non-ACM	ND		705
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 SE	Non-ACM	ND		706
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 Bathroom SE	Non-ACM	ND		707

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BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WP1	Window Putty	Unit 860 Grape Level 1 Exterior NW	Non-ACM	ND		708
WP1	Window Putty	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		709
WP1	Window Putty	Unit 860 Grape Level 1 Exterior NE	Non-ACM	ND		710
WS/J1	Drywall	Unit 860 Grape Level 1 Kitchen	Non-ACM	ND		711A-Joint Compound
WS/J1	Drywall	Unit 860 Grape Level 1 Kitchen	Non-ACM	ND		711A-Drywall
VSF2	Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		712A-Sheet Flooring
VSF2	Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		712A-Mastic
VSF5	Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		713A-Sheet Flooring
VSF5	Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		713A-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3479 Kentucky Level 1 Bathroom East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>714-Sheet Flooring</b>
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3479 Kentucky Level 1 Bathroom East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>714-Mastic 1</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		714-Vapor Barrier
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		714-Mastic 2
VSF1	Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		715-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		715-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		716-Sheet Flooring
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		716-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>717-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		717-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>718-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		718-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>719-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		719-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		720-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		720-Sheet Flooring
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		721-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		721-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		722-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		722-Mastic
VSF5	Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		723-Sheet Flooring
VSF5	Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		723-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		724-Floor Tile
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		724-Mastic
12VFT1	12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		725-Floor Tile
12VFT1	12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		725-Mastic
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Floor Tile
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Mastic
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Sheet Flooring
<b>VSF6</b>	<b>Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)</b>	<b>Unit 3415 Florida Level 1 Bathroom East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>727-Sheet Flooring</b>
<b>VSF6</b>	<b>Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)</b>	<b>Unit 3415 Florida Level 1 Bathroom East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>727-Mastic</b>
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND	0	727-Vapor Barrier
VSF1	Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		728-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		728-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		729-Floor Tile
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		729-Mastic
<b>VSF6</b>	<b>Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)</b>	<b>Unit 3403 Florida Level 1 Bathroom East</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>730-Sheet Flooring</b>
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		730-Mastic

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UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		731
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		732
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		733
USM2	Under Sink Mastic	Unit 3330 Idaho Level 1 Kitchen South	Non-ACM	ND		734
USM2	Under Sink Mastic	Unit 3360 Idaho Level 1 Kitchen South	Non-ACM	ND		735
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		736-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		736-Mastic
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		737-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		737-Mastic
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		738-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		738-Mastic
12VFT6	Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)	Unit 3340 Idaho Level 1 Bathroom West	Non-ACM	ND		739-Mastic 1
<b>12VFT6</b>	<b>Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)</b>	<b>Unit 3340 Idaho Level 1 Bathroom West</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>739-Sheet Flooring</b>
<b>12VFT6</b>	<b>Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)</b>	<b>Unit 3340 Idaho Level 1 Bathroom West</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>739-Mastic 2</b>
VSF2	Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		740-Sheet Flooring
12VFT2	Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		740-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		741-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		741-Floor Tile
VSF7	Sheet Floor w/ Brown Specks w/ Yellow Mastic (4th Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		742-Mastic
VSF7	Sheet Floor w/ Brown Specks w/ Yellow Mastic (4th Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		742-Sheet Flooring
<b>VSF6</b>	<b>Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)</b>	<b>Unit 3374 Idaho Level 1 Bathroom West</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>743-Sheet Flooring</b>
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		743-Mastic
<b>VSF6</b>	<b>Sheet Flooring Pebble Pattern w/ Blk Mastic (3rd &amp; Bottom Layer)</b>	<b>Unit 3380 Idaho Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>744-Sheet Flooring</b>
VSF6	Sheet Flooring Pebble Pattern w/ Blk Mastic (3rd & Bottom Layer)	Unit 3380 Idaho Level 1 Bathroom West	Non-ACM	ND		744-Mastic
USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		745
USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		746
USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		747
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>748-Sheet Flooring</b>
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		748-Mastic
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>749-Sheet Flooring</b>
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		749-Mastic
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		749-Floor Tile
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>750-Sheet Flooring</b>
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>750-Mastic</b>
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		751-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		751-Vapor Barrier
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		752-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		752-Vapor Barrier
<b>9VFT3</b>	<b>9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>753-Sheet Flooring</b>
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Mastic
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Vapor Barrier
VSF7	Sheet Flooring w/ Brown Specks & Black Mastic (Bottom Layer)	Unit 3364 Utah Level 1 Bathroom West	Non-ACM	ND		754-Sheet Flooring 1
VSF7	Sheet Flooring w/ Brown Specks & Black Mastic (Bottom Layer)	Unit 3364 Utah Level 1 Bathroom West	Non-ACM	ND		754-Mastic
<b>VSF7</b>	<b>Sheet Flooring w/ Brown Specks &amp; Black Mastic (Bottom Layer)</b>	<b>Unit 3364 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>754-Sheet Flooring 2</b>
USM1	Under Sink Mastic	Unit 3372 Utah Level 1 Kitchen North	Non-ACM	ND		755
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Tar

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE**

**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		758-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		762
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		763
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		764
WPF50	Plaster w/ button board	851 Plum St- Level 1st- N Center living room	Non-ACM	ND		1000-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- N Center living room	Non-ACM	ND		1000-Button Board
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bedroom 2	Non-ACM	ND		1001-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bedroom 2	Non-ACM	ND		1001-Button Board
WPF50	Plaster w/ button board	851 Plum St Level 1st- W ceiling of bedroom 1	Non-ACM	ND		1002-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- W ceiling of bedroom 1	Non-ACM	ND		1002-Button Board
WPF50	Plaster w/ button board	851 Plum St Level 1st- S center - living room	Non-ACM	ND		1003-Plaster
WPF50	Plaster w/ button board	849 Plum St - Level 1st- S center - living room	Non-ACM	ND		1003-Button Board
WPF50	Plaster w/ button board	849 Plum St- Level 1st- W center - bath room	Non-ACM	ND		1004-Plaster
WPF50	Plaster w/ button board	849 Plum St- Level 1st- W center - bath room	Non-ACM	ND		1004-Buttonboard
WPF50	Plaster w/ button board	849 Plum St Level 1st- S center - bedroom 2	Non-ACM	ND		1005-Plaster

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/ button board	849 Plum St- Level 1st- S center - bedroom 2	Non-ACM	ND		1005-Buttonboard
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bathroom	Non-ACM	ND		1006-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bathroom	Non-ACM	ND		1006-Buttonboard
WPF50	Smooth drywall w/ joint compound	851 Plum St-- Level 1st- SE corner of kitchen	Non-ACM	ND		1007-Joint Compound
WPF50	Smooth drywall w/ joint compound	851 Plum St-- Level 1st- SE corner of kitchen	Non-ACM	ND		1007-Drywall
WPF50	Smooth drywall w/ joint compound	849 Plum St- Level 1st- SW corner of kitchen	Non-ACM	ND		1008-Joint Compound
WPF50	Smooth drywall w/ joint compound	849 Plum St- Level 1st- SW corner of kitchen	Non-ACM	ND		1008-Drywall
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Top layer- Living room	Non-ACM	ND		1009-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1009-Mastic
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- bottom - Living room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1010-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- bottom - Living room	Non-ACM	ND		1010-Mastic 1
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- bottom - Living room	Non-ACM	ND		1010-Mastic 2
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- bottom - Living room	Non-ACM	ND		1010-Vapor Paper
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #2 top	Non-ACM	ND		1011-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St- Level 1st- Bedroom #2 top	Non-ACM	ND		1011-Mastic
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- Bedroom #2 bottom</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1012-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Mastic 1
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Mastic 2
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Vapor Paper
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #1 top	Non-ACM	ND		1013-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #1 top	Non-ACM	ND		1013-Mastic
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- Bedroom #1 bottom</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1014-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #1 bottom	Non-ACM	ND		1014-Mastic
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- Bedroom #1 bottom	Non-ACM	ND		1014-Vapor Paper
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1015-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1015-Mastic
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>849 Plum St Level 1st- Bottom layer- Living room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1016-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St Level 1st- Bottom layer- Living room	Non-ACM	ND		1016-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Hall	Non-ACM	ND		1017-Vinyl Floor Tile
12VFT50	<b>12 " Beige w/ specs tile. Beige mastic</b>	<b>849 Plum St- Level 1st- Top layer- Hall</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1017-Mastic</b>
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>849 Plum St Level 1st- Bottom layer- Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1018-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St- Level 1st- Bottom layer- Hall	Non-ACM	ND		1018-Mastic
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St Level 1st- Bottom layer- Hall	Non-ACM	ND		1018-Vapor Barrier
VSF50	White sheet flooring squares, w/ mastic	851 Plum St Level 1st- Bathroom	Non-ACM	ND		1019-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	851 Plum St- Level 1st- Bathroom	Non-ACM	ND		1019-Mastic
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Bathroom	Non-ACM	ND		1020-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Bathroom	Non-ACM	ND		1020-Mastic
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1021-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	849 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1021-Mastic
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Mastic 1
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Mastic 2
12VFT52	12" beige tile, beige mastic	849 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1023-Vinyl Floor Tile
12VFT52	12" beige tile, beige mastic	849 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1023-Mastic
VSF52	Marble sheet flooring, w/ mastic	849 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1024-Mastic 1
VSF52	Marble sheet flooring, w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1024-Vinyl Sheet Flooring
VSF52	Marble sheet flooring, w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1024-Mastic 2



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF53	Off white sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1025-Mastic 1
<b>VSF53</b>	<b>Off white sheet flooring w/ vapor paper</b>	<b>849 Plum St-- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1025-Vinyl Sheet Flooring</b>
VSF53	Off white sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1025-Mastic 2
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Mastic 1
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Mastic 2
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Vinyl Floor Tile
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Mastic 1
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Mastic 2
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Mastic 1
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Vinyl Sheet Flooring
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Mastic 2
VSF53	Sheet flooring w/ vapor paper	849 Plum St-- Level 1st- Kitchen (5)	Non-ACM	ND		1029-Mastic 1
<b>VSF53</b>	<b>Sheet flooring w/ vapor paper</b>	<b>849 Plum St-- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1029-Vinyl Sheet Flooring</b>
VSF53	Sheet flooring w/ vapor paper	849 Plum St-- Level 1st- Kitchen (5)	Non-ACM	ND		1029-Mastic 2
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1030-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1030-Mastic
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Vinyl Floor Tile
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Mastic 1
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Mastic 2
VSF52	Marble sheet flooring w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Vinyl Sheet Flooring
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Mastic 1
VSF52	Marble sheet flooring w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Mastic 2
<b>VSF53</b>	<b>Sheet flooring w/ vapor paper</b>	<b>849 Plum St- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1033-Vinyl Sheet Flooring</b>
VSF53	Sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1033-Vapor Paper
VSF54	Sheet flooring plain w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1034-Vinyl Sheet Flooring
VSF54	Sheet flooring plain w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1034-Mastic
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1035-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1035-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1035-Mastic 2
VSF55	Marble sheet flooring w/ mastic	851 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1036-Mastic 1
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>U851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1036-Vinyl Sheet Flooring</b>
VSF55	Marble sheet flooring w/ mastic	851 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1036-Mastic 2
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1037-Vinyl Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1037-Mastic
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1037-Vapor Paper
<b>12VFT54</b>	<b>Red/blue tile, vapor paper, black mastic</b>	<b>851 Plum St Level 1st- Kitchen (4)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1037-Backing</b>
VSF54	Sheet flooring brown, w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1038-Vinyl Sheet Flooring
VSF54	Sheet flooring brown, w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1038-Mastic
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1039-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1039-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1039-Mastic 2
VSF55	Marble sheet flooring w/ mastic	851 Plum St Level 1st- Kitchen (3)	Non-ACM	ND		1040-Mastic
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1040-Vinyl Sheet Flooring</b>
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Mastic
VSF54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Vapor Paper

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF54	Sheet flooring brown, w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1042-Vinyl Sheet Flooring
VSF54	Sheet flooring brown, w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1042-Mastic
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1043-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1043-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1043-Mastic 2
VSF55	Marble sheet flooring w/ mastic	851 Plum St Level 1st- Kitchen (3)	Non-ACM	ND		1044-Mastic
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1044-Vinyl Sheet Flooring</b>
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1045-Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1045-Mastic
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1045-Vapor Paper
ES50	Exterior stucco	851 Plum St- Level 1st- Exterior SW	Non-ACM	ND		1046
ES50	Exterior stucco	849 Plum St Level 1st- NE	Non-ACM	ND		1047
ES50	Exterior stucco	849 Plum St- Level 1st- N center	Non-ACM	ND		1048
ES50	Exterior stucco	849 Plum St- Level 1st- S center	Non-ACM	ND		1049
ES50	Exterior stucco	851 Plum St - Level 1st- NW	Non-ACM	ND		1050
RS50	Roof shingles	849 Plum St-- Level 1st- SE	Non-ACM	ND		1051
RS50	Roof shingles	849 Plum St-- Level 1st- SE	Non-ACM	ND		1052
RS50	Roof shingles	849 Plum St- Level 1st- SE	Non-ACM	ND		1053
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Kitchen	Non-ACM	ND		1058-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Kitchen	Non-ACM	ND		1058-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Living Room	Non-ACM	ND		1059-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Living Room	Non-ACM	ND		1059-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1060-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1060-Button Board
WS/J50	White Drywall w/ J.C.	850 Peach St 1st Level Kitchen	Non-ACM	ND		1061-Joint Compound
WS/J50	White Drywall w/ J.C.	850 Peach St 1st Level Kitchen	Non-ACM	ND		1061-Drywall
WS/J50	White Drywall w/ J.C.	848 Peach St 1st Level Kitchen	Non-ACM	ND		1062-Drywall
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Living Room	Non-ACM	ND		1063-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Living Room	Non-ACM	ND		1063-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1064-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1064-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1065-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1065-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Living Room	Non-ACM	ND		1066-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Living Room	Non-ACM	ND		1066-Mastic

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1067-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1067-Mastic
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1068-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1069-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1070-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Living Room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1071-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1072-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Mastic 2
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1073-Mastic
VSF55	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1073-Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1074-Mastic
VSF55	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1074-Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1075-Mastic
VSF55	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1075-Sheet Flooring</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Floor Tile
12VFT55	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1076-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Mastic 2
12VFT55	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1077-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1077-Floor Tile
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1077-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1077-Mastic 2
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Floor Tile
12VFT55	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1078-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Mastic 2
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1079-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1079-Mastic
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1080-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1080-Mastic
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1081-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1081-Mastic
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1082-Sheet Flooring



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UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1082-Mastic
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1083-Sheet Flooring
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1084-Sheet Flooring
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1084-Mastic
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1085-Mastic
<b>VSF58</b>	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1085-Sheet Flooring</b>
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1086-Mastic
<b>VSF58</b>	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1086-Sheet Flooring</b>
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1087-Mastic
<b>VSF58</b>	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1087-Sheet Flooring</b>
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1088-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1088-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1088-Mastic
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1089-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1089-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1089-Mastic
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1090-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1090-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1090-Mastic
ES50	White Exterior Stucco	848 Peach St 848 Exterior N.W.	Non-ACM	ND		1091
ES50	White Exterior Stucco	848 Peach St Exterior N. Center	Non-ACM	ND		1092
ES50	White Exterior Stucco	848 Peach St Exterior N.E.	Non-ACM	ND		1093
ES50	White Exterior Stucco	848 Peach St Exterior S. Center	Non-ACM	ND		1094
ES50	White Exterior Stucco	848 Peach St Exterior S.W.	Non-ACM	ND		1095
RS50	Red Roof Shingles	848 Peach St Roof N.E.	Non-ACM	ND		1096-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N.E.	Non-ACM	ND		1096-Shingle 2
RS50	Red Roof Shingles	848 Peach St Roof N. Center	Non-ACM	ND		1097-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N. Center	Non-ACM	ND		1097-Shingle 2
RS50	Red Roof Shingles	848 Peach St Roof N.W.	Non-ACM	ND		1098-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N.W.	Non-ACM	ND		1098-Shingle 2
WPF50	Plaster w/Button	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1099-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1099-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1100-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1100-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1101-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1101-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1102-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1102-Button Board
WPF50	Plaster w/Button	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1103-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1103-Button Board
WPF50	Plaster w/Button	823 Cherry St Level 1st - Hall	Non-ACM	ND		1104-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Hall	Non-ACM	ND		1104-Buttonboard
WPF50	Plaster w/Button	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1105-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1105-Buttonboard
WS/J50	Drywall w/ J.C	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1106-Joint Compound
WS/J50	Drywall w/ J.C	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1106-Drywall
WS/J50	Drywall w/ J.C	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1107-Joint Compound

**TABLE 1.0  
BULK SAMPLE RESULTS  
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UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J50	Drywall w/ J.C	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1107-Drywall
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1108-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1108-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St 1 Level 1st - Hall	Non-ACM	ND		1109-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Hall	Non-ACM	ND		1109-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1110-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1110-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1111-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1111-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1112-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1112-Mastic
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1113-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1114-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Hall	Non-ACM	ND		1114-Mastic
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Hall	Non-ACM	ND		1114-Vapor
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1115-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1116-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Bedrm. 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1117-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Mastic 2
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1118-Sheet Flooring
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1118-Mastic
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1119-Sheet Flooring
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1119-Mastic
VSF56	Single Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St 1 Level 1st - Bathroom	Non-ACM	ND		1120-Sheet Flooring
VSF56	Single Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Bathroom	Non-ACM	ND		1120-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1121-Sheet Flooring</b>
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1121-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1122-Sheet Flooring</b>
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1122-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1123-Sheet Flooring</b>
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1123-Mastic
<b>VSF58</b>	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1124-Sheet Flooring</b>
VSF58	Bottom Middle Layer: Flower Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1124-Mastic
VSF58	Bottom Middle Layer: Flower Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1124-Backing Paper
<b>VSF58</b>	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1125-Sheet Flooring</b>
VSF58	Bottom Middle Layer: Flower Sheet Floor w/ Mastic	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1125-Mastic
<b>VSF58</b>	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1126-Sheet Flooring</b>

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 1
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Floor Tile
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 2
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Vapor
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 3
<b>12VFT54</b>	<b>Bottom Layer: Blue &amp; Red Specks Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1128-Sheet Flooring Backing</b>
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1128-Vapor
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Sheet Flooring
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Mastic
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Vapor Paper
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Vinyl Sheet Flooring
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Vapor Paper
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Vinyl Sheet Flooring
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Vapor Paper
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vinyl Sheet Flooring 1
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vinyl Sheet Flooring 2
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vapor Paper
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S.E.	Non-ACM	ND		1133
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S. Center	Non-ACM	ND		1134
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S.W.	Non-ACM	ND		1135
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - N. Center	Non-ACM	ND		1136
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - N.E.	Non-ACM	ND		1137
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.E.	Non-ACM	ND		1138-Shingle 1
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.E.	Non-ACM	ND		1138-Shingle 2
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S. Center	Non-ACM	ND		1139-Shingle 1
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S. Center	Non-ACM	ND		1139-Shingle 2
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.W.	Non-ACM	ND		1140-Shingle 1
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.W.	Non-ACM	ND		1140-Shingle 2
USM50	Sink Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1141
USM50	Sink Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1142
USM50	Sink Mastic	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1143
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1146-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1146-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Buttonboard
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1148-Plaster
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1148-Buttonboard

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1149-Plaster
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1149-Buttonboard
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Skim Coat
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Plaster
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Buttonboard
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Living Room	Non-ACM	ND		1151-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Living Room	Non-ACM	ND		1151-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1152-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1152-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1153-Floor Tile 1
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1153-Mastic
<b>12VFT50</b>	<b>Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1153-Floor Tile 2</b>
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1154-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1154-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Living Room	Non-ACM	ND		1155-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Living Room	Non-ACM	ND		1155-Mastic
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1156-Floor Tile</b>
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Living Room</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1156-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 3</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1157-Floor Tile</b>
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 3</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1157-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1158-Floor Tile</b>
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1158-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>803 Cherry St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1159-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>803 Cherry St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1160-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 3
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1161-Sheet Flooring
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1161-Mastic
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Bathroom	Non-ACM	ND		1162-Sheet Flooring
VSF56	White 6" Square Sheet Floor & Mastic	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1163-Sheet Flooring
VSF56	White 6" Square Sheet Floor & Mastic	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1163-Mastic
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1164-Floor Tile

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1164-Mastic
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1165-Floor Tile
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1165-Mastic
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1166-Floor Tile
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1166-Mastic
USM50	Grey Sink Mastic	801 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1167
USM50	Grey Sink Mastic	801 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1168
USM50	Grey Sink Mastic	803 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1169
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.E.	Non-ACM	ND		1170
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S. Center	Non-ACM	ND		1171
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.W.	Non-ACM	ND		1172-Skim Coat
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.W.	Non-ACM	ND		1172-Stucco
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level N.W.	Non-ACM	ND		1173
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level N.E.	Non-ACM	ND		1174
RS50	Red Roof Shingles	801- 803 Cherry St Roof S.E.	Non-ACM	ND		1175
RS50	Red Roof Shingles	801- 803 Cherry St Roof S. Center	Non-ACM	ND		1176
RS50	Red Roof Shingles	801- 803 Cherry St Roof S.W.	Non-ACM	ND		1177
WS/J50	White Drywall w/ J.C.	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1178-Joint Compound
WS/J50	White Drywall w/ J.C.	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1178-Drywall
WS/J50	White Drywall w/ J.C.	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1179-Joint Compound
WS/J50	White Drywall w/ J.C.	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1179-Drywall
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1180-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1180-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1181-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1181-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Ceiling: Bathroom	Non-ACM	ND		1182-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Ceiling: Bathroom	Non-ACM	ND		1182-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1183-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1183-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1184-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1184-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1185-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1185-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1186-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1186-Button Board
WS/J50	White Drywall w/ J.C.	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1187-Joint Compound
WS/J50	White Drywall w/ J.C.	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1187-Drywall
WS/J50	White Drywall w/ J.C.	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1188-Joint Compound
WS/J50	White Drywall w/ J.C.	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1188-Drywall
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1189-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1189-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1190-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1190-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1191-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1191-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1192-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1192-Mastic



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1193-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1193-Mastic
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1194-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Living Rm</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1194-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1194-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1194-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 2</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1195-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 2</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1195-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1195-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1195-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1196-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 1</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1196-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1196-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1196-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3408 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1197-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1197-Mastic
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1197-Vapor Barrier
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3408 Florida St 1st Level Bedrm 2</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1198-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Mastic 2
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1199-Vinyl Sheet Flooring
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1199-Mastic
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1200-Vinyl Sheet Flooring
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Bathroom	Non-ACM	ND		1201-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1202-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1203-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1203-Mastic
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1204-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1204-Mastic
VSF55	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1205-Vinyl Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1205-Mastic
VSF55	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1206-Vinyl Sheet Flooring</b>
VSF55	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3408 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1207-Vinyl Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1207-Mastic
12VFT54	<b>Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1208-Vinyl Sheet Flooring</b>
12VFT54	Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1208-Vapor Paper
12VFT54	<b>Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor</b>	<b>Unit 3416 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1209-Vinyl Sheet Flooring</b>
12VFT54	Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1209-Vapor Paper
12VFT54	Tan Bottom Middle Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1210-Vinyl Sheet Flooring
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Mastic
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Vapor Paper
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Mastic
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Vapor Paper
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Mastic

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Vapor Paper
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1214
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1215
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1216
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1217
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1218
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1219
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level S.W	Non-ACM	ND		1220
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level W. Center	Non-ACM	ND		1221
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level N.W.	Non-ACM	ND		1222
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level N.E.	Non-ACM	ND		1223
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level S.E.	Non-ACM	ND		1224
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof S.W.	Non-ACM	ND		1225
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof W. Center	Non-ACM	ND		1226-Shingle 1
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof W. Center	Non-ACM	ND		1226-Shingle 2
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof N.W.	Non-ACM	ND		1227-Shingle 1
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof N.W.	Non-ACM	ND		1227-Shingle 2
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1228-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1228-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Kitchen	Non-ACM	ND		1229-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Kitchen	Non-ACM	ND		1229-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Bathroom	Non-ACM	ND		1230-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Bathroom	Non-ACM	ND		1230-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Ceiling: Bedrm 1	Non-ACM	ND		1231-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Ceiling: Bedrm 1	Non-ACM	ND		1231-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Living Rm	Non-ACM	ND		1232-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Living Rm	Non-ACM	ND		1232-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 2	Non-ACM	ND		1233-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 2	Non-ACM	ND		1233-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 1	Non-ACM	ND		1234-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 1	Non-ACM	ND		1234-Button Board
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1235-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1235-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Hall	Non-ACM	ND		1236-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Hall	Non-ACM	ND		1236-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1237-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1237-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1238-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1238-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Hall	Non-ACM	ND		1239-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Hall	Non-ACM	ND		1239-Mastic
VSF56	White 6" Square Sheet Floor w/ Mastic	3475 Florida St 1st Level Bathrm	Non-ACM	ND		1240-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3475 Florida St 1st Level Bathrm	Non-ACM	ND		1240-Mastic
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S 1st Level Bathrm	Non-ACM	ND		1241-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S 1st Level Bathrm	Non-ACM	ND		1242-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S1st Level Bathrm	Non-ACM	ND		1242-Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3475 Florida St 1st Level Middle Layer: Kitchen	Non-ACM	ND		1243-Sheet Flooring
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3475 Florida St 1st Level Middle Layer: Kitchen	Non-ACM	ND		1243-Mastic
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1244-Sheet Flooring</b>
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1244-Mastic</b>
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3479 Florida S 1st Level Middle Layer: Kitchen	Non-ACM	ND		1245-Mastic
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1245-Sheet Flooring</b>
<b>VSF58</b>	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>3475 Florida St 1st Level Bottom Middle Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1246-Sheet Flooring</b>
VSF58	Yellow Flower Floor Sheeting w/ Mastic	3475 Florida St 1st Level Bottom Middle Layer: Kitchen	Non-ACM	ND		1246-Mastic
<b>VSF58</b>	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>3479 Florida S 1st Level Bottom Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1247-Sheet Flooring</b>
<b>VSF58</b>	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>3479 Florida S 1st Level Bottom Layer: Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1248-Sheet Flooring</b>
VSF58	Yellow Flower Floor Sheeting w/ Mastic	3479 Florida S 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1248-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Vapor Paper
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Vapor Paper
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1251-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1251-Vapor Paper
WS/J50	White Drywall w/ J.C	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1252-Drywall
WS/J50	White Drywall w/ J.C	3479 Florida St 1st Level Kitchen	Non-ACM	ND		1253-Joint Compound
WS/J50	White Drywall w/ J.C	3479 Florida St 1st Level Kitchen	Non-ACM	ND		1253-Drywall
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level N.E.	Non-ACM	ND		1254
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level E. Center	Non-ACM	ND		1255
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level S.E.	Non-ACM	ND		1256
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level S.W.	Non-ACM	ND		1257
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level N.W.	Non-ACM	ND		1258
RS50	Red Roof Shingles	3475- 3479 Florida St Roof N.W.	Non-ACM	ND		1259
RS50	Red Roof Shingles	3475- 3479 Florida St Roof W. Center	Non-ACM	ND		1260
RS50	Red Roof Shingles	3475- 3479 Florida St Roof S.W.	Non-ACM	ND		1261
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1262-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Vapor Paper
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1263-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Vapor Paper
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Bedrm 1</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1264-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Vapor Paper
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 3
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3479 Florida S 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1265-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1265-Mastic

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S1st Level Living Rm	Non-ACM	ND		1265-Vapor Paper
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3479 Florida S 1st Level Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1266-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S1st Level Hall	Non-ACM	ND		1266-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Vapor Paper
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1267-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1267-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Skim Coat
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Skim Coat
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Skim Coat
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1271-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1271-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Skim Coat
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bedrm 1, Ceiling	Non-ACM	ND		1273-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bedrm 1, Ceiling	Non-ACM	ND		1273-Buttonboard
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Joint Compound 1
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Joint Compound 2
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Drywall
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1276-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1276-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Mastic 1
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Mastic 2
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1278-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1278-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1279-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1279-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Hall	Non-ACM	ND		1280-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Hall	Non-ACM	ND		1280-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1281-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 2
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 3
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Hall</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1282-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Hall	Non-ACM	ND		1282-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Hall	Non-ACM	ND		1282-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 1

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Bedrm 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1283-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 2
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 3
12VFT51	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3480 Kentucky 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1284-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1284-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1284-Vapor Paper
12VFT51	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3480 Kentucky 1st Level Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1285-Vinyl Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Hall	Non-ACM	ND		1285-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Hall	Non-ACM	ND		1285-Vapor Paper
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1286-Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1286-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1287-Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1287-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Vinyl Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Leveler
VSF56	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1289-Sheet Flooring
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1289-Mastic
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1290-Sheet Flooring
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1290-Mastic
VSF57	White small triangles white; beige w/ white mastic	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1291-Sheet Flooring
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky Level Bathroom	Non-ACM	ND		1291-Mastic
<b>VSF58</b>	<b>White flower pattern yellow w/ beige mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1292-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1292-Leveler
<b>VSF58</b>	<b>White flower pattern yellow w/ beige mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1293-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1293-Leveler
<b>VSF58</b>	<b>White flower pattern yellow w/ beige mastic</b>	<b>3480 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1294-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3480 Kentucky 1st Level Kitchen	Non-ACM	ND		1294-Leveler
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1295-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1295-Mastic
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1296-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1296-Mastic
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>Unit 3480 1st Level Bathroom</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1297-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	Unit 3480 1st Level Bathroom	Non-ACM	ND		1297-Mastic
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1298-Mastic
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1298-Sheet Flooring
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1299-Mastic
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1299-Sheet Flooring
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Mastic 1
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Sheet Flooring
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Mastic 2
ES50	White exterior stucco	3480-3488 Kentucky Exterior S.E.	Non-ACM	ND		1301
ES50	White exterior stucco	3480-3488 Kentucky Exterior S.W.	Non-ACM	ND		1302
ES50	White exterior stucco	3480-3488 Kentucky Exterior N.W.	Non-ACM	ND		1303
ES50	White exterior stucco	3480-3488 Kentucky Exterior N.W.	Non-ACM	ND		1304
ES50	White exterior stucco	3480-3488 Kentucky Exterior W. Center	Non-ACM	ND		1305

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS50	Red roof shingles	3480-3488 Kentucky Roof N.W.	Non-ACM	ND		1306
RS50	Red roof shingles	3480-3488 Kentucky Roof W. Center	Non-ACM	ND		1307
RS50	Red roof shingles	3480-3488 Kentucky Roof S.W.	Non-ACM	ND		1308-Shingle 1
RS50	Red roof shingles	3480-3488 Kentucky Roof S.W.	Non-ACM	ND		1308-Shingle 2
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Button
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Button
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Button
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1315-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1315-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1315-Button
WS/J50	White Smooth Dry Wall	3407 Kentucky Kitchen	Non-ACM	ND		1316
WS/J50	White Smooth Dry Wall	3401 Kentucky Kitchen	Non-ACM	ND		1317
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1318-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1318-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Hall	Non-ACM	ND		1319-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Hall	Non-ACM	ND		1319-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1320-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1320-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1321-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1321-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Hall	Non-ACM	ND		1322-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Hall	Non-ACM	ND		1322-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Living Rm</b>	<b>ACM</b>	<b>11%</b>	<b>Chrysotile</b>	<b>1323-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Hall</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1324-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Bed Rm 2</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1325-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3401 Kentucky Living Rm</b>	<b>ACM</b>	<b>14%</b>	<b>Chrysotile</b>	<b>1326-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3401 Kentucky Hall</b>	<b>ACM</b>	<b>11%</b>	<b>Chrysotile</b>	<b>1327-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Hall	Non-ACM	ND		1327-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Hall	Non-ACM	ND		1327-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1327-Mastic
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1328-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1328-Mastic
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Bathroom	Non-ACM	ND		1329-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Bathroom	Non-ACM	ND		1329-Mastic
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3401 Kentucky Bathroom	Non-ACM	ND		1330-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3401 Kentucky Bathroom	Non-ACM	ND		1330-Mastic
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1331-Flooring
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1331-Mastic
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1332-Flooring
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1332-Mastic
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3401 Kentucky Kitchen	Non-ACM	ND		1333-Flooring
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3401 Kentucky Kitchen	Non-ACM	ND		1333-Mastic
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Adhesive
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1337
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1338
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1339
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof W Center	Non-ACM	ND		1341-Shingles
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof W Center	Non-ACM	ND		1341-Shingles
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof S.W.	Non-ACM	ND		1342-Tar
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof S.W.	Non-ACM	ND		1342-Shingles
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior N.E.	Non-ACM	ND		1343
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior N.W.	Non-ACM	ND		1344
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior S.W.	Non-ACM	ND		1345
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior S.E.	Non-ACM	ND		1346
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior E Center	Non-ACM	ND		1347
WPF50	Plaster w/Button	3315 Utah -Living Room	Non-ACM	ND		1348-Plaster
WPF50	Plaster w/Button	3315 Utah Living Room	Non-ACM	ND		1348-Drywall
WPF50	Plaster w/Button	3315 Utah -Kitchen	Non-ACM	ND		1349-Plaster
WPF50	Plaster w/Button	U3315 Utah-Kitchen	Non-ACM	ND		1349-Drywall

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/Button	3315 Utah-Ceiling Bedrm 2	Non-ACM	ND		1350-Plaster
WPF50	Plaster w/Button	3315 Utah-Ceiling Bedrm 2	Non-ACM	ND		1350-Drywall
WPF50	Plaster w/Button	3315 Utah-Bathrm	Non-ACM	ND		1351-Plaster
WPF50	Plaster w/Button	3315 Utah-Bathrm	Non-ACM	ND		1351-Drywall
WPF50	Plaster w/Button	3317 Utah Living Rm	Non-ACM	ND		1352-Plaster
WPF50	Plaster w/Button	3317 Utah-Living Rm	Non-ACM	ND		1352-Drywall
WPF50	Plaster w/Button	3317 Utah-Bedrm 2	Non-ACM	ND		1353-Plaster
WPF50	Plaster w/Button	3317 Utah-Bedrm 2	Non-ACM	ND		1353-Drywall
WPF50	Plaster w/Button	3317 Utah-Bedrm 1	Non-ACM	ND		1354-Plaster
WPF50	Plaster w/Button	3317 Utah-Bedrm 1	Non-ACM	ND		1354-Drywall
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Living Rm	Non-ACM	ND		1355-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 UtahLiving Rm	Non-ACM	ND		1355-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Living Rm	Non-ACM	ND		1355-Mastic 2
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Hall	Non-ACM	ND		1356-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Hall	Non-ACM	ND		1356-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Bedrm 1	Non-ACM	ND		1357-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Bedrm 1	Non-ACM	ND		1357-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Living Rm	Non-ACM	ND		1358-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 UtahLiving Rm	Non-ACM	ND		1358-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Hall	Non-ACM	ND		1359-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Hall	Non-ACM	ND		1359-Mastic
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1360-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Living Rm	Non-ACM	ND		1360-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1361-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Hall	Non-ACM	ND		1361-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Bedrm 1</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1362-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Bedrm 1	Non-ACM	ND		1362-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3317 Utah-Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1363-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Living Rm	Non-ACM	ND		1363-Mastic/Vapor
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Hall	Non-ACM	ND		1364-Mastic
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3317 Utah-Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1364-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah7-Hall	Non-ACM	ND		1364-Mastic/Vapor
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Hall	Non-ACM	ND		1364-Leveler
WS/J50	Drywall w/JC	3317 UtahKitchen	Non-ACM	ND		1365-Drywall
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1365-Joint Compound
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Drywall
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Joint Compound
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Texture
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah Kitchen	Non-ACM	ND		1367-Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah -Kitchen	Non-ACM	ND		1367-Mastic
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah -Bathrm	Non-ACM	ND		1368-Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1368-Mastic
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1369-Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1369-Mastic
VSF56	6" Square Sheet Floor w/Mastic	Unit 3317-Bathrm	Non-ACM	ND		1370-Sheet Flooring
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1370-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1371-Sheet Flooring



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1371-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1372-Sheet Flooring
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1372-Mastic
VSF55	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1373</b>
VSF55	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1374</b>
VSF55	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1375</b>
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1376</b>
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>Unit 3317-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1377</b>
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1378</b>
12VFT54	<b>Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1379-Flooring</b>
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1379-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1379-Mastic/Vapor
12VFT54	<b>Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1380-Flooring</b>
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1380-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1380-Mastic/Vapor
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1381-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1381-Mastic/Vapor
ES50	Exterior Stucco	3115-3117 Utah Exterior-NE	Non-ACM	ND		1382
ES50	Exterior Stucco	3115-3117 Utah Exterior-E Center	Non-ACM	ND		1383
ES50	Exterior Stucco	3115-3117 Utah Exterior-SE	Non-ACM	ND		1384
ES50	Exterior Stucco	3115-3117 Utah Exterior-SW	Non-ACM	ND		1385-Sheet Flooring
ES50	Exterior Stucco	3115-3117 Utah Exterior-SW	Non-ACM	ND		1385-Mastic
ES50	Exterior Stucco	3115-3117 Utah Exterior-NW	Non-ACM	ND		1386
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1387-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1387-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1388-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1388-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1389-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1389-Mastic
RS50	Roof Shingles	3115-3117 Utah Roof-NE	Non-ACM	ND		1390-Shingle 1
RS50	Roof Shingles	3115-3117 Utah Roof-NE	Non-ACM	ND		1390-Shingle 2
RS50	Roof Shingles	3115-3117 Utah Roof-E Center	Non-ACM	ND		1391-Shingle 1
RS50	Roof Shingles	3115-3117 Utah Roof-E Center	Non-ACM	ND		1391-Shingle 2
RS50	Roof Shingles	3115-3117 Utah Roof-SE	Non-ACM	ND		1392
WPF50	Plaster W/Button	3342 Utah Living Rm	Non-ACM	ND		1393-Plaster
WPF50	Plaster W/Button	3342 Utah Living Rm	Non-ACM	ND		1393-Drywall
WPF50	Plaster W/Button	3342 Utah Kitchen	Non-ACM	ND		1394-Plaster
WPF50	Plaster W/Button	3342 Utah Kitchen	Non-ACM	ND		1394-Drywall
WPF50	Plaster W/Button	3342 Utah Bedrm1	Non-ACM	ND		1395-Plaster
WPF50	Plaster W/Button	3342 Utah Bedrm1	Non-ACM	ND		1395-Drywall
WPF50	Plaster W/Button	3342 Utah Bedrm2	Non-ACM	ND		1396-Plaster
WPF50	Plaster W/Button	3342 Utah Bedrm2	Non-ACM	ND		1396-Drywall
WPF50	Plaster W/Button	3344 Utah Living Rm	Non-ACM	ND		1397-Plaster
WPF50	Plaster W/Button	3344 Utah Living Rm	Non-ACM	ND		1397-Drywall
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Plaster 1
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Plaster 2
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Drywall

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster W/Button	3344 Utah Bedrm 2	Non-ACM	ND		1399-Plaster
WPF50	Plaster W/Button	3344 Utah Bedrm 2	Non-ACM	ND		1399-Drywall
WS/J50	Drywall w/JC	3342 Utah Kitchen	Non-ACM	ND		1400-Drywall
WS/J50	Drywall w/JC	3342 Utah Kitchen	Non-ACM	ND		1400-Joint Compound
WS/J50	Drywall w/JC	3344 Utah Kitchen	Non-ACM	ND		1401-Drywall
WS/J50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Kitchen	Non-ACM	ND		1401-Joint Compound
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Living Rm	Non-ACM	ND		1402-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Living Rm	Non-ACM	ND		1402-Mastic
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm2	Non-ACM	ND		1403-Floor Tile 1
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm2	Non-ACM	ND		1403-Mastic
<b>12VFT50</b>	<b>Top Layer 12" Beige w/Specks Tile w/ Beige Mastic</b>	<b>3342 Utah Bedrm2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1403-Floor Tile 2</b>
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm1	Non-ACM	ND		1404-Floor Tile 1
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm1	Non-ACM	ND		1404-Mastic
<b>12VFT50</b>	<b>Top Layer 12" Beige w/Specks Tile w/ Beige Mastic</b>	<b>3342 Utah Bedrm1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1404-Floor Tile 2</b>
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Living Rm	Non-ACM	ND		1405-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Living Rm	Non-ACM	ND		1405-Mastic
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3345 Utah Bedrm 2	Non-ACM	ND		1406-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3345 Utah Bedrm 2	Non-ACM	ND		1406-Mastic
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Living Rm	Non-ACM	ND		1407-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Living Rm</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1407-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Living Rm	Non-ACM	ND		1407-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm2	Non-ACM	ND		1408-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Bedrm2</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1408-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm2	Non-ACM	ND		1408-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm1	Non-ACM	ND		1409-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Bedrm1</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1409-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm1	Non-ACM	ND		1409-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Living Rm	Non-ACM	ND		1410-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3344 Utah Living Rm</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1410-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Living Rm	Non-ACM	ND		1410-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3344 Utah Bedrm 2</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1411-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Bedrm 2	Non-ACM	ND		1411-Mastic/Vapor
VSF56	6" Square Sheet Floor w/Mastic	3342 Utah Bathrm	Non-ACM	ND		1412-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3342 Utah Bathrm	Non-ACM	ND		1412-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1413-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1413-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1414-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1414-Mastic
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1415-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1415-Mastic
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1416-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1416-Mastic
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1417-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Ktichen	Non-ACM	ND		1417-Mastic
<b>VSF58</b>	<b>Bottom Middle Layer; Flower Sheet Floor</b>	<b>3342 Utah Ktichen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1418</b>
<b>VSF58</b>	<b>Bottom Middle Layer; Flower Sheet Floor</b>	<b>3342 Utah Ktichen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1419-Sheet Floor</b>
VSF58	Bottom Middle Layer; Flower Sheet Floor	3342 Utah Ktichen	Non-ACM	ND		1419-Floor Tile



**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE**

**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF58	Bottom Middle Layer; Flower Sheet Floor	3342 Utah Ktichen	Non-ACM	ND		1419-Mastic
<b>VSF58</b>	<b>Bottom Middle Layer; Flower Sheet Floor</b>	<b>3342 Utah Ktichen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1420</b>
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1421-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1421-Mastic/Vapor
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1422-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1422-Mastic/Vapor
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1423-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Ktichen	Non-ACM	ND		1423-Mastic/Vapor
ES50	Exterior Stucco	3342-3344 Utah SW	Non-ACM	ND		1424
ES50	Exterior Stucco	3342-3344 Utah S Center	Non-ACM	ND		1425
ES50	Exterior Stucco	3342-3344 Utah SE	Non-ACM	ND		1426
ES50	Exterior Stucco	3342-3344 Utah NE	Non-ACM	ND		1427
ES50	Exterior Stucco	3342-3344 Utah NW	Non-ACM	ND		1428
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Living Room	Non-ACM	ND		1429-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Living Room	Non-ACM	ND		1429-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Skim Coat
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Hall	Non-ACM	ND		1431-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Hall	Non-ACM	ND		1431-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Living Room	Non-ACM	ND		1432-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Living Room	Non-ACM	ND		1432-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 2	Non-ACM	ND		1433-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 2	Non-ACM	ND		1433-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1434-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1434-Button Board
WS/J50	WHITE-DRYWALL W/ JC	727 Grape 1st Floor Kitchen	Non-ACM	ND		1435-Drywall
WS/J50	WHITE-DRYWALL W/ JC	727 Grape 1st Floor Kitchen	Non-ACM	ND		1435-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	725 Grape 1st Floor Kitchen	Non-ACM	ND		1436-Drywall
WS/J50	WHITE-DRYWALL W/ JC	725 Grape 1st Floor Kitchen	Non-ACM	ND		1436-Joint Compound
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Living Room	Non-ACM	ND		1437--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Living Room	Non-ACM	ND		1437--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1438--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1438--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	725 Grape 1st Floor Living Room	Non-ACM	ND		1439--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	725 Grape 1st Floor Living Room	Non-ACM	ND		1439--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Hall	Non-ACM	ND		1440--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Hall	Non-ACM	ND		1440--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1441--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1441--Mastic
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1442-Floor Tile</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1442-Mastic</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1442-Vapor</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1443-Floor Tile</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1443-Mastic</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1443-Vapor</b>
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1444-Floor Tile</b>

**TABLE 1.0  
BULK SAMPLE RESULTS  
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CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Living Room	Non-ACM	ND		1444-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Living Room	Non-ACM	ND		1444-Vapor
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Hall</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1445-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Hall	Non-ACM	ND		1445-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Hall	Non-ACM	ND		1445-Vapor
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1446-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1446-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1446-Vapor
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1447-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1447-Mastic
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1448-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1448-Mastic
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1449-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1449-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1450-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1450-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1451-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1451-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1452-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1452-Mastic
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1453-Sheet Flooring</b>
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1453-Mastic
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1454-Sheet Flooring</b>
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1454-Mastic
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1455-Sheet Flooring</b>
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1455-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Sheet Flooring
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Vapor
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Sheet Flooring
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Vapor
<b>VSF54</b>	<b>TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1458-Sheet Flooring</b>
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1458-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1458-Vapor
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1459-Sheet Flooring</b>
VSF61	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1459-Mastic
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1460-Sheet Flooring</b>
VSF61	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1460-Mastic
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1461-Sheet Flooring</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1462-Backing</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Vapor
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1463-Backing</b>

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Vapor
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>22%</b>	<b>Chrysotile</b>	<b>1464-Backing</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Vapor
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1465
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1466
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1467
ES50	WHITE-EXTERIOR STUCCO-SE	725-737 Grape Exterior, SE	Non-ACM	ND		1468
ES50	WHITE-EXTERIOR STUCCO-S CENTER	725-737 Grape Exterior, S Center	Non-ACM	ND		1469
ES50	WHITE-EXTERIOR STUCCO-SW	725-737 Grape Exterior, SW	Non-ACM	ND		1470
ES50	WHITE-EXTERIOR STUCCO-NW	725-737 Grape Exterior, NW	Non-ACM	ND		1471
ES50	WHITE-EXTERIOR STUCCO-NE	725-737 Grape Exterior, NE	Non-ACM	ND		1472
RS50	RED-ROOF SHINGLES-SE	725-737 Grape Roof, SE	Non-ACM	ND		1473-Shingle
RS50	RED-ROOF SHINGLES-SE	725-737 Grape Roof, SE	Non-ACM	ND		1473-Shingle 2
RS50	RED-ROOF SHINGLES-S CENTER	725-737 Grape Roof, S Center	Non-ACM	ND		1474-Shingle
RS50	RED-ROOF SHINGLES-S CENTER	725-737 Grape Roof, SW	Non-ACM	ND		1474-Shingle 2
RS50	RED-ROOF SHINGLES-SW	725-737 Grape Roof, SW	Non-ACM	ND		1475-Shingle
RS50	RED-ROOF SHINGLES-SW	725-737 Grape Roof, SW	Non-ACM	ND		1475-Shingle 2
WPF50	WHITE-PLASTER W/ BUTTON-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1476-Plaster
WPF50	WHITE-PLASTER W/ BUTTON-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1476-Button Board
WPF50	White - Plaster w/ Button	815 Grape - 1st - Living Room	Non-ACM	ND		1477-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Living Room	Non-ACM	ND		1477-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Kitchen	Non-ACM	ND		1478-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Kitchen	Non-ACM	ND		1478-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 1	Non-ACM	ND		1479-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 1	Non-ACM	ND		1479-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 2	Non-ACM	ND		1480-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 2	Non-ACM	ND		1480-Drywall
WPF50	White - Plaster w/ Button	813 Grape- 1st - Living Rm	Non-ACM	ND		1481-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Living Rm	Non-ACM	ND		1481-Drywall
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bathroom	Non-ACM	ND		1482-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bathroom	Non-ACM	ND		1482-Drywall
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1483-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1483-Drywall
WS/J50	White - Drywall w/ J.C.	815 Grape- 1st - Kitchen	Non-ACM	ND		1484-Drywall
WS/J50	White - Drywall w/ J.C.	815 Grape- 1st - Kitchen	Non-ACM	ND		1484-Joint Compound
WS/J50	White - Drywall w/ J.C.	813 Grape- 1st - Kitchen	Non-ACM	ND		1485-Drywall
WS/J50	White - Drywall w/ J.C.	813 Grape- 1st - Kitchen	Non-ACM	ND		1485-Joint Compound
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape - 1st - Living Rm	Non-ACM	ND		1486-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Living Rm	Non-ACM	ND		1486-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Hall	Non-ACM	ND		1487-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Hall	Non-ACM	ND		1487-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 - Grape Bedroom 1	Non-ACM	ND		1488-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 -Grape - Bedroom 1	Non-ACM	ND		1488-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Living Rm	Non-ACM	ND		1489-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Living Rm	Non-ACM	ND		1489-Mastic

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape - 1st - Bedroom 2	Non-ACM	ND		1490-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1490-Mastic
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1491-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1491-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Living Rm	Non-ACM	ND		1491-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1492-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1492-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Hall	Non-ACM	ND		1492-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Bedrm 1</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1493-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape 1st - Bedrm 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1493-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Bedrm 1	Non-ACM	ND		1493-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1494-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1494-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	813 Grape- 1st - Living Rm	Non-ACM	ND		1494-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Bedrm 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1495-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Bedrm 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1495-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	813 Grape- 1st - Bedrm 2	Non-ACM	ND		1495-Vapor Barrier
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Vapor Barrier
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1497-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1497-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape - 1st - Kitchen	Non-ACM	ND		1497-Vapor Barrier
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Vapor Barrier
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1499-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 -Grape 1st - Bathrm	Non-ACM	ND		1499-Mastic
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1500-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1500-Mastic
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1501-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1501-Mastic
VSF57	White - Small Triangle Sheet Flooring	815 -Grape 1st - Kitchen	Non-ACM	ND		1502
VSF57	White - Small Triangle Sheet Flooring	815 Grape- 1st - Kitchen	Non-ACM	ND		1503
VSF57	White - Small Triangle Sheet Flooring	815 Grape- 1st - Kitchen	Non-ACM	ND		1504
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1505-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1505-Mastic
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1506-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1506-Mastic
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1507-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1507-Mastic
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - S.E.	Non-ACM	ND		1508
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - W. Center	Non-ACM	ND		1509
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - N.W.	Non-ACM	ND		1510
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - N.E.	Non-ACM	ND		1511
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - S.E.	Non-ACM	ND		1512
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1516-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1516-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Hall	Non-ACM	ND		1517-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Hall	Non-ACM	ND		1517-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1518-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1518-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1519-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1519-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1520-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1520-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1521-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1521-Drywall
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 2	Non-ACM	ND		1522-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 2	Non-ACM	ND		1522-Drywall
WS/J50	WHITE-DRYWALL W/ JC	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1523-Drywall
WS/J50	WHITE-DRYWALL W/ JC	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1523-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Drywall
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Joint Compound 2
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1525-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1525-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1526-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1526-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1527-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1527-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1528-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1528-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1529-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1529-Mastic
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1530-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1530-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1530-Felt
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1531-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1531-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1531-Felt
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1532-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1532-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1532-Felt
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 840 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1533-Floor Tile</b>

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1533-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1533-Felt
<b>12VFT51</b>	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 840 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1534-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1534-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1534-Felt
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1535-Vinyl Sheet Flooring
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1536-Vinyl Sheet Flooring
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1537-Vinyl Sheet Flooring
<b>VSF58</b>	<b>YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER</b>	<b>Unit 842 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1538-Vinyl Sheet Flooring</b>
<b>VSF58</b>	<b>YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER</b>	<b>Unit 840 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1539-Vinyl Sheet Flooring</b>
VSF58	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1539-Mastic
<b>VSF58</b>	<b>YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER</b>	<b>Unit 840 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1540-Vinyl Sheet Flooring</b>
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1541-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1541-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1542-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1542-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1543-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1543-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1544-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1544-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1545-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1545-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1546-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1546-Mastic
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, NW	Non-ACM	ND		1547
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, SW	Non-ACM	ND		1548
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, S Center	Non-ACM	ND		1549
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, SE	Non-ACM	ND		1550
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, NE	Non-ACM	ND		1551
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Tar
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Tar
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Tar
WPF50	White Plaster w/Button	870 Blaine Alley Living Rm	Non-ACM	ND		1555-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Living Rm	Non-ACM	ND		1555-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley kitchen	Non-ACM	ND		1556-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley kitchen	Non-ACM	ND		1556-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 1	Non-ACM	ND		1557-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 1	Non-ACM	ND		1557-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 2	Non-ACM	ND		1558-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 2	Non-ACM	ND		1558-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Living Rm.	Non-ACM	ND		1559-Plaster



**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White Plaster w/Button	878 Blaine Alley Living Rm.	Non-ACM	ND		1559-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 1	Non-ACM	ND		1560-Plaster
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 1	Non-ACM	ND		1560-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 2	Non-ACM	ND		1561-Plaster
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 2	Non-ACM	ND		1561-Drywall
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1562-Drywall
WS/J50	White Drywall w/Joint C.	876 Blaine Alley Kitchen	Non-ACM	ND		1562-Joint Compound
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1563-Joint Compound
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1563-Joint Compound
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Living Rm.	Non-ACM	ND		1564-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Living Rm.	Non-ACM	ND		1564-Mastic
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Hall	Non-ACM	ND		1565-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Hall	Non-ACM	ND		1565-Mastic
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Bedroom 2	Non-ACM	ND		1566-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Bedroom 2	Non-ACM	ND		1566-Mastic
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	876 Blaine Alley Living Rm	Non-ACM	ND		1567-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Living Rm	Non-ACM	ND		1567-Mastic
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Bedroom 2	Non-ACM	ND		1568-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Bedroom 2	Non-ACM	ND		1568-Mastic
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1569-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1569-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	876 Blaine Alley Living Rm	Non-ACM	ND		1569-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1570-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1570-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	876 Blaine Alley Hall	Non-ACM	ND		1570-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1571-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1571-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Bedroom 2	Non-ACM	ND		1571-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Living Rm.</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1572-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Living Rm.</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1572-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Living Rm.	Non-ACM	ND		1572-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1573-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1573-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Bedroom 2	Non-ACM	ND		1573-Vapor Barrier
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Kitchen	Non-ACM	ND		1574-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Kitchen	Non-ACM	ND		1574-Mastic
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Bathroom	Non-ACM	ND		1575-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Bathroom	Non-ACM	ND		1575-Mastic
VSF56	White Top layer: 6" Square Sheet H	878 Blaine Alley Kitchen	Non-ACM	ND		1576-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	878 Blaine Alley Kitchen	Non-ACM	ND		1576-Mastic
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1577-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1577-Mastic
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1578-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1578-Mastic
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1579-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1579-Mastic
VSF58	<b>White Middle layer: Brown Flower Sheet Flooring w/Mastic</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1580-Sheet Flooring</b>

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	Non-ACM	ND		1580-Mastic
<b>VSF58</b>	<b>White Middle layer: Brown Flower Sheet Flooring w/Mastic</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1581-Sheet Flooring</b>
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	Non-ACM	ND		1581-Mastic
<b>VSF58</b>	<b>White Middle layer: Brown Flower Sheet Flooring w/Mastic</b>	<b>878 Blaine Alley Bathroom</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1582</b>
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1583-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1583-Vapor Barrier
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1584-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1584-Vapor Barrier
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1585-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1585-Vapor Barrier
ES50	White exterior Stucco	876-878 Blaine Alley N.E.	Non-ACM	ND		1586
ES50	White exterior Stucco	876-878 Blaine Alley S.E.	Non-ACM	ND		1587
ES50	White exterior Stucco	876-878 Blaine Alley S.W.	Non-ACM	ND		1588
ES50	White exterior Stucco	876-878 Blaine Alley N.W.	Non-ACM	ND		1589
ES50	White exterior Stucco	876-878 Blaine Alley N. Center	Non-ACM	ND		1590
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1591-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1591-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1592-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1592-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.W.	Non-ACM	ND		1593-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.W.	Non-ACM	ND		1593-Shingle
WPF50	Plaster w/Button Board	758 Blaine Alley Living Rm	Non-ACM	ND		1594-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1594-Button
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bathrm	Non-ACM	ND		1595-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bathrm	Non-ACM	ND		1595-Button
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Button
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Ceiling: Bedrm 1	Non-ACM	ND		1597-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Ceiling: Bedrm 1	Non-ACM	ND		1597-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Texture
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1599-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1599-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Texture
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Button
WS/J50	Drywall w/Joint Compound	Unit 758 Blaine Alley Kitchen	Non-ACM	ND		1601-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 758 Blaine Alley Kitchen	Non-ACM	ND		1601-Drywall
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Tape
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Drywall
12VFT50	Top Layer 12" Beige w/Specks with Beige Mastic	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1603-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1603-Mastic

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UNIVERSITY OF CALIFORNIA, RIVERSIDE  
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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1604-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1604-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1605-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1605-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1606-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1606-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1607-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1607-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>19%</b>	<b>Chrysotile</b>	<b>1608-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Bedrm 1</b>	<b>ACM</b>	<b>16%</b>	<b>Chrysotile</b>	<b>1609-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Bedrm 2</b>	<b>ACM</b>	<b>17%</b>	<b>Chrysotile</b>	<b>1610-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 760 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>18%</b>	<b>Chrysotile</b>	<b>1611-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1611-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Living Rm	Non-ACM	ND		1611-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Living Rm	Non-ACM	ND		1611-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>760 Blaine Alley Bedrm 1</b>	<b>ACM</b>	<b>19%</b>	<b>Chrysotile</b>	<b>1612-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Vapor
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Leveler
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1614-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1614-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Hall	Non-ACM	ND		1615-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Hall	Non-ACM	ND		1615-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1616-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1616-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1617-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1617-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1618-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1618-Mastic
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>17%</b>	<b>Chrysotile</b>	<b>1619-Sheet Flooring</b>
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Vapor
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1620-Sheet Flooring</b>



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Vapor
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1621-Sheet Flooring</b>
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1622-Sheet Flooring
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	758 Blaine Alley Kitchen	Non-ACM	ND		1622-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	758 Blaine Alley Kitchen	Non-ACM	ND		1622-Leveler
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Leveler
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Blaine Alley Bathrm	Non-ACM	ND		1624-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Bathrm	Non-ACM	ND		1624-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Blaine Alley Bathrm	Non-ACM	ND		1624-Leveler
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.E.	Non-ACM	ND		1625-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.E.	Non-ACM	ND		1625-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.E.	Non-ACM	ND		1626-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.E.	Non-ACM	ND		1626-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S. Center	Non-ACM	ND		1627
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.W.	Non-ACM	ND		1628
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.W.	Non-ACM	ND		1629
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1631-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1631-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1631-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Shingles
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Living Room	Non-ACM	ND		1633-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Living Room	Non-ACM	ND		1633-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1634-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1634-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Skim Coat
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Texture
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 1	Non-ACM	ND		1636-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 1	Non-ACM	ND		1636-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Living Room	Non-ACM	ND		1637-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Living Room	Non-ACM	ND		1637-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 1	Non-ACM	ND		1638-Plaster

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 1	Non-ACM	ND		1638-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 2	Non-ACM	ND		1639-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 2	Non-ACM	ND		1639-Button Board
WS/J51	WHITE-DRYWALL W/ JOINT C.	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1640-Drywall
WS/J51	WHITE-DRYWALL W/ JOINT C.	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1640-Joint Compound
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Drywall
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Joint Compound
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Skim Coat
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1642-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1642-Mastic
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1643-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1643-Mastic
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1644-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1644-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1645-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1645-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1646-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1646-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1647-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1647-Mastic
VSF58	<b>YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC</b>	<b>3321 Utah 1st Floor Bathroom</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1648-Sheet Floor</b>
VSF58	<b>YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC</b>	<b>3321 Utah 1st Floor Bathroom</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1649-Sheet Floor</b>
VSF58	<b>YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC</b>	<b>3321 Utah 1st Floor Bathroom</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1650-Sheet Floor</b>
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1651-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1651-Vapor Barrier
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1652-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1652-Vapor Barrier
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1653-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1653-Vapor Barrier
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SE	Non-ACM	ND		1654-Stucco 1
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SE	Non-ACM	ND		1654-Stucco 2
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SW	Non-ACM	ND		1655
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, Center	Non-ACM	ND		1656
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, NW	Non-ACM	ND		1657
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, NE	Non-ACM	ND		1658
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, NE	Non-ACM	ND		1659
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, NE	Non-ACM	ND		1660
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, SE	Non-ACM	ND		1661
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof, NE	Non-ACM	ND		1662
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof, NE	Non-ACM	ND		1663
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof, SE	Non-ACM	ND		1664
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1665
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1666-Mastic 1
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1666-Mastic 2
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1667-Mastic 1
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1667-Mastic 2
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Living Room	Non-ACM	ND		1668-Plaster

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Living Room	Non-ACM	ND		1668-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1669-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1669-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1670-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1670-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1671-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1671-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Living Room	Non-ACM	ND		1672-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Living Room	Non-ACM	ND		1672-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1673-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1673-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 1	Non-ACM	ND		1674-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 1	Non-ACM	ND		1674-Button Board
WS/J50	WHITE-DRYWALL W/ JOINT C.	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1675-Drywall
WS/J50	WHITE-DRYWALL W/ JOINT C.	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1675-Joint Compound
WS/J50	WHITE-DRYWALL W/ JOINT C.	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1676-Drywall
WS/J50	WHITE-DRYWALL W/ JOINT C.	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1676-Joint Compound
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1677-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1677-Mastic
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1678-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1678-Mastic
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1679-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1679-Mastic
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1680-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1680-Mastic
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1681-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1681-Mastic
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1682-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1682-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1683-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1683-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1684-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1684-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1685-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1685-Mastic
<b>VSF58</b>	<b>YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC</b>	<b>3323 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1686-Vinyl Sheet Flooring</b>
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1686-Mastic
<b>VSF58</b>	<b>YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1687-Vinyl Sheet Flooring</b>
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1687-Mastic
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1688-Vinyl Sheet Flooring
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1688-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Vapor Barrier
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Vapor Barrier

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Vapor Barrier
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1692
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1693
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1694
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, NE	Non-ACM	ND		1695
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, SE	Non-ACM	ND		1696
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, N	Non-ACM	ND		1697
ESS0	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, NE	Non-ACM	ND		1698
ESS0	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, SE	Non-ACM	ND		1699
ESS0	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, Center	Non-ACM	ND		1700
ESS0	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, SW	Non-ACM	ND		1701
ESS0	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, NW	Non-ACM	ND		1702
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, NE	Non-ACM	ND		1703-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, NE	Non-ACM	ND		1703-Shingle 2
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1704-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1704-Shingle 2
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1705-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1705-Shingle 2
WPF50	Plaster w/ Button	3359 Idaho Living Rm	Non-ACM	ND		1706-Plaster
WPF50	Plaster w/ Button	3359 Idaho Living Rm	Non-ACM	ND		1706-Drywall
WPF50	Plaster w/ Button	3359 Idaho Kitchen	Non-ACM	ND		1707-Plaster
WPF50	Plaster w/ Button	3359 Idaho Kitchen	Non-ACM	ND		1707-Drywall
WPF50	Plaster w/ Button	3359 Idaho Bedrm 1	Non-ACM	ND		1708-Plaster
WPF50	Plaster w/ Button	3359 Idaho Bedrm 1	Non-ACM	ND		1708-Drywall
WPF50	Plaster w/ Button	3359 Idaho Bedrm 2	Non-ACM	ND		1709-Plaster
WPF50	Plaster w/ Button	3359 Idaho Bedrm 2	Non-ACM	ND		1709-Drywall
WPF50	Plaster w/ Button	3361 Idaho Living Rm	Non-ACM	ND		1710-Plaster
WPF50	Plaster w/ Button	3361 Idaho Living Rm	Non-ACM	ND		1710-Drywall
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Drywall
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Plaster
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Texture
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Drywall
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Plaster
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Texture
WS/J50	Drywall w/ Joint C.	3361 Idaho Kitchen	Non-ACM	ND		1713-Drywall
WS/J50	Drywall w/ Joint C.	3361 Idaho Kitchen	Non-ACM	ND		1713-Joint Compound
WS/J50	Drywall w/ Joint C.	3359 Idaho Kitchen	Non-ACM	ND		1714-Drywall
WS/J50	Drywall w/ Joint C.	3359 Idaho Kitchen	Non-ACM	ND		1714-Texture
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1715-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1715-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1716-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1716-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3361 Idaho Bathrm	Non-ACM	ND		1717-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3361 Idaho Bathrm	Non-ACM	ND		1717-Mastic
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1718

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1719
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1720
MISC50	Exterior Window Frame Putty	3359-3361 Idaho NE	Non-ACM	ND		1721
MISC50	Exterior Window Frame Putty	3359-3361 Idaho E Center	Non-ACM	ND		1722
MISC50	Exterior Window Frame Putty	3359-3361 Idaho SE	Non-ACM	ND		1723
ES50	Exterior Stucco	3359-3361 Idaho NE	Non-ACM	ND		1724
ES50	Exterior Stucco	3359-3361 Idaho E Center	Non-ACM	ND		1725
ES50	Exterior Stucco	3359-3361 Idaho SW	Non-ACM	ND		1726
ES50	Exterior Stucco	3359-3361 Idaho NW	Non-ACM	ND		1727
ES50	Exterior Stucco	3359-3361 Idaho NW	Non-ACM	ND		1728
RS50	Roof Shingles	3359-3361 Idaho NW	Non-ACM	ND		1729-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho NW	Non-ACM	ND		1729-Shingle 2
RS50	Roof Shingles	3359-3361 Idaho NE	Non-ACM	ND		1730-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho NE	Non-ACM	ND		1730-Shingle 2
RS50	Roof Shingles	3359-3361 Idaho Roof	Non-ACM	ND		1731-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho Roof	Non-ACM	ND		1731-Shingle 2
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN - 1ST - LIVING RM.	Non-ACM	ND		1732-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN - - 1ST - LIVING RM.	Non-ACM	ND		1732-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN - - 1ST - BATHRM	Non-ACM	ND		1733-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1733-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1734-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1734-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 2	Non-ACM	ND		1735-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 2	Non-ACM	ND		1735-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - LIVING RM	Non-ACM	ND		1736-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - LIVING RM	Non-ACM	ND		1736-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1737-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1737-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - HALL	Non-ACM	ND		1738-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - HALL	Non-ACM	ND		1738-Button Board
WS/J50	WHITE - DRYWALL W/ JOINT C.	747 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1739-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	747 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1739-Joint Compound
WS/J50	WHITE - DRYWALL W/ JOINT C.	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1740-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1740-Joint Compound
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1741-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1741-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1742-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1742-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	749 LINDEN -- BATHRM	Non-ACM	ND		1743-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	749 LINDEN -- BATHRM	Non-ACM	ND		1743-Mastic
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1744-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1744-Mastic
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1745-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1745-Mastic
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1746-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1746-Mastic
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1747-Leveling Compound



**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1747-Mastic
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1748-Leveling Compound
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1748-Mastic
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1749-Leveling Compound
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1749-Mastic
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1750
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1751
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1752
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - N.E.	Non-ACM	ND		1753
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - N.W.	Non-ACM	ND		1754
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - S.E.	Non-ACM	ND		1755
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S.E.	Non-ACM	ND		1756
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S. CENTER	Non-ACM	ND		1757
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S.W.	Non-ACM	ND		1758
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - N.W.	Non-ACM	ND		1759
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - N.E.	Non-ACM	ND		1760
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1761-Shingle 1
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1761-Shingle 2
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1762-Shingle 1
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1762-Shingle 2
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.W.	Non-ACM	ND		1763
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - LIVING RM.	Non-ACM	ND		1764-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - LIVING RM.	Non-ACM	ND		1764-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - HALL	Non-ACM	ND		1765-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - HALL	Non-ACM	ND		1765-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1767-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1767-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO - 1ST - BEDRM 2	Non-ACM	ND		1770-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1770-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1770-Button Board
WS/J50	WHITE - DRYWALL W/ JOINT C.	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1771-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1771-Joint Compound
WS/J50	WHITE - DRYWALL W/ JOINT C.	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1772-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1772-Joint Compound
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1773-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1773-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1774-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1774-Mastic

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3411 AVACADO- 1ST - BATHRM	Non-ACM	ND		1775-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3411 AVACADO- 1ST - BATHRM	Non-ACM	ND		1775-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1776-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO - 1ST - BATHRM	Non-ACM	ND		1776-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1777-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1777-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1778-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO-1ST - BATHRM	Non-ACM	ND		1778-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Vapor
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Vapor
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Vapor
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1782-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1782-Mastic 2
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1783-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1783-Mastic 2
FBM51	WHITE - BASEBOARD MASTIC	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1784-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3411 AVACADO - 1ST - KITCHEN	Non-ACM	ND		1784-Mastic 2
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	3411-3413 AVACADO EXTERIOR - 1ST - N. CENTER	Non-ACM	ND		1785
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	3411-3413 AVACADO EXTERIOR - 1ST - N.E.	Non-ACM	ND		1786
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	3411-3413 AVACADO EXTERIOR - 1ST - N.W.	Non-ACM	ND		1787
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - N.W.	Non-ACM	ND		1788
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - N.E.	Non-ACM	ND		1789
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - S CENTER	Non-ACM	ND		1790
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - S.E.	Non-ACM	ND		1791
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - S.E.	Non-ACM	ND		1792
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1793-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1793-Shingle 2
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1794-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1794-Shingle 2
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.E.	Non-ACM	ND		1795-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.E.	Non-ACM	ND		1795-Shingle 2
WPF50	White Plaster with Button	3424 Avacado -Living Room	Non-ACM	ND		1796-Plaster
WPF50	White Plaster with Button	3424 Avacado -Living Room	Non-ACM	ND		1796-Drywall
WPF50	White Plaster with Button	3424 Avacado -Bathroom	Non-ACM	ND		1797-Plaster
WPF50	White Plaster with Button	3424 Avacado -Bathroom	Non-ACM	ND		1797-Drywall
WPF50	White Plaster with Button	3424 Avacado -Bedroom 1	Non-ACM	ND		1798-Plaster
WPF50	White Plaster with Button	3424 Avacado -Bedroom 1	Non-ACM	ND		1798-Drywall
WPF50	White Plaster with Button	3424 Avacado -bedroom 2	Non-ACM	ND		1799-Plaster
WPF50	White Plaster with Button	3424 Avacado -bedroom 2	Non-ACM	ND		1799-Drywall
WPF50	White Plaster with Button	3422 Avacado -Living Room	Non-ACM	ND		1800-Plaster
WPF50	White Plaster with Button	3422 Avacado -Living Room	Non-ACM	ND		1800-Drywall

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White Plaster with Button	3422 Avacado -Bedroom 1	Non-ACM	ND		1801-Plaster
WPF50	White Plaster with Button	3422 Avacado -Bedroom 1	Non-ACM	ND		1801-Drywall
WPF50	White Plaster with Button	3422 Avacado -Bedroom 2	Non-ACM	ND		1802-Plaster
WPF50	White Plaster with Button	3422 Avacado -Bedroom 2	Non-ACM	ND		1802-Drywall
WS/J50	Drywall with Joint Compund	3424 Avacado Kitchen	Non-ACM	ND		1803-Joint Compound
WS/J50	Drywall with Joint Compund	3424 Avacado Kitchen	Non-ACM	ND		1803-Drywall
WS/J50	Drywall with Joint Compund	3422 Avacado -Kitchen	Non-ACM	ND		1804-Joint Compound
WS/J50	Drywall with Joint Compund	3422 Avacado -Kitchen	Non-ACM	ND		1804-Drywall
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1805-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1805-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1806-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1806-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3422 Avacado -Bathroom	Non-ACM	ND		1807-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3422 Avacado -Bathroom	Non-ACM	ND		1807-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1808-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1808-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1809-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1809-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1810-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1810-Mastic
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1811
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1812
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1813
FBM51	Baseboard Mastic	3424 Avacado -Kitchen	Non-ACM	ND		1814
FBM51	Baseboard Mastic	3424 Avacado -Kitchen	Non-ACM	ND		1815
FBM51	Baseboard Mastic	3422 Avacado -Kitchen	Non-ACM	ND		1816
ES50	Exterior Stucco	3422-3424 Avacado Exterior SE	Non-ACM	ND		1817
ES50	Exterior Stucco	3422-3424 Avacado Exterior E Center	Non-ACM	ND		1818
ES50	Exterior Stucco	3422-3424 Avacado Exterior NE	Non-ACM	ND		1819
ES50	Exterior Stucco	3422-3424 Avacado Exterior NW	Non-ACM	ND		1820
ES50	Exterior Stucco	3422-3424 Avacado Exterior SW	Non-ACM	ND		1821
WPF50	White Plaster with Button	3459 Avacado-Living Room	Non-ACM	ND		1822-Plaster
WPF50	White Plaster with Button	3459 Avacado-Living Room	Non-ACM	ND		1822-Drywall
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Top Plaster
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Bottom Plaster
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Drywall
WPF50	White Plaster with Button	3459 Avacado-Bedroom 1	Non-ACM	ND		1824-Plaster
WPF50	White Plaster with Button	3459 Avacado-Bedroom 1	Non-ACM	ND		1824-Drywall
WPF50	White Plaster with Button	3459 Avacado-Ceiling Bedroom 2	Non-ACM	ND		1825-Plaster
WPF50	White Plaster with Button	3459 Avacado-Ceiling Bedroom 2	Non-ACM	ND		1825-Drywall
WPF50	White Plaster with Button	3461 Avacado-Living Room Bedroom 1	Non-ACM	ND		1826-Plaster
WPF50	White Plaster with Button	3461 Avacado-Living Room Bedroom 1	Non-ACM	ND		1826-Drywall
WPF50	White Plaster with Button	3461 Avacado-Bedroom 1	Non-ACM	ND		1827-Plaster
WPF50	White Plaster with Button	3461 Avacado-Bedroom 1	Non-ACM	ND		1827-Drywall
WPF50	White Plaster with Button	3461 Avacado Bathroom	Non-ACM	ND		1828-Plaster
WPF50	White Plaster with Button	3461 Avacado Bathroom	Non-ACM	ND		1828-Drywall
WS/J50	Dry Wall with Joint Compund	3459 Avacado-Kitchen	Non-ACM	ND		1829-Joint Compound

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J50	Dry Wall with Joint Compound	3459 Avacado-Kitchen	Non-ACM	ND		1829-Drywall
WS/J50	Dry Wall with Joint Compound	3461 Avacado-Kitchen	Non-ACM	ND		1830-Joint Compound
WS/J50	Dry Wall with Joint Compound	3461 Avacado-Kitchen	Non-ACM	ND		1830-Drywall
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1831-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1831-Mastic
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1832-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1832-Mastic
VSF56	6" Square Sheet Flooring with Mastic	3461 Avacado-Bathroom	Non-ACM	ND		1833-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3461 Avacado-Bathroom	Non-ACM	ND		1833-Mastic
FBM51	Baseboard Mastic	3459 Avacado-Kitchen	Non-ACM	ND		1834
FBM51	Baseboard Mastic	3461 Avacado-Kitchen	Non-ACM	ND		1835
FBM51	Baseboard Mastic	3461 Avacado -Kitchen	Non-ACM	ND		1836
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior NE	Non-ACM	ND		1837
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior NW	Non-ACM	ND		1838
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior SE	Non-ACM	ND		1839
ES50	Exterior Stucco	3459-3461 Avacado Exterior NE	Non-ACM	ND		1840
ES50	Exterior Stucco	3459-3461 Avacado Exterior E Center	Non-ACM	ND		1841
ES50	Exterior Stucco	3459-3461 Avacado Exterior SE	Non-ACM	ND		1842
ES50	Exterior Stucco	3459-3461 Avacado Exterior SW	Non-ACM	ND		1843
ES50	Exterior Stucco	3459-3461 Avacado Exterior NW	Non-ACM	ND		1844
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 2
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 3
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 2
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 3
RS50	Roof Shingles	3459-3461 Avacado Roof NW	Non-ACM	ND		1847-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NW	Non-ACM	ND		1847-Roof Shingle 2
WPF50	Plaster w/Button	3489 Avacado Living Rm	Non-ACM	ND		1848-Plaster
WPF50	Plaster w/Button	3489 Avacado Living Rm	Non-ACM	ND		1848-Drywall
WPF50	Plaster w/Button	3489 Avacado Kitchen	Non-ACM	ND		1849-Plaster
WPF50	Plaster w/Button	3489 Avacado Kitchen	Non-ACM	ND		1849-Drywall
WPF50	Plaster w/Button	3489 Avacado Bedrm 1	Non-ACM	ND		1850-Plaster
WPF50	Plaster w/Button	3489 Avacado Bedrm 1	Non-ACM	ND		1850-Drywall
WPF50	Plaster w/Button	3489 Avacado Bedrm 2	Non-ACM	ND		1851-Plaster
WPF50	Plaster w/Button	3489 Avacado Bedrm 2	Non-ACM	ND		1851-Drywall
WPF50	Plaster w/Button	3491 Avacado Living Rm	Non-ACM	ND		1852-Plaster
WPF50	Plaster w/Button	3491 Avacado Living Rm	Non-ACM	ND		1852-Drywall
WPF50	Plaster w/Button	3491 Avacado Bathrm	Non-ACM	ND		1853-Plaster
WPF50	Plaster w/Button	3491 Avacado Bathrm	Non-ACM	ND		1853-Drywall
WPF50	Plaster w/Button	3491 Avacado Bedrm 2	Non-ACM	ND		1854-Plaster
WPF50	Plaster w/Button	3491 Avacado Bedrm 2	Non-ACM	ND		1854-Drywall
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Drywall
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Joint Compound
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Texture
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Drywall
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Caulk

**TABLE 1.0**  
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**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Texture
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1857-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1857-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1858-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1858-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1859-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1859-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1860-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1860-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1861-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1861-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1862-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1862-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1863-Floor Tile
12VFT50	<b>Middle Layer: Beige with Specks Tile with Beige Mastic</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1863-Mastic</b>
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1864-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1864-Mastic</b>
12VFT50	<b>Middle Layer: Beige with Specks Tile with Beige Mastic</b>	3491 Avacado Bathrm	Non-ACM	ND		1865-Mastic 1
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1865-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1865-Mastic 2
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1866
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1867
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1868
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1869-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Vapor 1
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Vapor 2
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Other
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1870-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1870-Vapor
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1871-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1871-Vapor
MISC50	Exterior Window Frame Putty	3489-3491 Avacado N Center	Non-ACM	ND		1872
MISC50	Exterior Window Frame Putty	3489-3491 Avacado NE	Non-ACM	ND		1873
MISC50	Exterior Window Frame Putty	3489-3491 Avacado NW	Non-ACM	ND		1874
ES50	Exterior Stucco	3489-3491 Avacado NW	Non-ACM	ND		1875
ES50	Exterior Stucco	3489-3491 Avacado NE	Non-ACM	ND		1876
ES50	Exterior Stucco	3489-3491 Avacado E Center	Non-ACM	ND		1877
ES50	Exterior Stucco	3489-3491 Avacado SE	Non-ACM	ND		1878
ES50	Exterior Stucco	3489-3491 Avacado SW	Non-ACM	ND		1879
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1880-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1880-Shingle 2
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1881-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1881-Shingle 2
RS50	Roof Shingles	3489-3491 Avacado NE	Non-ACM	ND		1882-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NE	Non-ACM	ND		1882-Shingle 2
WPF50	Plaster w/ Buton	3472 Avacado Living Room	Non-ACM	ND		1883-Plaster
WPF50	Plaster w/ Buton	3472 Avacado Living Room	Non-ACM	ND		1883-Drywall

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/ Button	3472 Avacado Hall	Non-ACM	ND		1884-Plaster
WPF50	Plaster w/ Button	3472 Avacado Hall	Non-ACM	ND		1884-Drywall
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Plaster
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Drywall
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Texture
WPF50	Plaster w/ Button	3472 Avacado Bedrm 1	Non-ACM	ND		1886-Plaster
WPF50	Plaster w/ Button	3472 Avacado Bedrm 1	Non-ACM	ND		1886-Drywall
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Plaster Base Coat
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Plaster Skim Coat
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Drywall
WPF50	Plaster w/ Button	3474 Avacado Bedrm 1	Non-ACM	ND		1888-Plaster
WPF50	Plaster w/ Button	3474 Avacado Bedrm 1	Non-ACM	ND		1888-Drywall
WPF50	Plaster w/ Button	3474 Avacado Bedrm 2	Non-ACM	ND		1889-Plaster
WPF50	Plaster w/ Button	3474 Avacado Bedrm 2	Non-ACM	ND		1889-Drywall
WS/J50	Drywall w/ Joint C.	3474 Avacado Kitchen	Non-ACM	ND		1890-Drywall
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1890-Joint Compound
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1891-Drywall
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1891-Joint Compound
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1892-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1892-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1893-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1893-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1894-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1894-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Felt
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Felt
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Felt
FBM51	Baseboard Mastic	3474 Avacado Kitchen	Non-ACM	ND		1898
FBM51	Baseboard Mastic	3474 Avacado Kitchen	Non-ACM	ND		1899
FBM51	Baseboard Mastic	3472 Avacado Kitchen	Non-ACM	ND		1900
ES50	Exterior Stucco	3472-3474 Avacado SE	Non-ACM	ND		1901
ES50	Exterior Stucco	3472-3474 Avacado S Center	Non-ACM	ND		1902
ES50	Exterior Stucco	3472-3474 Avacado SW	Non-ACM	ND		1903
ES50	Exterior Stucco	3472-3474 Avacado NW	Non-ACM	ND		1904
ES50	Exterior Stucco	3472-3474 Avacado NE	Non-ACM	ND		1905
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1906-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1906-Shingle 2
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1907-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1907-Shingle 2
RS50	Roof Shingles	3472-3474 Avacado SW	Non-ACM	ND		1908-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SW	Non-ACM	ND		1908-Shingle 2

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Styrofoam
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Styrofoam
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Styrofoam
RP50	Roof Parapet	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2121
RP50	Roof Parapet	3401-3403 Avacado Roof, E. Center	Non-ACM	ND		2122-Coating
RP50	Roof Parapet	3401-3403 Avacado Roof, E. Center	Non-ACM	ND		2122-Built Up Roofing
RP50	Roof Parapet	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2123-Coating
RP50	Roof Parapet	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2123-Built Up Roofing
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N.W.	Non-ACM	ND		2124-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N.W.	Non-ACM	ND		2124-Tar
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2125-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2125-Tar
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, S. Center	Non-ACM	ND		2126-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, S. Center	Non-ACM	ND		2126-Tar
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2127
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2128
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2129-Roof Penetration
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2129-Tar

## *SUPPORT BUILDINGS*





**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**MAINTENANCE AND GROUNDS SHOP (3458 AVOCADO ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J51	Drywall Panels	Unit D, S.E.Area	Non-ACM	ND		1909
WS/J51	Drywall Panels	Unit E, E. Center	Non-ACM	ND		1910
WS/J51	Drywall Panels	Unit G, S.E. Area	Non-ACM	ND		1911
WS/J51	Drywall Panels	Unit D, Ceiling S.W.	Non-ACM	ND		1912
WS/J51	Drywall Panels	Unit D, N.W.	Non-ACM	ND		1913
WPF51	Plaster	Unit F, S.W.	Non-ACM	ND		1914
WPF51	Plaster	Unit F, S.E.	Non-ACM	ND		1915
WPF51	Plaster	Unit F, N.E.	Non-ACM	ND		1916
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Fiberboard
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Joint Compound
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Tape
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Texture
MISC51	Compact Wood Boards	Unit F, E. Center	Non-ACM	ND		1918-Fiberboard
MISC51	Compact Wood Boards	Unit F, E. Center	Non-ACM	ND		1918-Texture
MISC51	Compact Wood Boards	Unit D, S.E.	Non-ACM	ND		1919-Fiberboard
MISC51	Compact Wood Boards	Unit D, S.E.	Non-ACM	ND		1919-Texture
WS/J52	Drywall	Unit E, S. Center	Non-ACM	ND		1920
WS/J52	Drywall	Unit E, S.E.	Non-ACM	ND		1921
WS/J52	Drywall	Unit E, N. Center	Non-ACM	ND		1922
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, N.W.	Non-ACM	ND		1923-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, N.W.	Non-ACM	ND		1923-Mastic
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, S. Center	Non-ACM	ND		1924-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, S. Center	Non-ACM	ND		1924-Mastic
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, E. Center	Non-ACM	ND		1925-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, E. Center	Non-ACM	ND		1925-Mastic
FVB52	Sub Floor Vapor Bar.	Unit D, E. Center	Non-ACM	ND		1926
FVB52	Sub Floor Vapor Bar.	Unit D, S.W.	Non-ACM	ND		1927
FVB52	Sub Floor Vapor Bar.	Unit A, S.W.	Non-ACM	ND		1928
WP50	Window Putty	Exterior, Garage: N.W.	Non-ACM	ND		1929
WP50	Window Putty	Exterior, E. of Rm. G	Non-ACM	ND		1930
WP50	Window Putty	Exterior, E of Rm. D	Non-ACM	ND		1931
<b>MISC52</b>	<b>Exterior Transite 1x2 Panels</b>	<b>Exterior, N.W.</b>	<b>ACM</b>	<b>15</b>	<b>Chrysotile</b>	<b>1932</b>
<b>MISC52</b>	<b>Exterior Transite 1x2 Panels</b>	<b>Exterior, N.</b>	<b>ACM</b>	<b>17</b>	<b>Chrysotile</b>	<b>1933</b>
<b>MISC52</b>	<b>Exterior Transite 1x2 Panels</b>	<b>Exterior, E.</b>	<b>ACM</b>	<b>17</b>	<b>Chrysotile</b>	<b>1934-Transite</b>
MISC52	Exterior Transite 1x2 Panels	Exterior, E.	Non-ACM	ND		1934-Tar Felt
<b>MISC52</b>	<b>Exterior Transite 1x2 Panels</b>	<b>Exterior, S.E.</b>	<b>ACM</b>	<b>17</b>	<b>Chrysotile</b>	<b>1935-Transite</b>
MISC52	Exterior Transite 1x2 Panels	Exterior, S.E.	Non-ACM	ND		1935-Tar Felt
<b>MISC52</b>	<b>Exterior Transite 1x2 Panels</b>	<b>Exterior, S.W.</b>	<b>ACM</b>	<b>17</b>	<b>Chrysotile</b>	<b>1936</b>
RS51	Roof Shingles	Roof, E. Center	Non-ACM	ND		1937



TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
MAINTENANCE AND GROUNDS SHOP (3458 AVOCADO ST)

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS51	Roof Shingles	Roof, N.E.	Non-ACM	ND		1938
RS51	Roof Shingles	Roof, N.W.	Non-ACM	ND		1939
RS51	Roof Shingles	Roof, S.E.	Non-ACM	ND		1940
RS51	Roof Shingles	Roof, S.W.	Non-ACM	ND		1941

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**PARKS AND RECREATION RESTROOM**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, S. Center	Non-ACM	ND		1945-Shingle
RS52	Roof Shingles	Roof, S. Center	Non-ACM	ND		1945-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF52	White Plaster with Button	SE-Unit E	Non-ACM	ND		1947-Plaster
WPF52	White Plaster with Button	SE-Unit E	Non-ACM	ND		1947-Drywall
WPF52	White Plaster with Button	E. Center- Unit H	Non-ACM	ND		1948-Plaster
WPF52	White Plaster with Button	E. Center- Unit H	Non-ACM	ND		1948-Drywall
WPF52	White Plaster with Button	NW-Unit D	Non-ACM	ND		1949-Plaster
WPF52	White Plaster with Button	NW-Unit D	Non-ACM	ND		1949-Drywall
WPF52	White Plaster with Button	S Center-Unit B	Non-ACM	ND		1950-Plaster
WPF52	White Plaster with Button	S Center-Unit B	Non-ACM	ND		1950-Drywall
WPF52	White Plaster with Button	W Center- Unit A	Non-ACM	ND		1951-Plaster
WPF52	White Plaster with Button	W Center- Unit A	Non-ACM	ND		1951-Drywall
WPF52	White Plaster with Button	NW-Unit I	Non-ACM	ND		1952-Finish Coat
WPF52	White Plaster with Button	NW-Unit I	Non-ACM	ND		1952-Plaster
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Finish Coat
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Plaster
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Drywall
WS/J53	Drywall with Joint	SE-Unit E	Non-ACM	ND		1954-Joint Compound
WS/J53	Drywall with Joint	SE-Unit E	Non-ACM	ND		1954-Drywall
WS/J53	Drywall with Joint	NE-Unit D	Non-ACM	ND		1955-Joint Compound
WS/J53	Drywall with Joint	NE-Unit D	Non-ACM	ND		1955-Drywall
WS/J53	Drywall with Joint	NE-Unit B	Non-ACM	ND		1956-Joint Compound
WS/J53	Drywall with Joint	NE-Unit B	Non-ACM	ND		1956-Drywall
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit H	Non-ACM	ND		1957-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit H	Non-ACM	ND		1957-Mastic
VSF64	Top Layer:6" Square Sheet Floor with Mastic	S Center- Unit C	Non-ACM	ND		1958-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	S Center- Unit C	Non-ACM	ND		1958-Mastic
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit A	Non-ACM	ND		1959-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit A	Non-ACM	ND		1959-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit E	ACM	2	Chrysotile	1960-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit E	ACM	5	Chrysotile	1960-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit H	ACM	3	Chrysotile	1961-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit H	ACM	5	Chrysotile	1961-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit I	ACM	2	Chrysotile	1962-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit I	ACM	5	Chrysotile	1962-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit A	ACM	2	Chrysotile	1963-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit A	ACM	5	Chrysotile	1963-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NW-Unit B	ACM	2	Chrysotile	1964-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NW-Unit B	ACM	5	Chrysotile	1964-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	ACM	6	Chrysotile	1965-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	Non-ACM	ND		1965-Mastic

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	Non-ACM	ND		1965-Vapor Paper
<b>9VFT51</b>	<b>Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper</b>	<b>NE-Unit H</b>	<b>ACM</b>	<b>6</b>	<b>Chrysotile</b>	<b>1966-Floor Tile</b>
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit H	Non-ACM	ND		1966-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit H	Non-ACM	ND		1966-Vapor Paper
<b>9VFT51</b>	<b>Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper</b>	<b>NE-Unit I</b>	<b>ACM</b>	<b>8</b>	<b>Chrysotile</b>	<b>1967-Floor Tile</b>
<b>9VFT51</b>	<b>Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper</b>	<b>NE-Unit I</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>1967-Mastic</b>
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit I	Non-ACM	ND		1967-Vapor Paper
<b>9VFT51</b>	<b>Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper</b>	<b>NE-Unit A</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1968-Floor Tile</b>
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit A	Non-ACM	ND		1968-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit A	Non-ACM	ND		1968-Vapor Paper
<b>9VFT51</b>	<b>Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper</b>	<b>NW-Unit B</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1969-Floor Tile</b>
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NW-Unit B	Non-ACM	ND		1969-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NW-Unit B	Non-ACM	ND		1969-Vapor Paper
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1970-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NE-Unit G</b>	<b>ACCM</b>	<b>&lt;1</b>		<b>1970-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1970-Barrier Paper
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1971-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NE-Unit G</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>1971-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1971-Barrier Paper
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NW-Unit G	Non-ACM	ND		1972-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NW-Unit G</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>1972-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NW-Unit G	Non-ACM	ND		1972-Barrier Paper
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>NW-Unit F</b>	<b>ACM</b>	<b>8</b>	<b>Chrysotile</b>	<b>1973-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Vapor Paper
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Leveler
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>NW-Unit F</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1974-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1974-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1974-Vapor Paper
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>N Center-Unit F</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1975-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Vapor Paper
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Leveler
FCM50	Carpet Mastic	NW-Unit E	Non-ACM	ND		1976
FCM50	Carpet Mastic	NW-Unit F	Non-ACM	ND		1977
FCM50	Carpet Mastic	SW-Unit B	Non-ACM	ND		1978
FBM52	Grey Baseboard Vinyl Mastic	SE-Unit D	Non-ACM	ND		1979
FBM52	Grey Baseboard Vinyl Mastic	S Center-Unit H	Non-ACM	ND		1980
FBM52	Grey Baseboard Vinyl Mastic	NW-Unit B	Non-ACM	ND		1981

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WP51	Window Putty	NE-Exterior	Non-ACM	ND		1982
WP51	Window Putty	S Center-Exterior	Non-ACM	ND		1983
WP51	Window Putty	S Cente-Exteriorr	Non-ACM	ND		1984
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1985
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1986
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1987
ES53	Stucco	N Center-Exterior	Non-ACM	ND		1988-Coating
ES53	Stucco	N Center-Exterior	Non-ACM	ND		1988-Stucco
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Coating
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Stucco
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Base Coat
ES53	Stucco	SE-Exterior	Non-ACM	ND		1990-Coating
ES53	Stucco	SE-Exterior	Non-ACM	ND		1990-Stucco
ES53	Stucco	SW-Exterior	Non-ACM	ND		1991-Coating
ES53	Stucco	SW-Exterior	Non-ACM	ND		1991-Stucco
ES53	Stucco	W Center-Exterior	Non-ACM	ND		1992-Coating
ES53	Stucco	W Center-Exterior	Non-ACM	ND		1992-Stucco
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1993-Shingle 1
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1993-Shingle 2
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1994-Shingle 1
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1994-Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1995-Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1995-Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1996-Roof Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1996-Roof Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1997-Roof Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1997-Roof Shingle 2

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**LAUNDRY BUILDING (PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, S.E.	Non-ACM	ND		1998-Drywall
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, S.E.	Non-ACM	ND		1998-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit B, 1st Level, S.W.	Non-ACM	ND		1999-Drywall
WS/J54	Drywall w/ Joint C.	Unit B, 1st Level, S.W.	Non-ACM	ND		1999-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Drywall
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Tape
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, Ceiling: W. Center	Non-ACM	ND		2001-Drywall
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, Ceiling: W. Center	Non-ACM	ND		2001-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit D, 1st Level, S.E.	Non-ACM	ND		2002-Drywall
WS/J54	Drywall w/ Joint C.	Unit D, 1st Level, S.E.	Non-ACM	ND		2002-Joint Compound
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, S.E.	Non-ACM	ND		2003-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, S.E.	Non-ACM	ND		2003-Mastic
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, N.W.	Non-ACM	ND		2004-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, N.W.	Non-ACM	ND		2004-Mastic
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit B, 1st Level, S.Center	Non-ACM	ND		2005-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit B, 1st Level, S.Center	Non-ACM	ND		2005-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Leveler
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Leveler
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Leveler
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2009
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2010
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2011
ES54	Exterior Stucco	Exterior, 1st Level, S.W.	Non-ACM	ND		2012
ES54	Exterior Stucco	Exterior, 1st Level, N.Center	Non-ACM	ND		2013
ES54	Exterior Stucco	Exterior, 1st Level, W.Center	Non-ACM	ND		2014
RFM50	Roof Membrane	Roof, N.Center	Non-ACM	ND		2015-Shingle
RFM50	Roof Membrane	Roof, N.Center	Non-ACM	ND		2015-Built Up Roofing
RFM50	Roof Membrane	Roof, E.Center	Non-ACM	ND		2016-Shingle
RFM50	Roof Membrane	Roof, E.Center	Non-ACM	ND		2016-Built Up Roofing
RFM50	Roof Membrane	Roof, W.Center	Non-ACM	ND		2017-Shingle



**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**LAUNDRY BUILDING (PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM50	Roof Membrane	Roof, W.Center	Non-ACM	ND		2017-Built Up Roofing
RPM50	Roof Penetration	Roof, N.E.	Non-ACM	ND		2018
RPM50	Roof Penetration	Roof, E.Center	Non-ACM	ND		2019
RPM50	Roof Penetration	Roof, N.W.	Non-ACM	ND		2020
PP50	Pitch Pocket Mastic	Roof, N.E.	Non-ACM	ND		2021
PP50	Pitch Pocket Mastic	Roof, E.Center	Non-ACM	ND		2022
PP50	Pitch Pocket Mastic	Roof, N.E.	Non-ACM	ND		2023



**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CARPENTER SHOP (3358 UTAH ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J53	Drywall w/ Joint	Unit E, 1st Level, N.W.	Non-ACM	ND		2024-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, N.W.	Non-ACM	ND		2024-Joint Compound
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Joint Compound
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Caulk
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Woven Tape
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Joint Compound
FBM53	Baseboard Mastic	Unit F, 1st Level, S.W.	Non-ACM	ND		2027-Mastic
FBM53	Baseboard Mastic	Unit F, 1st Level, S.W.	Non-ACM	ND		2027-Baseboard
FBM53	Baseboard Mastic	Unit C, 1st Level, S.E.	Non-ACM	ND		2028
FBM53	Baseboard Mastic	Unit E, 1st Level, E.Center	Non-ACM	ND		2029
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.W.	Non-ACM	ND		2030-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.W.	Non-ACM	ND		2030-Mastic
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.E.	Non-ACM	ND		2031-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.E.	Non-ACM	ND		2031-Mastic
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, S.E.	Non-ACM	ND		2032-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, S.E.	Non-ACM	ND		2032-Mastic
ES55	Exterior Stucco	Exterior, W	Non-ACM	ND		2033-Stucco
ES55	Exterior Stucco	Exterior, W	Non-ACM	ND		2033-Concrete
ES55	Exterior Stucco	Exterior, S.W.	Non-ACM	ND		2034-Stucco
ES55	Exterior Stucco	Exterior, S.W.	Non-ACM	ND		2034-Concrete
ES55	Exterior Stucco	Exterior, S.E.	Non-ACM	ND		2035-Stucco
ES55	Exterior Stucco	Exterior, S.E.	Non-ACM	ND		2035-Concrete
ES55	Exterior Stucco	Exterior S	Non-ACM	ND		2036-Stucco
ES55	Exterior Stucco	Exterior S	Non-ACM	ND		2036-Concrete
ES55	Exterior Stucco	Exterior S.W.	Non-ACM	ND		2037
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Membrane
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Shingle
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Tar Felt
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Tar Felt
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Shingle
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Membrane
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Shingle
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Tar Felt
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Tar Felt
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Shingle
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Membrane
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Shingle
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Shingle
<b>RPM51</b>	<b>Penetration</b>	<b>Roof S.E.</b>	<b>ACM</b>	<b>7</b>	<b>Chrysotile</b>	<b>2041</b>
<b>RPM51</b>	<b>Penetration</b>	<b>Roof N.W.</b>	<b>ACM</b>	<b>6</b>	<b>Chrysotile</b>	<b>2042</b>
RPM51	Penetration	Roof N.E.	Non-ACM	ND		2043
RP50	Roof Patch	Roof Center	Non-ACM	ND		2044

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF53	PLASTER W/ BUTTON	1ST FL/ SW	Non-ACM	ND		2047-Plaster
WPF53	PLASTER W/ BUTTON	1ST FL/ SW	Non-ACM	ND		2047-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NE	Non-ACM	ND		2048-Plaster
WPF53	PLASTER W/ BUTTON	1ST FL/ NE	Non-ACM	ND		2048-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NW	Non-ACM	ND		2049-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NW	Non-ACM	ND		2049-Plaster
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2050-Skim Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2050-Rough Coat
WPF54	PLASTER	1ST FL/ NE	Non-ACM	ND		2051-Skim Coat
WPF54	PLASTER	1ST FL/ NE	Non-ACM	ND		2051-Rough Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2052-Skim Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2052-Rough Coat
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Joint Compound
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Tape
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2054-Joint Compound
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2054-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ SE	Non-ACM	ND		2055-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ SE	Non-ACM	ND		2055-Joint Compound
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Sheetrock
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Sheetrock
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Sheetrock
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ CENTER</b>	<b>ACCM</b>	<b>&lt;1</b>	<b>Chrysotile</b>	<b>2059-Floor Tile</b>
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ CENTER</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>2059-Mastic</b>
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	Non-ACM	ND		2059-Vapor Barrier
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ CENTER</b>	<b>ACCM</b>	<b>&lt;1</b>	<b>Chrysotile</b>	<b>2060-Floor Tile</b>
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ CENTER</b>	<b>ACM</b>	<b>3</b>	<b>Chrysotile</b>	<b>2060-Mastic</b>
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	Non-ACM	ND		2060-Vapor Barrier
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ W CENTER</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>2061-Floor Tile</b>
<b>12VFT61</b>	<b>12" BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ W CENTER</b>	<b>ACCM</b>	<b>&lt;1</b>	<b>Chrysotile</b>	<b>2061-Mastic</b>
<b>VSF68</b>	<b>GREY/ WHITE SHEET FL W/ VAPOR</b>	<b>1ST FL/ NE</b>	<b>ACM</b>	<b>15</b>	<b>Chrysotile</b>	<b>2062</b>
<b>VSF68</b>	<b>GREY/ WHITE SHEET FL W/ VAPOR</b>	<b>1ST FL/ SW</b>	<b>ACM</b>	<b>15</b>	<b>Chrysotile</b>	<b>2063-Sheet Flooring</b>
VSF68	GREY/ WHITE SHEET FL W/ VAPOR	1ST FL/ SW	Non-ACM	ND		2063-Vapor Barrier
<b>VSF68</b>	<b>GREY/ WHITE SHEET FL W/ VAPOR</b>	<b>1ST FL/ NW</b>	<b>ACM</b>	<b>20</b>	<b>Chrysotile</b>	<b>2064</b>
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2065-Sheet Flooring
<b>12VFT62</b>	<b>12" BEIGE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NW</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>2065-Mastic</b>
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2066-Sheet Flooring
<b>12VFT62</b>	<b>12" BEIGE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NW</b>	<b>ACM</b>	<b>4</b>	<b>Chrysotile</b>	<b>2066-Mastic</b>
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2066-Vapor Barrier
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2067-Sheet Flooring
<b>12VFT62</b>	<b>12" BEIGE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NE</b>	<b>ACCM</b>	<b>&lt;1</b>	<b>Chrysotile</b>	<b>2067-Mastic</b>

**TABLE 1.0  
BULK SAMPLE RESULTS  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Sheet Flooring
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Mastic
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Vapor Barrier
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Sheet Flooring
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Mastic
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Vapor Barrier
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2070-Sheet Flooring
<b>VSF69</b>	<b>MARBLE SHEET FLOOR W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NW</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>2070-Mastic</b>
<b>12VFT63</b>	<b>12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NW</b>	<b>ACM</b>	<b>4</b>	<b>Chrysotile</b>	<b>2071-Floor Tile</b>
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2071-Mastic
<b>12VFT63</b>	<b>12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ NE</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>2072-Floor Tile</b>
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2072-Mastic
<b>12VFT63</b>	<b>12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>1ST FL/ SW</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>2073-Floor Tile</b>
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ SW	Non-ACM	ND		2073-Mastic
	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM			2074-Ceiling Tile
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Glue
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Joint Compound
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Sheetrock
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ W CENTER	Non-ACM	ND		2075-Ceiling Tile
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ W CENTER	Non-ACM	ND		2075-Sheetrock
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ NE	Non-ACM	ND		2076-Ceiling Tile
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ NE	Non-ACM	ND		2076-Sheetrock
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2077-Ceiling Tile
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	2	Anthophyllite	2077-Adhesive
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2078-Ceiling Tile
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	2	Anthophyllite	2078-Adhesive
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2079-Ceiling Tile
<b>CT51</b>	<b>WALL TILE: SMALL HOLE TILE W/ ADHESIVE</b>	<b>1ST FL/ S WALL</b>	<b>ACCM</b>	<b>&lt;1</b>	<b>Anthophyllite</b>	<b>2079-Adhesive</b>
<b>MISC53</b>	<b>TRANSITE PANELS</b>	<b>1ST FL/ FLOOR: CENTER</b>	<b>ACM</b>	<b>14</b>	<b>Chrysotile</b>	<b>2080</b>
<b>MISC53</b>	<b>TRANSITE PANELS</b>	<b>1ST FL/ WALL N</b>	<b>ACM</b>	<b>10</b>	<b>Chrysotile</b>	<b>2081</b>
<b>MISC53</b>	<b>TRANSITE PANELS</b>	<b>1ST FL/ WALL N</b>	<b>ACM</b>	<b>13</b>	<b>Chrysotile</b>	<b>2082</b>
FBM54	BASEBOARD MASTIC	1ST FL/ SW	Non-ACM	ND		2083
FBM54	BASEBOARD MASTIC	1ST FL/ CENTER	Non-ACM	ND		2084
FBM54	BASEBOARD MASTIC	1ST FL/ N	Non-ACM	ND		2085
FBM54	BASEBOARD MASTIC	1ST FL/ E	Non-ACM	ND		2086
FBM55	BASEBOARD MASTIC	1ST FL/ NE	Non-ACM	ND		2087
FBM55	BASEBOARD MASTIC	1ST FL/ E	Non-ACM	ND		2088
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2089
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2090
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2091
ES56	EXTERIOR STUCCO	1ST FL/ E OF RM Q	Non-ACM	ND		2092
ES56	EXTERIOR STUCCO	1ST FL/ E OF RM A	Non-ACM	ND		2093
ES56	EXTERIOR STUCCO	1ST FL/ S OF RM A	Non-ACM	ND		2094
ES56	EXTERIOR STUCCO	1ST FL/ W OF RM Q	Non-ACM	ND		2095
ES56	EXTERIOR STUCCO	1ST FL/ W OF RM A	Non-ACM	ND		2096
ES57	EXTERIOR STUCCO	1ST FL/ S OF RM V	Non-ACM	ND		2097
ES57	EXTERIOR STUCCO	1ST FL/ S OF RM T	Non-ACM	ND		2098

**TABLE 1.0**  
**BULK SAMPLE RESULTS**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES57	EXTERIOR STUCCO	1ST FL/ N O FRM U	Non-ACM	ND		2099
ES58	EXTERIOR STUCCO	1ST FL/ W OF RM R	ACM	5	Chrysotile	2100
ES58	EXTERIOR STUCCO	1ST FL/ W OF RM R	ACM	5	Chrysotile	2101
ES58	EXTERIOR STUCCO	1ST FL/ E OF RM R	ACM	3	Chrysotile	2102
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ N	Non-ACM	ND		2103
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ SW	Non-ACM	ND		2104
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ CENTER	Non-ACM	ND		2105
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ SW	Non-ACM	ND		2106
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ E	Non-ACM	ND		2107
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ CENTER	Non-ACM	ND		2108
RS54	ROOF SHINGLES	ROOF/ SW	Non-ACM	ND		2109
RS54	ROOF SHINGLES	ROOF/ N	Non-ACM	ND		2110
RS54	ROOF SHINGLES	ROOF/ CENTER	ACM	ND		2111
RPM2	PENETRATION MASTIC	ROOF/ NW	ACM	8	Chrysotile	2112
RPM2	PENETRATION MASTIC	ROOF/ E	ACM	5	Chrysotile	2113
RPM2	PENETRATION MASTIC	ROOF/ SE	ACM	8	Chrysotile	2114
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2115
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2116
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2117



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix D**

## **Table 2.0 - Summary by Material**

*HOUSING UNITS*



*CITADEL ENVIRONMENTAL SERVICES, INC.*

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room NE	Non-ACM	ND		02-Mastic
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Hallway East	Non-ACM	ND		03-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NE	Non-ACM	ND		364-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NE	Non-ACM	ND		364-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - E	Non-ACM	ND		365-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - E	Non-ACM	ND		365-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NW	Non-ACM	ND		366-Vinyl Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Unit 3350 Utah - Level 1 - Living room - NW	Non-ACM	ND		366-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		423-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		423-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - SW	Non-ACM	ND		424-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Living room - SW	Non-ACM	ND		424-Mastic
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Hallway Center	Non-ACM	ND		425-Floor Tile
12VFT1	12" Floor tile w/ gray streaks & yellow mastic (top layer)	Unit 766 Grape - Level 1 - Hallway Center	Non-ACM	ND		425-Mastic
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		477-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		477-Mastic
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		478-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		478-Mastic
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		479-Floor Tile
12VFT1	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		479-Mastic
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		658-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		658-Mastic
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		659-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		659-Mastic
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		660-Floor Tile
12VFT1	12" floor tile w/ gray streaks w/ yellow mastic (top layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		660-Mastic
12VFT1	12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		725-Floor Tile
12VFT1	12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		725-Mastic
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		01-Floor Tile
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		01-Mastic
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Living Room NE	Non-ACM	ND		02-Floor Tile
12VFT1	Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	811 Plum St Hallway East	Non-ACM	ND		03-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		05-Mastic
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		06-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		06-Mastic
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		39-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Living Room SW	Non-ACM	ND		39-Mastic
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		40-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		40-Mastic
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		41-Vinyl Floor Tile
12VFT2	12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		41-Mastic

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		69-Floor Tile
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		69-Mastic
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		70-Floor Tile
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		70-Mastic
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		71-Floor Tile
12VFT2	12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		71-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		116-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		116-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		117-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		117-Mastic
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		118-Floor Tile
12VFT2	12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	3334 Idaho - Level 1 - Bedroom 2 - Central	Non-ACM	ND		118-Mastic
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Living room - NE	Non-ACM	ND		149-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Living room - NE	Non-ACM	ND		149-Mastic
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		150-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		150-Mastic
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 2 - NW	Non-ACM	ND		151-Floor Tile
12VFT2	12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	3370 Idaho - Level 1 - Bedroom 2 - NW	Non-ACM	ND		151-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		181-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		181-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		182-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		182-Mastic
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 2 - East	Non-ACM	ND		183-Floor Tile
12VFT2	12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	3429 Florida - Level 1- Bedroom 2 - East	Non-ACM	ND		183-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		210-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		210-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		211-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		211-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		212-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		212-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		241-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		241-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		242-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		242-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		243-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		243-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Mastic 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		280-Mastic 2
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Mastic 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Floor Tile



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		281-Mastic 2
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		282-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		282-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		315-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		315-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Kitchen - South	Non-ACM	ND		316-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Kitchen - South	Non-ACM	ND		316-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Bathroom South	Non-ACM	ND		317-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 3384 Utah - Level 1 - Bathroom South	Non-ACM	ND		317-Mastic
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		345-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		345-Mastic
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		346-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		346-Mastic
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		347-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		347-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		367-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		367-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		368-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		368-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		369-Vinyl Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		369-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - N	Non-ACM	ND		417-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - N	Non-ACM	ND		417-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		418-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		418-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 2- N central	Non-ACM	ND		419-Floor Tile 1
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Unit 766 Grape - Level 1 - Bedroom 2- N central	Non-ACM	ND		419-Mastic 1
<b>12VFT2</b>	<b>12" Floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>Unit 766 Grape - Level 1 - Bedroom 2- N central</b>	<b>ACM</b>	<b>6%</b>	<b>Chrysotile</b>	<b>419-Floor Tile 2</b>
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		439-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		439-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		440-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		440-Mastic
<b>12VFT2</b>	<b>12" Floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>873 Grape - Level 1 - Bedroom 1 S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>440-Floor Tile 2</b>
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 2 - W	Non-ACM	ND		441-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	873 Grape - Level 1 - Bedroom 2 - W	Non-ACM	ND		441-Mastic
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		510-Floor Tile
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		510-Mastic
<b>12VFT2</b>	<b>12" floor tile w/ white &amp; brown streaks w/ yellow mastic (top layer)</b>	<b>861 Cherry - Level 1 - Living room - NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>510-Floor Tile</b>
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 1 - SW	Non-ACM	ND		511-Floor Tile
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 1 - SW	Non-ACM	ND		511-Mastic
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 2- NE	Non-ACM	ND		512-Floor Tile

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT2	12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	861 Cherry - Level 1 - Bedroom 2- NE	ACCM	<1%	Chrysotile	512-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		559-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		559-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		560-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		560-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		561-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		561-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		638-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		638-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		639-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		639-Mastic
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		640-Floor Tile
12VFT2	12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		640-Mastic
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		671-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		671-Mastic
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		672-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		672-Mastic
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom- SW	Non-ACM	ND		673-Floor Tile
12VFT2	12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	810 Peach - Level 1 - Bathroom- SW	Non-ACM	ND		673-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		724-Floor Tile
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		724-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		729-Floor Tile
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		729-Mastic
12VFT2	Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		740-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		741-Mastic
12VFT2	12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		741-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		04-Floor Tile
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 1 NW	Non-ACM	ND		04-Mastic
12VFT2	Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		05-Floor Tile
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bathroom 1 NW	Non-ACM	ND		07-Felt
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 SW	ACM	2%	Chrysotile	08-Floor Tile
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		08-Mastic
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 SW	Non-ACM	ND		08-Felt
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 NE	ACM	3%	Chrysotile	09-Floor Tile
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		09-Mastic
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bedroom 2 NE	Non-ACM	ND		09-Felt
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	ACM	3%	Chrysotile	152-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Living room NE	Non-ACM	ND		152-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Mastic 1

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	ACM	3%	Chrysotile	153-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 1 - NE	Non-ACM	ND		153-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	ACM	4%	Chrysotile	154-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	3370 Idaho - Level 1 - Bedroom 2- NW	Non-ACM	ND		154-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	ACM	4%	Chrysotile	184-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Living room - SW	Non-ACM	ND		184-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	ACM	3%	Chrysotile	185-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 1- West	Non-ACM	ND		185-Mastic 2
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	ACM	4%	Chrysotile	186-Floor Tile
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Mastic 1
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Vapor Barrier Paper
12VFT3	12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	3429 Florida - Level 1- Bedroom 2- East	Non-ACM	ND		186-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	ACM	3%	Chrysotile	213-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Living room - NW	Non-ACM	ND		213-Mastic 3
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	ACM	2%	Chrysotile	214-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 1 - NW	Non-ACM	ND		214-Mastic 3
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	ACM	3%	Chrysotile	215-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	ACM	2%	Chrysotile	215-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	3367 Utah - Level 1 - Bedroom 2 - NE	Non-ACM	ND		215-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	ACM	3%	Chrysotile	250-Vinyl Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	ACM	2%	Chrysotile	250-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Living room - West	Non-ACM	ND		250-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	ACM	3%	Chrysotile	251-Vinyl Floor Tile

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**SUMMARY BY MATERIAL**  
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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	ACM	2%	Chrysotile	251-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		251-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	ACM	3%	Chrysotile	252-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	ACCM	<1%	Chrysotile	252-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	3341 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		252-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	ACM	3%	Chrysotile	289-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Living room - NW	Non-ACM	ND		289-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	ACM	3%	Chrysotile	290-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Hall - North	Non-ACM	ND		290-Mastic 3
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Mastic 1
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	ACM	6%	Chrysotile	291-Floor Tile
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	ACCM	<1%	Chrysotile	291-Mastic 2
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Vapor Barrier
12VFT3	12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Bedroom - West	Non-ACM	ND		291-Mastic 3
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	ACM	4%	Chrysotile	318-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		318-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	ACM	4%	Chrysotile	319-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Mastic 1
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Vapor Barrier
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 2 - N	Non-ACM	ND		319-Mastic 2
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 1 - S	ACM	4%	Chrysotile	320-Floor Tile
12VFT3	12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3384 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		320-Mastic
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Mastic 1
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	ACM	2%	Chrysotile	348-Vinyl Floor Tile
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		348-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 1
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	ACM	3%	Chrysotile	349-Vinyl Floor Tile
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Vapor Barrier

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Bedroom 1 - N	Non-ACM	ND		349-Mastic 3
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier ( bottom layer)</b>	<b>Unit 3350 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>350-Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Mastic 1
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		350-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Living room - SE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>370-Vinyl Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Living room - SE	Non-ACM	ND		370-Mastic 3
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Hallway E</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>371-Vinyl Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Hallway E	Non-ACM	ND		371-Mastic 3
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 1
<b>12VFT3</b>	<b>9" Floor tile w/ brn Streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3348 Utah - Level 1 - Bedroom 2 - W</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>372-Floor Tile</b>
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 2
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Vapor Barrier
12VFT3	9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Unit 3348 Utah - Level 1 - Bedroom 2 - W	Non-ACM	ND		372-Mastic 3
<b>12VFT3</b>	<b>9" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>Unit 766 Grape - Level 1 - Bedroom 1 - SE</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>420-Floor Tile</b>
<b>12VFT3</b>	<b>9" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>Unit 766 Grape - Level 1 - Bedroom 1 - SE</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>420-Mastic</b>
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Bedroom 1 - SE	Non-ACM	ND		420-Vapor Barrier
<b>12VFT3</b>	<b>9" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>Unit 766 Grape - Level 1 - Living room - NE</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>421-Floor Tile</b>
<b>12VFT3</b>	<b>9" Floor tile w/ brn streaks w/ black mastic &amp; vapor barrier (2nd layer)</b>	<b>Unit 766 Grape - Level 1 - Living room - NE</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>421-Mastic</b>
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Living room - NE	Non-ACM	ND		421-Vapor Barrier
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Kitchen	Non-ACM	ND		422-Floor Tile
12VFT3	9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Unit 766 Grape - Level 1 - Kitchen	Non-ACM	ND		422-Mastic
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		442-Mastic 1
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Living room S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>442-Floor Tile</b>
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Living room S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>442-Mastic 2</b>
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Living room S	Non-ACM	ND		442-Vapor Barrier
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Bedroom 1 S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>443-Mastic1</b>
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Bedroom 1 S</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>443-Floor Tile</b>
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Bedroom 1 S</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>443-Mastic 2</b>
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 1 S	Non-ACM	ND		443-Vapor Barrier
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Bedroom 2 W</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>444-Floor Tile</b>
<b>12VFT3</b>	<b>9" Floor w/ brown streaks &amp; black mastic w/ vapor barrier (bottom layer)</b>	<b>873 Grape - Level 1 - Bedroom 2 W</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>444-Mastic</b>
12VFT3	9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	873 Grape - Level 1 - Bedroom 2 W	Non-ACM	ND		444-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		480-Mastic 1
<b>12VFT3</b>	<b>9" floor tile w/ brown streaks w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>786 Blaine - Level 1 - Living room N</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>480-Floor Tile</b>

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	ACCM	<1%	Chrysotile	480-Mastic 2
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Living room N	Non-ACM	ND		480-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		481-Mastic 1
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	ACM	4%	Chrysotile	481-Floor Tile
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	ACM	2%	Chrysotile	481-Mastic 2
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 1 N	Non-ACM	ND		481-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 2 E	ACM	5%	Chrysotile	482-Floor Tile
12VFT3	9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	786 Blaine - Level 1 - Bedroom 2 E	ACCM	<1%	Chrysotile	482-Mastic
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Mastic 1
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	ACM	3%	Chrysotile	513-Floor Tile
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Mastic 2
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Living room - NW	Non-ACM	ND		513-Vapor Barrier
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 1
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	ACM	3%	Chrysotile	514-Floor Tile
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 2
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Vapor Barrier
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 1	Non-ACM	ND		514-Mastic 3
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 2 - NE	ACM	5%	Chrysotile	515-Floor Tile
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 2 - NE	Non-ACM	ND		515-Mastic
12VFT3	9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	861 Cherry - Level 1 - Bedroom 2 - NE	Non-ACM	ND		515-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Floor Tile 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Mastic 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	ACM	4%	Chrysotile	553-Floor Tile 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	ACCM	<1%	Chrysotile	553-Mastic 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Living room - S	Non-ACM	ND		553-Mastic 3
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		554-Mastic 1
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	ACM	4%	Chrysotile	554-Floor Tile
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	ACCM	<1%	Chrysotile	554-Mastic 2
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		554-Vapor Barrier
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	ACM	4%	Chrysotile	555-Floor Tile
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	ACCM	<1%	Chrysotile	555-Mastic
12VFT3	9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	3419 Kentucky - Level 1 - Bedroom 2 - E	Non-ACM	ND		555-Vapor Barrier
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bathroom 1 NW	ACM	2%	Chrysotile	07-Floor Tile
12VFT3	Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	811 Plum St Bathroom 1 NW	Non-ACM	ND		07-Mastic
12VFT4	Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	811 Plum St Kitchen SE	Non-ACM	ND		14-Vinyl Floor Tile
12VFT4	Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	811 Plum St Kitchen SE	Non-ACM	ND		14-Mastic
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		17-Vinyl Floor Tile
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		17-Mastic
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen SW	Non-ACM	ND		21-Vinyl Floor Tile
12VFT4	Biege 2nd Layer 12" Floor Tile w/ Black Mastic	811 Plum St Kitchen SW	Non-ACM	ND		21-Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	Non-ACM	ND		42-Mastic 1
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Living Room SW</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>42-Vinyl Floor Tile</b>
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Living Room SW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>42-Mastic 2</b>
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Living Room SW	Non-ACM	ND		42-Vapor Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Living room - SW</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>72-Floor Tile</b>
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Living room - SW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>72-Mastic 2</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Living room - SW	Non-ACM	ND		72-Mastic 3
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 1 - South</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>73-Floor Tile</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 2
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		73-Mastic 3
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Mastic 1
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>74-Floor Tile</b>
12VFT4	<b>12" Beige floor tile w/ black mastic &amp; vapor barrier paper ( bottom layer)</b>	<b>3398 Idaho - Level 1 - Bedroom 2 - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>74-Mastic 2</b>
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Barrier Paper
12VFT4	12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	3398 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		74-Mastic 3
12VFT4	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Living room - West</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>119-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Living room - West	Non-ACM	ND		119-Mastic 2
12VFT4	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Bedroom 1 - East</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>120-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		120-Mastic 2
12VFT4	<b>12" Floor tile w/ black mastic &amp; vapor barrier paper (bottom layer)</b>	<b>3334 Idaho - Level 1 - Bedroom 2- Central</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>121-Floor Tile</b>
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2- Central	Non-ACM	ND		121-Mastic 1
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2- Central	Non-ACM	ND		121-Vapor Barrier Paper
12VFT4	12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	3334 Idaho - Level 1 - Bedroom 2- Central	Non-ACM	ND		121-Mastic 2
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Mastic 1
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		357-Mastic 2
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Vinyl Sheet Flooring
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		358-Mastic
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		359-Vinyl Floor Tile
12VFT4	12" Floor tile w/ yellow mastic (3rd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		359-Mastic
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Bedroom 1 NW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>44-Vinyl Floor Tile</b>
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Bedroom 1 NW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>44-Mastic</b>

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12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 1 NW	Non-ACM	ND		44-Vapor Barrier Paper
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Bedroom 2 SW</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>43-Vinyl Floor Tile</b>
12VFT4	<b>Bottom Layer 12" Beige Floor Tile w/ Black Mastic &amp; Vapor Barrier Paper</b>	<b>811 Plum St Bedroom 2 SW</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>43-Mastic</b>
12VFT4	Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	811 Plum St Bedroom 2 SW	Non-ACM	ND		43-Vapor Barrier Paper
12VFT5	Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	811 Plum St Kitchen SE	Non-ACM	ND		15-Vinyl Floor Tile
12VFT5	Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	811 Plum St Kitchen SE	Non-ACM	ND		15-Mastic
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen SW	Non-ACM	ND		22-Vinyl Floor Tile
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen SW	Non-ACM	ND		22-Mastic
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen NE	Non-ACM	ND		18-Vinyl Floor Tile
12VFT5	Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	811 Plum St Kitchen NE	Non-ACM	ND		18-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Top layer- Living room	Non-ACM	ND		1009-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1009-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #2 top	Non-ACM	ND		1011-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St- Level 1st- Bedroom #2 top	Non-ACM	ND		1011-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #1 top	Non-ACM	ND		1013-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	851 Plum St-- Level 1st- Bedroom #1 top	Non-ACM	ND		1013-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1015-Vinyl Floor Tile
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Living room	Non-ACM	ND		1015-Mastic
12VFT50	12 " Beige w/ specs tile. Beige mastic	849 Plum St- Level 1st- Top layer- Hall	Non-ACM	ND		1017-Vinyl Floor Tile
12VFT50	<b>12 " Beige w/ specs tile. Beige mastic</b>	<b>849 Plum St- Level 1st- Top layer- Hall</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1017-Mastic</b>
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Living Room	Non-ACM	ND		1063-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Living Room	Non-ACM	ND		1063-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1064-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1064-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1065-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1065-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Living Room	Non-ACM	ND		1066-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Living Room	Non-ACM	ND		1066-Mastic
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1067-Floor Tile
12VFT50	Beige Top Layer: 12" Beige Floor Tile w/ Specks & Beige Mastic	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1067-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1108-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1108-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St 1 Level 1st - Hall	Non-ACM	ND		1109-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Hall	Non-ACM	ND		1109-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1110-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1110-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1111-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1111-Mastic
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1112-Floor Tile
12VFT50	Top Layer: 12" Beige w. Specks Tile w/ Beige Mastic	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1112-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Living Room	Non-ACM	ND		1151-Floor Tile





**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**

**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Living Room	Non-ACM	ND		1151-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1152-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1152-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1153-Floor Tile 1
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1153-Mastic
<b>12VFT50</b>	<b>Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1153-Floor Tile 2</b>
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1154-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1154-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Living Room	Non-ACM	ND		1155-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	803 Cherry St 1st Level Living Room	Non-ACM	ND		1155-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1189-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1189-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1190-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1190-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1191-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1191-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1192-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1192-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1193-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1193-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1235-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1235-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Hall	Non-ACM	ND		1236-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Hall	Non-ACM	ND		1236-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1237-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1237-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1238-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1238-Mastic
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Hall	Non-ACM	ND		1239-Floor Tile
12VFT50	Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3479 Florida S 1st Level Hall	Non-ACM	ND		1239-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1276-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1276-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Mastic 1
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Hall	Non-ACM	ND		1277-Mastic 2
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1278-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1278-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1279-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1279-Mastic
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Hall	Non-ACM	ND		1280-Floor Tile
12VFT50	Beige Top layer: 12" beige w/specks tile w/ beige mastic	3480 Kentucky 1st Level Hall	Non-ACM	ND		1280-Mastic

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**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 KentuckyLiving Rm	Non-ACM	ND		1318-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 KentuckyLiving Rm	Non-ACM	ND		1318-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 KentuckyHall	Non-ACM	ND		1319-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 KentuckyHall	Non-ACM	ND		1319-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1320-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1320-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1321-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1321-Mastic
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Hall	Non-ACM	ND		1322-Tile
12VFT50	12" Floortile Beige with Specks & Beige Mastic ( Top Layer)	3401 Kentucky Hall	Non-ACM	ND		1322-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Living Rm	Non-ACM	ND		1355-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 UtahLiving Rm	Non-ACM	ND		1355-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Living Rm	Non-ACM	ND		1355-Mastic 2
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Hall	Non-ACM	ND		1356-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Hall	Non-ACM	ND		1356-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Bedrm 1	Non-ACM	ND		1357-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3315 Utah-Bedrm 1	Non-ACM	ND		1357-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Living Rm	Non-ACM	ND		1358-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 UtahLiving Rm	Non-ACM	ND		1358-Mastic
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Hall	Non-ACM	ND		1359-Floor Tile
12VFT50	Top Layer: 12" Beige w/Specks Tile w/Beige Mastic	3317 Utah-Hall	Non-ACM	ND		1359-Mastic
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Living Rm	Non-ACM	ND		1402-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Living Rm	Non-ACM	ND		1402-Mastic
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm2	Non-ACM	ND		1403-Floor Tile 1
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm2	Non-ACM	ND		1403-Mastic
<b>12VFT50</b>	<b>Top Layer 12" Beige w/Specks Tile w/ Beige Mastic</b>	<b>3342 Utah Bedrm2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1403-Floor Tile 2</b>
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm1	Non-ACM	ND		1404-Floor Tile 1
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3342 Utah Bedrm1	Non-ACM	ND		1404-Mastic
<b>12VFT50</b>	<b>Top Layer 12" Beige w/Specks Tile w/ Beige Mastic</b>	<b>3342 Utah Bedrm1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1404-Floor Tile 2</b>
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Living Rm	Non-ACM	ND		1405-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Living Rm	Non-ACM	ND		1405-Mastic
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3345 Utah Bedrm 2	Non-ACM	ND		1406-Floor Tile
12VFT50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3345 Utah Bedrm 2	Non-ACM	ND		1406-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Living Room	Non-ACM	ND		1437--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Living Room	Non-ACM	ND		1437--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1438--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1438--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	725 Grape 1st Floor Living Room	Non-ACM	ND		1439--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	725 Grape 1st Floor Living Room	Non-ACM	ND		1439--Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Hall	Non-ACM	ND		1440--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Hall	Non-ACM	ND		1440--Mastic

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1441--Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS W/ BEIGE MASTIC	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1441-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape - 1st - Living Rm	Non-ACM	ND		1486-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Living Rm	Non-ACM	ND		1486-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Hall	Non-ACM	ND		1487-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 Grape- 1st - Hall	Non-ACM	ND		1487-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 - Grape Bedroom 1	Non-ACM	ND		1488-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	815 -Grape - Bedroom 1	Non-ACM	ND		1488-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Living Rm	Non-ACM	ND		1489-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Living Rm	Non-ACM	ND		1489-Mastic
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape - 1st - Bedroom 2	Non-ACM	ND		1490-Floor Tile
12VFT50	Beige - Top Layer: 12" Beige w/ Specks W/ Beige Mastic	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1490-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1525-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1525-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1526-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1526-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1527-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1527-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1528-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1528-Mastic
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1529-Floor Tile
12VFT50	BEIGE-TOP LAYER 12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1529-Mastic
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Living Rm.	Non-ACM	ND		1564-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Living Rm.	Non-ACM	ND		1564-Mastic
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Hall	Non-ACM	ND		1565-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Hall	Non-ACM	ND		1565-Mastic
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Bedroom 2	Non-ACM	ND		1566-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/Specks Tile w/o black Mastic	876 Blaine Alley Bedroom 2	Non-ACM	ND		1566-Mastic
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	876 Blaine Alley Living Rm	Non-ACM	ND		1567-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Living Rm	Non-ACM	ND		1567-Mastic
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Bedroom 2	Non-ACM	ND		1568-Floor Tile
12VFT50	Beige Top layer: 12" Beige w/specks tile w/ beige mastic	878 Blaine Alley Bedroom 2	Non-ACM	ND		1568-Mastic
12VFT50	Top Layer 12" Beige w/Specks with Beige Mastic	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1603-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1603-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1604-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1604-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1605-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1605-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1606-Tile
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1606-Mastic
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1607-Tile

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT50	Top Layer 12" Beige Tile w/Specks with Beige Mastic	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1607-Mastic
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1677-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1677-Mastic
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1678-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1678-Mastic
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1679-Vinyl Floor Tile
12VFT50	BEIGE-TOP LAYER-12" BEIGE W/ SPECKS TILE W/ BEIGE MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1679-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1808-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1808-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1809-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1809-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1810-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1810-Mastic
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1863-Floor Tile
12VFT50	<b>Middle Layer: Beige with Specks Tile with Beige Mastic</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1863-Mastic</b>
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1864-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1864-Mastic</b>
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1865-Mastic 1
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1865-Floor Tile
12VFT50	Middle Layer: Beige with Specks Tile with Beige Mastic	3491 Avacado Bathrm	Non-ACM	ND		1865-Mastic 2
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- bottom - Living room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1010-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- bottom - Living room	Non-ACM	ND		1010-Mastic 1
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- bottom - Living room	Non-ACM	ND		1010-Mastic 2
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- bottom - Living room	Non-ACM	ND		1010-Vapor Paper
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- Bedroom #2 bottom</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1012-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Mastic 1
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Mastic 2
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- Bedroom #2 bottom	Non-ACM	ND		1012-Vapor Paper
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>851 Plum St-- Level 1st- Bedroom #1 bottom</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1014-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St-- Level 1st- Bedroom #1 bottom	Non-ACM	ND		1014-Mastic
12VFT51	12" brown tile, black vapor paper,, Black Mastic	851 Plum St- Level 1st- Bedroom #1 bottom	Non-ACM	ND		1014-Vapor Paper
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>49 Plum St Level 1st- Bottom layer- Living roo</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1016-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St Level 1st- Bottom layer- Living room	Non-ACM	ND		1016-Mastic
<b>12VFT51</b>	<b>12" brown tile, black vapor paper,, Black Mastic</b>	<b>849 Plum St Level 1st- Bottom layer- Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1018-Vinyl Floor Tile</b>
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St- Level 1st- Bottom layer- Hall	Non-ACM	ND		1018-Mastic
12VFT51	12" brown tile, black vapor paper,, Black Mastic	849 Plum St Level 1st- Bottom layer- Hall	Non-ACM	ND		1018-Vapor Barrier
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1068-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Living Room	Non-ACM	ND		1068-Mastic 2
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1069-Floor Tile</b>

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1069-Mastic 2
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>850 Peach St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1070-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1070-Mastic 2
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Living Room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1071-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Living Room	Non-ACM	ND		1071-Mastic 2
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1072-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1072-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1113-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1113-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1114-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Hall	Non-ACM	ND		1114-Mastic
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Hall	Non-ACM	ND		1114-Vapor
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>821 Cherry St Level 1st - Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1115-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1115-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1116-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1116-Mastic 2
<b>12VFT51</b>	<b>Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Bedrm. 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1117-Floor Tile</b>
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Mastic 1
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Vapor
12VFT51	Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Bedrm. 1	Non-ACM	ND		1117-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1156-Floor Tile</b>
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Living Room</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1156-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Living Room	Non-ACM	ND		1156-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 3</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1157-Floor Tile</b>

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 3</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1157-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 3	Non-ACM	ND		1157-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Mastic 1
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1158-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>801 Cherry St 1st Level Bedroom 1</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1158-Mastic 2</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1158-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 1
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>803 Cherry St 1st Level Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1159-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1159-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 1
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor</b>	<b>803 Cherry St 1st Level Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1160-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Vapor
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	803 Cherry St 1st Level Living Room	Non-ACM	ND		1160-Mastic 3
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1194-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Living Rm</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1194-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1194-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1194-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 2</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1195-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 2</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1195-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1195-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1195-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1196-Floor Tile</b>
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3416 Florida St 1st Level Bedrm 1</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1196-Mastic 1</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1196-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1196-Mastic 2
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3408 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1197-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1197-Mastic
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1197-Vapor Barrier
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3408 Florida St 1st Level Bedrm 2</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1198-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Vapor Barrier
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1198-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 1
12VFT51	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1262-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Vapor Paper

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12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1262-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1263-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Vapor Paper
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Hall	Non-ACM	ND		1263-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3475 Florida St 1st Level Bedrm 1</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1264-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Vapor Paper
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3475 Florida St 1st Level Bedrm 1	Non-ACM	ND		1264-Mastic 3
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3479 Florida S 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1265-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Living Rm	Non-ACM	ND		1265-Mastic
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S1st Level Living Rm	Non-ACM	ND		1265-Vapor Paper
<b>12VFT51</b>	<b>Brown Bottom Layer: 12" Brown Tile w/ Black Mastic &amp; Vapor</b>	<b>3479 Florida S 1st Level Hall</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1266-Floor Tile</b>
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Mastic 1
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S1st Level Hall	Non-ACM	ND		1266-Mastic 2
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Mastic 3
12VFT51	Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	3479 Florida S 1st Level Hall	Non-ACM	ND		1266-Vapor Paper
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1281-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 2
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1281-Mastic 3
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Hall</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1282-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Hall	Non-ACM	ND		1282-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Hall	Non-ACM	ND		1282-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 1
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3488 Kentucky 1st Level Bedrm 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1283-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 2
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Vapor
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1283-Mastic 3
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3480 Kentucky 1st Level Living Rm</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1284-Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1284-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1284-Vapor Paper
<b>12VFT51</b>	<b>Brown Bottom layer: 12" brown tile w/ black mastic; vapor</b>	<b>3480 Kentucky 1st Level Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1285-Vinyl Floor Tile</b>
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Hall	Non-ACM	ND		1285-Mastic
12VFT51	Brown Bottom layer: 12" brown tile w/ black mastic; vapor	3480 Kentucky 1st Level Hall	Non-ACM	ND		1285-Vapor Paper
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Living Rm</b>	<b>ACM</b>	<b>11%</b>	<b>Chrysotile</b>	<b>1323-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Vapor

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Living Rm	Non-ACM	ND		1323-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Hall</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1324-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1324-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3407 Kentucky Bed Rm 2</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1325-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Bed Rm 2	Non-ACM	ND		1325-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3401 Kentucky Living Rm</b>	<b>ACM</b>	<b>14%</b>	<b>Chrysotile</b>	<b>1326-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Living Rm	Non-ACM	ND		1326-Mastic
<b>12VFT51</b>	<b>12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)</b>	<b>3401 Kentucky Hall</b>	<b>ACM</b>	<b>11%</b>	<b>Chrysotile</b>	<b>1327-Tile</b>
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Hall	Non-ACM	ND		1327-Mastic
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3401 Kentucky Hall	Non-ACM	ND		1327-Vapor
12VFT51	12" Floortile Brown with Black Mastic and Vapor Barrier Paper ( Bottom Layer)	3407 Kentucky Hall	Non-ACM	ND		1327-Mastic
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1360-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Living Rm	Non-ACM	ND		1360-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1361-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Hall	Non-ACM	ND		1361-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Bedrm 1</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1362-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3315 Utah-Bedrm 1	Non-ACM	ND		1362-Mastic/Vapor
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3317 Utah-Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1363-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Living Rm	Non-ACM	ND		1363-Mastic/Vapor
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Hall	Non-ACM	ND		1364-Mastic
<b>12VFT51</b>	<b>Bottom Layer: Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3317 Utah-Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1364-Floor Tile</b>
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah7-Hall	Non-ACM	ND		1364-Mastic/Vapor
12VFT51	Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	3317 Utah-Hall	Non-ACM	ND		1364-Leveler
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Living Rm	Non-ACM	ND		1407-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Living Rm</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1407-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Living Rm	Non-ACM	ND		1407-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm2	Non-ACM	ND		1408-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Bedrm2</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1408-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm2	Non-ACM	ND		1408-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm1	Non-ACM	ND		1409-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3342 Utah Bedrm1</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1409-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3342 Utah Bedrm1	Non-ACM	ND		1409-Mastic/Vapor
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Living Rm	Non-ACM	ND		1410-Mastic
<b>12VFT51</b>	<b>Bottom Layer 12" Brown Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3344 Utah Living Rm</b>	<b>ACM</b>	<b>8%</b>	<b>Chrysotile</b>	<b>1410-Floor Tile</b>
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Living Rm	Non-ACM	ND		1410-Mastic/Vapor



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Bedrm 2	ACM	8%	Chrysotile	1411-Floor Tile
12VFT51	Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	3344 Utah Bedrm 2	Non-ACM	ND		1411-Mastic/Vapor
12VFT51	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1442-Floor Tile</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1442-Mastic</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1442-Vapor</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1443-Floor Tile</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>4%</b>	<b>Chrysotile</b>	<b>1443-Mastic</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>727 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1443-Vapor</b>
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1444-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Living Room	Non-ACM	ND		1444-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Living Room	Non-ACM	ND		1444-Vapor
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Hall</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1445-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Hall	Non-ACM	ND		1445-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Hall	Non-ACM	ND		1445-Vapor
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>725 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1446-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1446-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1446-Vapor
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1491-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1491-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Living Rm	Non-ACM	ND		1491-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1492-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1492-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Hall	Non-ACM	ND		1492-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape- 1st - Bedrm 1</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1493-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>815 Grape 1st - Bedrm 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1493-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	815 Grape- 1st - Bedrm 1	Non-ACM	ND		1493-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1494-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1494-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	813 Grape- 1st - Living Rm	Non-ACM	ND		1494-Vapor Barrier
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Bedrm 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1495-Floor Tile</b>
12VFT51	<b>Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic &amp; Vapor</b>	<b>813 Grape- 1st - Bedrm 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1495-Mastic</b>
12VFT51	Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	813 Grape- 1st - Bedrm 2	Non-ACM	ND		1495-Vapor Barrier
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1530-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1530-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1530-Felt
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1531-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1531-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 1	Non-ACM	ND		1531-Felt
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 842 Grape 1st Floor Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1532-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1532-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1532-Felt

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 840 Grape 1st Floor Living Room</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>1533-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1533-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1533-Felt
12VFT51	<b>BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC &amp; VAPOR</b>	<b>Unit 840 Grape 1st Floor Bedroom 1</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1534-Floor Tile</b>
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1534-Mastic
12VFT51	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1534-Felt
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1569-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1569-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	876 Blaine Alley Living Rm	Non-ACM	ND		1569-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Hall</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1570-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Hall</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1570-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	876 Blaine Alley Hall	Non-ACM	ND		1570-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1571-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1571-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Bedroom 2	Non-ACM	ND		1571-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Living Rm.</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1572-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Living Rm.</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1572-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Living Rm.	Non-ACM	ND		1572-Vapor Barrier
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>7%</b>	<b>Chrysotile</b>	<b>1573-Floor Tile</b>
12VFT51	<b>Brown Bottom layer: 12" Brown Tile w/Black Mastic &amp; Vapor</b>	<b>878 Blaine Alley Bedroom 2</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1573-Mastic</b>
12VFT51	Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	878 Blaine Alley Bedroom 2	Non-ACM	ND		1573-Vapor Barrier
12VFT51	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>19%</b>	<b>Chrysotile</b>	<b>1608-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1608-Mastic
12VFT51	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Bedrm 1</b>	<b>ACM</b>	<b>16%</b>	<b>Chrysotile</b>	<b>1609-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 1	Non-ACM	ND		1609-Mastic
12VFT51	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 758 Blaine Alley Bedrm 2</b>	<b>ACM</b>	<b>17%</b>	<b>Chrysotile</b>	<b>1610-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1610-Mastic
12VFT51	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>Unit 760 Blaine Alley Living Rm</b>	<b>ACM</b>	<b>18%</b>	<b>Chrysotile</b>	<b>1611-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1611-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Living Rm	Non-ACM	ND		1611-Vapor
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Living Rm	Non-ACM	ND		1611-Mastic
12VFT51	<b>Bottom Layer 12"Brown Tile with Black Mastic and Vapor</b>	<b>760 Blaine Alley Bedrm 1</b>	<b>ACM</b>	<b>19%</b>	<b>Chrysotile</b>	<b>1612-Tile</b>
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Mastic
12VFT51	Bottom Layer 12"Brown Tile with Black Mastic and Vapor	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Vapor
12VFT52	12" beige tile, beige mastic	849 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1023-Vinyl Floor Tile

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT52	12" beige tile, beige mastic	849 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1023-Mastic
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Vinyl Floor Tile
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Mastic 1
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1027-Mastic 2
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Vinyl Floor Tile
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Mastic 1
12VFT52	12" beige tile, beige mastic	849 Plum St-- Level 1st- Kitchen (3)	Non-ACM	ND		1031-Mastic 2
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1035-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1035-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1035-Mastic 2
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1039-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1039-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1039-Mastic 2
12VFT53	12" beige tile, beige mastic	851 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1043-Mastic 1
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1043-Vinyl Floor Tile
12VFT53	12" beige tile, beige mastic	851 Plum St Level 1st- Kitchen (2)	Non-ACM	ND		1043-Mastic 2
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1037-Vinyl Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1037-Mastic
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1037-Vapor Paper
<b>12VFT54</b>	<b>Red/blue tile, vapor paper, black mastic</b>	<b>851 Plum St Level 1st- Kitchen (4)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1037-Backing</b>
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Mastic
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1045-Sheet Flooring
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1045-Mastic
12VFT54	Red/blue tile, vapor paper, black mastic	851 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1045-Vapor Paper
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1088-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1088-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1088-Mastic
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1089-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St1st Level Bottom Layer Kitchen	Non-ACM	ND		1089-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1089-Mastic
<b>12VFT54</b>	<b>Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic &amp; Vapor Paper</b>	<b>848 Peach St 1st Level Bottom Layer Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1090-Sheet Flooring</b>
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St1st Level Bottom Layer Kitchen	Non-ACM	ND		1090-Vapor Paper
12VFT54	Tan Red/Blue Speck 12" Tan Tile w/ Black Mastic & Vapor Paper	848 Peach St 1st Level Bottom Layer Kitchen	Non-ACM	ND		1090-Mastic
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 1
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Floor Tile
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 2
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Vapor
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1127-Mastic 3
<b>12VFT54</b>	<b>Bottom Layer: Blue &amp; Red Specks Tile w/ Black Mastic, Vapor</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1128-Sheet Flooring Backing</b>
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1128-Vapor

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Sheet Flooring
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Mastic
12VFT54	Bottom Layer: Blue & Red Specks Tile w/ Black Mastic, Vapor	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1129-Vapor Paper
<b>12VFT54</b>	<b>Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1208-Vinyl Sheet Flooring</b>
12VFT54	Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1208-Vapor Paper
<b>12VFT54</b>	<b>Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor</b>	<b>Unit 3416 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1209-Vinyl Sheet Flooring</b>
12VFT54	Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1209-Vapor Paper
12VFT54	Tan Bottom Middle Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1210-Vinyl Sheet Flooring
<b>12VFT54</b>	<b>Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1379-Flooring</b>
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1379-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1379-Mastic/Vapor
<b>12VFT54</b>	<b>Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic &amp; Vapor</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1380-Flooring</b>
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1380-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1380-Mastic/Vapor
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1381-Floor Tile
12VFT54	Bottom Layer: 12" Red/Blue Specks Floor Tile w/Black Mastic & Vapor	3315 Utah-Kitchen	Non-ACM	ND		1381-Mastic/Vapor
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1421-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1421-Mastic/Vapor
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1422-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1422-Mastic/Vapor
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1423-Floor Tile
12VFT54	Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	3342 Utah Kitchen	Non-ACM	ND		1423-Mastic/Vapor
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1583-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1583-Vapor Barrier
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1584-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1584-Vapor Barrier
<b>12VFT54</b>	<b>Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic &amp; Vapor</b>	<b>876 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1585-Floor Tile</b>
12VFT54	Tan Bottom layer Red/Blue Specks 12" Floor tile w/Black Mastic & Vapor	876 Blaine Alley Kitchen	Non-ACM	ND		1585-Vapor Barrier
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1689-Vapor Barrier
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1690-Vapor Barrier
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Vinyl Sheet Flooring
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Mastic
12VFT54	TAN-BOTTOM LAYER RED/BLUE SPECKS W/ BLACK MASTIC & VAPOR	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1691-Vapor Barrier
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Floor Tile
<b>12VFT55</b>	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1076-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1076-Mastic 2

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT55	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>5%</b>	<b>Chrysotile</b>	<b>1077-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1077-Floor Tile
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St1st Level Kitchen	Non-ACM	ND		1077-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1077-Mastic 2
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Floor Tile
12VFT55	<b>Beige Bottom Layer: 12" Beige Tile w/ Black Mastic &amp; Vapor</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>1078-Mastic 1</b>
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Vapor
12VFT55	Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	850 Peach St 1st Level Kitchen	Non-ACM	ND		1078-Mastic 2
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1164-Floor Tile
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1164-Mastic
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1165-Floor Tile
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1165-Mastic
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1166-Floor Tile
12VFT55	Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	803 Cherry St 1st Level Hall	Non-ACM	ND		1166-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1249-Vapor Paper
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Mastic
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1250-Vapor Paper
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1251-Floor Tile
12VFT56	Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1251-Vapor Paper
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	760 Blaine Alley Bedrm 1	Non-ACM	ND		1612-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1613-Leveler
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1614-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	758 Blaine Alley Living Rm	Non-ACM	ND		1614-Mastic
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Hall	Non-ACM	ND		1615-Tile
12VFT57	Top Layer 12" White Tile w/Specks with Beige Mastic	Unit 758 Blaine Alley Hall	Non-ACM	ND		1615-Mastic
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		736-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		736-Mastic
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		737-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		737-Mastic
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		738-Floor Tile
12VFT6	12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Unit 3340 Idaho Level 1 Hallway Central	Non-ACM	ND		738-Mastic
12VFT6	Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)	Unit 3340 Idaho Level 1 Bathroom West	Non-ACM	ND		739-Mastic 1
12VFT6	<b>Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)</b>	<b>Unit 3340 Idaho Level 1 Bathroom West</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>739-Sheet Flooring</b>
12VFT6	<b>Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)</b>	<b>Unit 3340 Idaho Level 1 Bathroom West</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>739-Mastic 2</b>
9VFT1	<b>9" Floor tile w/ black specs w/ yellow mastic (2nd layer)</b>	<b>Unit 3384 Utah - Level 1 - Kitchen - S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>322-Floor Tile</b>
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		322-Mastic

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	ACCM	<1%	Chrysotile	323-Floor Tile
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		323-Mastic
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	ACCM	<1%	Chrysotile	324-Floor Tile
9VFT1	9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		324-Mastic
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom	3452 Avocado - Level 1 - Bathroom central	ACCM	<1%	Chrysotile	664-Floor Tile
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Mastic 1
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Vapor Barrier
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Mastic 2
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		664-Insulation
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom	3452 Avocado - Level 1 - Bathroom central	ACCM	<1%	Chrysotile	665-Floor Tile
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Mastic 1
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Vapor Barrier
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Mastic 2
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		665-Insulation
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom	3452 Avocado - Level 1 - Bathroom central	ACCM	<1%	Chrysotile	666-Floor Tile
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Mastic
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Flooring
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Vapor Barrier
9VFT2	9" floor tile w/ small brown speck pattern w/ blk mastic & vapor barrier & brown insulation (bottom I	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		666-Insulation
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		751-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		751-Vapor Barrier
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		752-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		752-Vapor Barrier
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	ACM	25%	Chrysotile	753-Sheet Flooring
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Floor Tile
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Mastic
9VFT3	9" Floor Tile w/ Brown Specks w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		753-Vapor Barrier
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Mastic
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1211-Vapor Paper
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Mastic
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1212-Vapor Paper
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Mastic
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Floor Tile
9VFT50	Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1213-Vapor Paper
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior South	Non-ACM	ND		29
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior West	Non-ACM	ND		30
ES1	Yellow Stucco Skim Coat	811 Plum St Exterior North	Non-ACM	ND		31

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**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior NW	Non-ACM	ND		60-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior NW	Non-ACM	ND		60-Stucco
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SW	Non-ACM	ND		61-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SW	Non-ACM	ND		61-Stucco
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SE	Non-ACM	ND		62-Skim Coat
ES1	Stucco Skim coat	822 Plum ST - Level 1 - Exterior SE	Non-ACM	ND		62-Stucco
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - NW	Non-ACM	ND		81-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - NW	Non-ACM	ND		81-Stucco
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SW	Non-ACM	ND		82-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SW	Non-ACM	ND		82-Stucco
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SE	Non-ACM	ND		83-Skim Coat
ES1	Stucco skim coat	3398 Idaho - Level 1 - Exterior - SE	Non-ACM	ND		83-Stucco
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior West	Non-ACM	ND		99
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior SE	Non-ACM	ND		100
ES1	Stucco skim coat	3334 Idaho - Level 1 - Exterior NE	Non-ACM	ND		101
ES1	Stucco Skim Coat	3370 Idaho - Level 1 - Exterior SW	Non-ACM	ND		129
ES1	Stucco Skim Coat	3370 Idaho - Level 1 - Exterior SE	Non-ACM	ND		130
<b>ES1</b>	<b>Stucco Skim Coat</b>	<b>3370 Idaho - Level 1 - Exterior West</b>	<b>ACCM</b>	<b>0.30%</b>	<b>Chrysotile PCV</b>	<b>131</b>
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior East	Non-ACM	ND		167-Skim Coat
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior East	Non-ACM	ND		167-Stucco
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior North	Non-ACM	ND		168-Skim Coat
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior North	Non-ACM	ND		168-Stucco
ES1	Stucco Skim coat	3429 Florida - Level 1 - Exterior West	Non-ACM	ND		169
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - NE	Non-ACM	ND		201-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - West	Non-ACM	ND		202-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - SW	Non-ACM	ND		203-Skim Coat
ES1	Stucco - Skim coat	3367 Utah - Level 1 - Exterior - SW	Non-ACM	ND		203-Stucco
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NE	Non-ACM	ND		259-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NE	Non-ACM	ND		259-Stucco
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NW	Non-ACM	ND		260-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior NW	Non-ACM	ND		260-Stucco
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior SW	Non-ACM	ND		261-Skim Coat
ES1	Stucco- Skim coat	Unit 3341 Utah - Level 1 - Exterior SW	Non-ACM	ND		261-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Skim Coat
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior West	Non-ACM	ND		262-Plaster
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Skim Coat
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Stucco
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SW	Non-ACM	ND		263-Plaster
ES1	Stucco- Skim coat	Unit 3308 Utah - Level 1 - Exterior SE	Non-ACM	ND		264
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - NE	Non-ACM	ND		303-Skim Coat

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - NE	Non-ACM	ND		303-Stucco
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SE	Non-ACM	ND		304-Skim Coat
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SE	Non-ACM	ND		304-Stucco
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SW	Non-ACM	ND		305-Skim Coat
ES1	Stucco - Skim coat	Unit 3384 Utah - Level 1 - SW	Non-ACM	ND		305-Stucco
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Stucco
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - SW	Non-ACM	ND		388-Plaster
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - S	Non-ACM	ND		389-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - S	Non-ACM	ND		389-Stucco
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - E	Non-ACM	ND		390-Skim Coat
ES1	Stucco - Skim coat	Unit 3348 Utah - Level 1 - Exterior - E	Non-ACM	ND		390-Stucco
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - NW	Non-ACM	ND		406
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - NE	Non-ACM	ND		407
ES1	Stucco - Skim coat	Unit 766 Grape - Level 1 - Exterior - SE	Non-ACM	ND		408
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior SE	Non-ACM	ND		463
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior SW	Non-ACM	ND		464
ES1	Stucco Skim coat	873 Grape - Level 1 - Exterior NW	Non-ACM	ND		465
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior NW	Non-ACM	ND		496-Skim Coat
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior NW	Non-ACM	ND		496-Stucco
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior SW	Non-ACM	ND		497-Skim Coat
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior SW	Non-ACM	ND		497-Stucco
ES1	Stucco skim coat	786 Blaine - Level 1 - Exterior E	Non-ACM	ND		498
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Texture
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Skim Coat
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SW	Non-ACM	ND		522-Stucco
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Texture
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Skim Coat
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior SE	Non-ACM	ND		523-Stucco
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Skim Coat 1
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Skim Coat 2
ES1	Stucco skim coat	861 Cherry - Level 1 - Exterior NE	Non-ACM	ND		524-Stucco
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -NE	Non-ACM	ND		549-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -NE	Non-ACM	ND		549- Stucco
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SW	Non-ACM	ND		550-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SW	Non-ACM	ND		550- Stucco
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SE	Non-ACM	ND		551-Skim Coat
ES1	Stucco skim coat	3419 Kentucky - Level 1 - Exterior -SE	Non-ACM	ND		551-Stucco
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NW	Non-ACM	ND		589-Skim Coat
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NW	Non-ACM	ND		589-Stucco
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NE	Non-ACM	ND		590-Skim Coat



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior NE	Non-ACM	ND		590-Stucco
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		591-Skim Coat
ES1	Stucco skim coat	3434 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		591-Stucco
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior NW	Non-ACM	ND		606
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior SW	Non-ACM	ND		607
ES1	Stucco skim coat	890 Blaine - Level 1 - Exterior S	Non-ACM	ND		608
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SW	Non-ACM	ND		621-Skim Coat
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SW	Non-ACM	ND		621-Stucco
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		622-Skim Coat
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		622-Stucco
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		623-Skim Coat 1
ES1	Stucco skim coat	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		623-Skim Coat 2
ES1	Stucco skim coat	3452 Avocado - Level 1 - NW	Non-ACM	ND		655-Skim Coat
ES1	Stucco skim coat	3452 Avocado - Level 1 - NW	Non-ACM	ND		655-Stucco
ES1	Stucco skim coat	3452 Avocado - Level 1 - SW	Non-ACM	ND		656-Skim Coat
ES1	Stucco skim coat	3452 Avocado - Level 1 - SW	Non-ACM	ND		656-Stucco
ES1	Stucco skim coat	3452 Avocado - Level 1 - S	Non-ACM	ND		657
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior NW	Non-ACM	ND		682-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior NW	Non-ACM	ND		682- Stucco
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior SW	Non-ACM	ND		683-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior SW	Non-ACM	ND		683- Stucco
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior S	Non-ACM	ND		684-Skim Coat
ES1	Stucco skim coat	810 Peach - Level 1 - Exterior S	Non-ACM	ND		684-Stucco
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior NW	Non-ACM	ND		699
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Skim Coat 1
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Skim Coat 2
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		700-Stucco
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SE	Non-ACM	ND		701-Skim Coat
ES1	Stucco Skim Coat	Unit 860 Grape Level 1 Exterior SE	Non-ACM	ND		701-Stucco
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - NW	Non-ACM	ND		331-Skim Coat
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - NW	Non-ACM	ND		331-Stucco
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - N	Non-ACM	ND		332-Skim Coat
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - N	Non-ACM	ND		332-Stucco
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - E	Non-ACM	ND		333-Skim Coat
ES2	Stucco - skim coat	Unit 3350 Utah - Level 1 - Exterior - E	Non-ACM	ND		333-Stucco
ES50	Exterior stucco	851 Plum St- Level 1st- Exterior SW	Non-ACM	ND		1046
ES50	Exterior stucco	849 Plum St Level 1st- NE	Non-ACM	ND		1047
ES50	Exterior stucco	849 Plum St- Level 1st- N center	Non-ACM	ND		1048
ES50	Exterior stucco	849 Plum St- Level 1st- S center	Non-ACM	ND		1049
ES50	Exterior stucco	851 Plum St - Level 1st- NW	Non-ACM	ND		1050
ES50	White Exterior Stucco	848 Peach St 848 Exterior N.W.	Non-ACM	ND		1091

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**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES50	White Exterior Stucco	848 Peach St Exterior N. Center	Non-ACM	ND		1092
ES50	White Exterior Stucco	848 Peach St Exterior N.E.	Non-ACM	ND		1093
ES50	White Exterior Stucco	848 Peach St Exterior S. Center	Non-ACM	ND		1094
ES50	White Exterior Stucco	848 Peach St Exterior S.W.	Non-ACM	ND		1095
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S.E.	Non-ACM	ND		1133
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S. Center	Non-ACM	ND		1134
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - S.W.	Non-ACM	ND		1135
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - N. Center	Non-ACM	ND		1136
ES50	Exterior Stucco	821-823 Cherry St Exterior Level 1st - N.E.	Non-ACM	ND		1137
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.E.	Non-ACM	ND		1170
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S. Center	Non-ACM	ND		1171
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.W.	Non-ACM	ND		1172-Skim Coat
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level S.W.	Non-ACM	ND		1172-Stucco
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level N.W.	Non-ACM	ND		1173
ES50	White Exterior Stucco	801- 803 Cherry St Exterior 1st Level N.E.	Non-ACM	ND		1174
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level N.E.	Non-ACM	ND		1254
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level E. Center	Non-ACM	ND		1255
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level S.E.	Non-ACM	ND		1256
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level S.W.	Non-ACM	ND		1257
ES50	White Exterior Stucco	3475- 3479 Florida St Exterior 1st Level N.W.	Non-ACM	ND		1258
ES50	White exterior stucco	3480-3488 Kentucky Exterior S.E.	Non-ACM	ND		1301
ES50	White exterior stucco	3480-3488 Kentucky Exterior S.W.	Non-ACM	ND		1302
ES50	White exterior stucco	3480-3488 Kentucky Exterior N.W.	Non-ACM	ND		1303
ES50	White exterior stucco	3480-3488 Kentucky Exterior N.W.	Non-ACM	ND		1304
ES50	White exterior stucco	3480-3488 Kentucky Exterior W. Center	Non-ACM	ND		1305
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior N.E.	Non-ACM	ND		1343
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior N.W.	Non-ACM	ND		1344
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior S.W.	Non-ACM	ND		1345
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior S.E.	Non-ACM	ND		1346
ES50	Stucco Skim coat	3401-3407 Kentucky Exterior E Center	Non-ACM	ND		1347
ES50	Exterior Stucco	3115-3117 Utah Exterior-NE	Non-ACM	ND		1382
ES50	Exterior Stucco	3115-3117 Utah Exterior-E Center	Non-ACM	ND		1383
ES50	Exterior Stucco	3115-3117 Utah Exterior-SE	Non-ACM	ND		1384
ES50	Exterior Stucco	3115-3117 Utah Exterior-SW	Non-ACM	ND		1385-Sheet Flooring
ES50	Exterior Stucco	3115-3117 Utah Exterior-SW	Non-ACM	ND		1385-Mastic
ES50	Exterior Stucco	3115-3117 Utah Exterior-NW	Non-ACM	ND		1386
ES50	Exterior Stucco	3342-3344 Utah SW	Non-ACM	ND		1424
ES50	Exterior Stucco	3342-3344 Utah S Center	Non-ACM	ND		1425
ES50	Exterior Stucco	3342-3344 Utah SE	Non-ACM	ND		1426
ES50	Exterior Stucco	3342-3344 Utah NE	Non-ACM	ND		1427
ES50	Exterior Stucco	3342-3344 Utah NW	Non-ACM	ND		1428

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES50	WHITE-EXTERIOR STUCCO-SE	725-737 Grape Exterior, SE	Non-ACM	ND		1468
ES50	WHITE-EXTERIOR STUCCO-S CENTER	725-737 Grape Exterior, S Center	Non-ACM	ND		1469
ES50	WHITE-EXTERIOR STUCCO-SW	725-737 Grape Exterior, SW	Non-ACM	ND		1470
ES50	WHITE-EXTERIOR STUCCO-NW	725-737 Grape Exterior, NW	Non-ACM	ND		1471
ES50	WHITE-EXTERIOR STUCCO-NE	725-737 Grape Exterior, NE	Non-ACM	ND		1472
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - S.E.	Non-ACM	ND		1508
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - W. Center	Non-ACM	ND		1509
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - N.W.	Non-ACM	ND		1510
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - N.E.	Non-ACM	ND		1511
ES50	White - Exterior Stucco	813-815 Grape Exterior - 1st - S.E.	Non-ACM	ND		1512
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, NW	Non-ACM	ND		1547
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, SW	Non-ACM	ND		1548
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, S Center	Non-ACM	ND		1549
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, SE	Non-ACM	ND		1550
ES50	WHITE-EXTERIOR STUCCO	840-842 Grape Exterior, NE	Non-ACM	ND		1551
ES50	White exterior Stucco	876-878 Blaine Alley N.E.	Non-ACM	ND		1586
ES50	White exterior Stucco	876-878 Blaine Alley S.E.	Non-ACM	ND		1587
ES50	White exterior Stucco	876-878 Blaine Alley S.W.	Non-ACM	ND		1588
ES50	White exterior Stucco	876-878 Blaine Alley N.W.	Non-ACM	ND		1589
ES50	White exterior Stucco	876-878 Blaine Alley N. Center	Non-ACM	ND		1590
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SE	Non-ACM	ND		1654-Stucco 1
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SE	Non-ACM	ND		1654-Stucco 2
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, SW	Non-ACM	ND		1655
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, Center	Non-ACM	ND		1656
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, NW	Non-ACM	ND		1657
ES50	WHITE-EXTERIOR STUCCO	3321-3323 Utah Exterior, NE	Non-ACM	ND		1658
ES50	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, NE	Non-ACM	ND		1698
ES50	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, SE	Non-ACM	ND		1699
ES50	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, Center	Non-ACM	ND		1700
ES50	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, SW	Non-ACM	ND		1701
ES50	WHITE-EXTERIOR STUCCO	3323-3325 Idaho Exterior, NW	Non-ACM	ND		1702
ES50	Exterior Stucco	3359-3361 Idaho NE	Non-ACM	ND		1724
ES50	Exterior Stucco	3359-3361 Idaho E Center	Non-ACM	ND		1725
ES50	Exterior Stucco	3359-3361 Idaho SW	Non-ACM	ND		1726
ES50	Exterior Stucco	3359-3361 Idaho NW	Non-ACM	ND		1727
ES50	Exterior Stucco	3359-3361 Idaho NW	Non-ACM	ND		1728
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S.E.	Non-ACM	ND		1756
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S. CENTER	Non-ACM	ND		1757
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - S.W.	Non-ACM	ND		1758
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - N.W.	Non-ACM	ND		1759
ES50	WHITE - EXTERIOR STUCCO	747-749 LINDEN EXTERIOR - 1ST - N.E.	Non-ACM	ND		1760

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - N.W.	Non-ACM	ND		1788
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - N.E.	Non-ACM	ND		1789
ES50	WHITE - EXTERIOR STUCCO	11-3413 AVACADO EXTERIOR - 1ST - S CENT	Non-ACM	ND		1790
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - S.E.	Non-ACM	ND		1791
ES50	WHITE - EXTERIOR STUCCO	3411-3413 AVACADO EXTERIOR - 1ST - S.E.	Non-ACM	ND		1792
ES50	Exterior Stucco	3422-3424 Avacado Exterior SE	Non-ACM	ND		1817
ES50	Exterior Stucco	3422-3424 Avacado Exterior E Center	Non-ACM	ND		1818
ES50	Exterior Stucco	3422-3424 Avacado Exterior NE	Non-ACM	ND		1819
ES50	Exterior Stucco	3422-3424 Avacado Exterior NW	Non-ACM	ND		1820
ES50	Exterior Stucco	3422-3424 Avacado Exterior SW	Non-ACM	ND		1821
ES50	Exterior Stucco	3459-3461 Avacado Exterior NE	Non-ACM	ND		1840
ES50	Exterior Stucco	3459-3461 Avacado Exterior E Center	Non-ACM	ND		1841
ES50	Exterior Stucco	3459-3461 Avacado Exterior SE	Non-ACM	ND		1842
ES50	Exterior Stucco	3459-3461 Avacado Exterior SW	Non-ACM	ND		1843
ES50	Exterior Stucco	3459-3461 Avacado Exterior NW	Non-ACM	ND		1844
ES50	Exterior Stucco	3489-3491 Avacado NW	Non-ACM	ND		1875
ES50	Exterior Stucco	3489-3491 Avacado NE	Non-ACM	ND		1876
ES50	Exterior Stucco	3489-3491 Avacado E Center	Non-ACM	ND		1877
ES50	Exterior Stucco	3489-3491 Avacado SE	Non-ACM	ND		1878
ES50	Exterior Stucco	3489-3491 Avacado SW	Non-ACM	ND		1879
ES50	Exterior Stucco	3472-3474 Avacado SE	Non-ACM	ND		1901
ES50	Exterior Stucco	3472-3474 Avacado S Center	Non-ACM	ND		1902
ES50	Exterior Stucco	3472-3474 Avacado SW	Non-ACM	ND		1903
ES50	Exterior Stucco	3472-3474 Avacado NW	Non-ACM	ND		1904
ES50	Exterior Stucco	3472-3474 Avacado NE	Non-ACM	ND		1905
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level S.W	Non-ACM	ND		1220
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level W. Center	Non-ACM	ND		1221
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level N.W.	Non-ACM	ND		1222
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level N.E.	Non-ACM	ND		1223
ES51	Orange Exterior Stucco	3416 - 3407 Florida St Ext 1st Level S.E.	Non-ACM	ND		1224
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.E.	Non-ACM	ND		1625-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.E.	Non-ACM	ND		1625-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.E.	Non-ACM	ND		1626-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.E.	Non-ACM	ND		1626-Stucco
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S. Center	Non-ACM	ND		1627
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior S.W.	Non-ACM	ND		1628
ES51	Exterior Stucco, Orange	758-760 Blaine Alley Exterior N.W.	Non-ACM	ND		1629
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen SE	Non-ACM	ND		FBM 1 - 36
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen SW	Non-ACM	ND		FBM 1 - 37
FBM1	Beige Baseboard Mastic Beige A/W / 4" Black BB	811 Plum St Kitchen West	Non-ACM	ND		FBM 1 - 38
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Bathroom - SW	Non-ACM	ND		89- Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Bath Rm - West	Non-ACM	ND		90- Mastic
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Kitchen - West	Non-ACM	ND		91-Mastic
FBM1	4" Black vinyl baseboard w/ beige mastic	3398 Idaho - Level 1 - Kitchen - West	Non-ACM	ND		91-Drywall
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		126-Baseboard
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		126-Mastic
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom - E	Non-ACM	ND		127-Baseboard
FBM1	4" black baseboard w/ beige mastic	3334 Idaho - Level 1 - Bathroom - SE	Non-ACM	ND		128-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		158-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		159-Mastic
FBM1	4' Black baseboard w/ beige mastic	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		160-Mastic
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- South	Non-ACM	ND		178-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- South	Non-ACM	ND		178-Mastic
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- West	Non-ACM	ND		179-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- West	Non-ACM	ND		179-Mastic
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- NW	Non-ACM	ND		180-Baseboard
FBM1	4' Black baseboard w/ beige mastic	3429 Florida - Level 1- NW	Non-ACM	ND		180-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		274-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Kitchen - South	Non-ACM	ND		275-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3308 Utah - Level 1 - Bathroom - South	Non-ACM	ND		276-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		360-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		361-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		362-Mastic
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		391
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - N	Non-ACM	ND		392
FBM1	4" Black baseboard w/ beige mastic	Unit 3348 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		393
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - N	Non-ACM	ND		414
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		415
FBM1	4" Black baseboard w/ beige mastic	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		416
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Kitchen W	Non-ACM	ND		459
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Kitchen NW	Non-ACM	ND		460
FBM1	4" Baseboard & beige mastic	873 Grape - Level 1 - Bathroom N	Non-ACM	ND		461
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen SW	Non-ACM	ND		592
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen S	Non-ACM	ND		593
FBM1	4" Black baseboard w/ beige mastic	3434 Kentucky - Level 1 - Kitchen SE	Non-ACM	ND		594
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen W	Non-ACM	ND		618-Baseboard
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen W	Non-ACM	ND		618-Mastic
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		619-Mastic
FBM1	4" Black baseboard w/ beige mastic	3446 Avocado - Level 1 - Bathroom NE	Non-ACM	ND		620
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		667-Caulk
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		667-Mastic
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		668-Baseboard

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		668-Mastic
FBM1	4" black baseboard w/ beige mastic	3452 Avocado - Level 1 - Bathroom SE	Non-ACM	ND		669
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen NE	Non-ACM	ND		685
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen Central	Non-ACM	ND		686
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen SE	Non-ACM	ND		687-Baseboard
FBM1	4" baseboard black w/ beige mastic	810 Peach - Level 1 - Kitchen SE	Non-ACM	ND		687-Mastic
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 Kitchen East	Non-ACM	ND		705
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 SE	Non-ACM	ND		706
FBM1	4" Black Baseboard w/ Beige Mastic	Unit 860 Grape Level 1 Bathroom SE	Non-ACM	ND		707
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Bathroom - South	Non-ACM	ND		204-Baseboard
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Bathroom - South	Non-ACM	ND		204-Mastic
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Kitchen - South	Non-ACM	ND		205-Mastic
FBM2	4" Black baseboard w/ yellow mastic	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		206-Mastic
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen SE	Non-ACM	ND		492
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		493
FBM2	4" Baseboard black w/ yellow mastic	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		494
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		306
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Kitchen - West	Non-ACM	ND		307
FBM3	4" Black baseboard white mastic	Unit 3384 Utah - Level 1 - Bathroom SW	Non-ACM	ND		308
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - NE	Non-ACM	ND		519-Mastic
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - E	Non-ACM	ND		520-Mastic
FBM3	4" black baseboard w/ white mastic	861 Cherry - Level 1 - Kitchen - SE	Non-ACM	ND		521
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1665
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1666-Mastic 1
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1666-Mastic 2
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1667-Mastic 1
FBM50	BEIGE-BASEBOARD MASTIC	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1667-Mastic 2
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1750
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1751
FBM50	WHITE - BASEBOARD MASTIC	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1752
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1718
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1719
FBM51	Baseboard Mastic	3361 Idaho Kitchen	Non-ACM	ND		1720
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1782-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1782-Mastic 2
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1783-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1783-Mastic 2
FBM51	WHITE - BASEBOARD MASTIC	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1784-Mastic
FBM51	WHITE - BASEBOARD MASTIC	3411 AVACADO - 1ST - KITCHEN	Non-ACM	ND		1784-Mastic 2
FBM51	Baseboard Mastic	3424 Avacado -Kitchen	Non-ACM	ND		1814
FBM51	Baseboard Mastic	3424 Avacado -Kitchen	Non-ACM	ND		1815

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**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM51	Baseboard Mastic	3422 Avacado -Kitchen	Non-ACM	ND		1816
FBM51	Baseboard Mastic	3459 Avacado-Kitchen	Non-ACM	ND		1834
FBM51	Baseboard Mastic	3461 Avacado-Kitchen	Non-ACM	ND		1835
FBM51	Baseboard Mastic	3461 Avacado -Kitchen	Non-ACM	ND		1836
FBM51	Baseboard Mastic	3474 Avacado Kitchen	Non-ACM	ND		1898
FBM51	Baseboard Mastic	3474 Avacado Kitchen	Non-ACM	ND		1899
FBM51	Baseboard Mastic	3472 Avacado Kitchen	Non-ACM	ND		1900
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1747-Leveling Compound
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1747-Mastic
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1748-Leveling Compound
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1748-Mastic
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1749-Leveling Compound
FLC50	GREY - BOTTOM LAYER: LEVELING COMPOUND	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1749-Mastic
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		762
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		763
MISC1	Blown-In Insulation	3403 Florida, Attic, South	Non-ACM	ND		764
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, NE	Non-ACM	ND		1659
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, NE	Non-ACM	ND		1660
MISC50	GREY-WINDOW PUTTY	3321-3323 Utah Exterior, SE	Non-ACM	ND		1661
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, NE	Non-ACM	ND		1695
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, SE	Non-ACM	ND		1696
MISC50	GREY-EXTERIOR WINDOW FRAME PUTTY	3323-3325 Idaho Exterior, N	Non-ACM	ND		1697
MISC50	Exterior Window Frame Putty	3359-3361 Idaho NE	Non-ACM	ND		1721
MISC50	Exterior Window Frame Putty	3359-3361 Idaho E Center	Non-ACM	ND		1722
MISC50	Exterior Window Frame Putty	3359-3361 Idaho SE	Non-ACM	ND		1723
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - N.E.	Non-ACM	ND		1753
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - N.W.	Non-ACM	ND		1754
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	747-749 LINDEN EXTERIOR - 1ST - S.E.	Non-ACM	ND		1755
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	11-3413 AVACADO EXTERIOR - 1ST - N. CENT	Non-ACM	ND		1785
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	3411-3413 AVACADO EXTERIOR - 1ST - N.E.	Non-ACM	ND		1786
MISC50	WHITE - EXTERIOR WINDOW FRAME PUTTY	3411-3413 AVACADO EXTERIOR - 1ST - N.W.	Non-ACM	ND		1787
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior NE	Non-ACM	ND		1837
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior NW	Non-ACM	ND		1838
MISC50	Exterior Window Frame Putty	3459-3461 Avacado Exterior SE	Non-ACM	ND		1839
MISC50	Exterior Window Frame Putty	3489-3491 Avacado N Center	Non-ACM	ND		1872
MISC50	Exterior Window Frame Putty	3489-3491 Avacado NE	Non-ACM	ND		1873
MISC50	Exterior Window Frame Putty	3489-3491 Avacado NW	Non-ACM	ND		1874
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1811
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1812
MISC51	Floor Vapor Barrier Paper	3424 Avacado -Bathroom	Non-ACM	ND		1813
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- -Roofing

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - NE	Non-ACM	ND		93- Styrofoam
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- Roofing
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - West	Non-ACM	ND		94- Styrofoam
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Roofing
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Insulation
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Vapor Barrier
RFM1	Tar roof w/ insulation w/ vapor barrier + styrofoam	3398 Idaho - Roof - Central	Non-ACM	ND		95-Styrofoam
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - S	Non-ACM	ND		394-Styrofoam
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - SE	Non-ACM	ND		395-Styrofoam
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Tar
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Vapor Barrier
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Insulation
RFM1	Black tar w/ Vapor barrier & Brown insulation & styrofoam	Unit 3348 Utah - Roof - N	Non-ACM	ND		396-Styrofoam
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Tar
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Vapor Barrier
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - N	Non-ACM	ND		400-Styrofoam
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Tar
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Vapor Barrier
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - Central	Non-ACM	ND		401-Styrofoam
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Roofing 1
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Roofing 2
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Insulation
RFM1	Black tar w/ vapor barrier & brown insulation & styrofoam	Unit 766 Grape - Roof - S	Non-ACM	ND		402-Styrofoam
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Tar
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Felt
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SE	Non-ACM	ND		612-Styrofoam
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Tar



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Felt
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - S	Non-ACM	ND		613-Styrofoam
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Tar
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Vapor Barrier
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Insulation
RFM1	Roofing: black tar w/ vapor barrier & brown insulation styrofoam	890 Blaine - Roof - SW	Non-ACM	ND		614-Styrofoam
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Tar
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		649-Styrofoam
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Tar
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		650-Styrofoam
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Tar
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Vapor Barrier
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Insulation
RFM1	Black tar w/ vapor barrier + brown insulation + styrofoam	3452 Avocado - Roof - W	Non-ACM	ND		651-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, NE	Non-ACM	ND		756-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, SE	Non-ACM	ND		757-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Shingle
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3433 Avocado, Roof, South	Non-ACM	ND		758-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Tar

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		759-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Vapor Barrier
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		760-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Insulation
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Styrofoam
RFM1	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam	3455 Avocado, Roof, North	Non-ACM	ND		761-Tar
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, N.E.	Non-ACM	ND		2118-Styrofoam
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2119-Styrofoam
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Membrane
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Insulation
RFM54	Roof Membrane	3401-3403 Avacado Roof, S.E.	Non-ACM	ND		2120-Styrofoam
RP50	Roof Parapet	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2121
RP50	Roof Parapet	3401-3403 Avacado Roof, E. Center	Non-ACM	ND		2122-Coating
RP50	Roof Parapet	3401-3403 Avacado Roof, E. Center	Non-ACM	ND		2122-Built Up Roofing
RP50	Roof Parapet	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2123-Coating
RP50	Roof Parapet	3401-3403 Avacado Roof, W. Center	Non-ACM	ND		2123-Built Up Roofing
RPM1	Roof penetration mastic	Unit 766 Grape - Roof - Central	ACM	3%	Chrysotile	403
RPM1	Roof penetration mastic	Unit 766 Grape - Roof - S	ACCM	<1%	Chrysotile	404
RPM1	Roof penetration mastic	Unit 766 Grape - Roof - SW	ACCM	<1%	Chrysotile	405
RPM1	Roof penetration mastic	822 Plum ST - Roof - South	ACM	3%	Chrysotile	66
RPM1	Roof penetration mastic	822 Plum ST - Roof - South	ACM	3%	Chrysotile	67
RPM1	Roof penetration mastic	822 Plum ST - Roof - South	ACM	3%	Chrysotile	68
RPM1	Roof penetration mastic	3398 Idaho - Roof - South central	Non-ACM	ND		96-Mastic 1
RPM1	Roof penetration mastic	3398 Idaho - Roof - South central	ACM	5%	Chrysotile	96-Mastic 2
RPM1	Roof penetration mastic	3398 Idaho - Roof - Central	Non-ACM	ND		97
RPM1	Roof penetration mastic	3398 Idaho - Roof - East	Non-ACM	ND		98
RPM1	Roof penetration mastic	3334 Idaho - Roof - South	ACM	4%	Chrysotile	105
RPM1	Roof penetration mastic	3334 Idaho - Roof - South	ACM	4%	Chrysotile	106
RPM1	Roof penetration mastic	3334 Idaho - Roof - South	ACM	3%	Chrysotile	107
RPM1	Roof penetration mastic	3370 Idaho - Roof - East	ACM	4%	Chrysotile	164

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RPM1	Roof penetration mastic	3370 Idaho - Roof - East	ACM	4%	Chrysotile	165
RPM1	Roof penetration mastic	3370 Idaho - Roof - East	ACM	5%	Chrysotile	166
RPM1	Roof penetration mastic	3367 Utah - Roof - Roof - West	ACM	3%	Chrysotile	228
RPM1	Roof penetration mastic	3367 Utah - Roof - Roof - West	ACM	4%	Chrysotile	229
RPM1	Roof penetration mastic	3367 Utah - Roof - Roof - West	ACM	3%	Chrysotile	230
RPM1	Roof penetration mastic	3341 Utah - Roof - West	ACM	4%	Chrysotile	256
RPM1	Roof penetration mastic	Unit 3341 Utah - Roof - West	ACM	3%	Chrysotile	257
RPM1	Roof penetration mastic	Unit 3341 Utah - Roof - West	ACM	4%	Chrysotile	258
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	295
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	296
RPM1	Roof penetration mastic	Unit 3308 Utah - Roof - East	ACM	3%	Chrysotile	297
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		312
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		313
RPM1	Roof penetration mastic	Unit 3384 Utah - Roof - South	Non-ACM	ND		314
RPM1	Roof penetration mastic	Unit 3350 Utah - Roof - West	ACM	3%	Chrysotile	337
RPM1	Roof penetration mastic	Unit 3350 Utah - Roof - West	ACM	3%	Chrysotile	338
RPM1	Roof penetration mastic	Unit 3350 Utah - Roof - West	ACM	3%	Chrysotile	339
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		397
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		398
RPM1	Roof penetration mastic	Unit 3348 Utah - Roof - N	Non-ACM	ND		399
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	469
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	470
RPM1	Roof penetration mastic	786 Blaine - Level 1 - Exterior N	ACM	3%	Chrysotile	471
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	3%	Chrysotile	502
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	3%	Chrysotile	503
RPM1	Roof penetration mastic	786 Blaine - Roof - SW	ACM	5%	Chrysotile	504
RPM1	Penetration mastic	861 Cherry - Roof - N	ACM	2%	Chrysotile	540
RPM1	Penetration mastic	861 Cherry - Roof - N	ACM	2%	Chrysotile	541
RPM1	Penetration mastic	861 Cherry - Roof - N	ACM	5%	Chrysotile	542
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	4%	Chrysotile	580
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	4%	Chrysotile	581
RPM1	Penetration mastic	3434 Kentucky - Roof - E	ACM	3%	Chrysotile	582
RPM1	Penetration mastic	3446 Avocado - Roof - N	ACM	3%	Chrysotile	632
RPM1	Penetration mastic	3446 Avocado - Roof - N	ACM	3%	Chrysotile	633
RPM1	Penetration mastic	3446 Avocado - Roof - N	ACM	5%	Chrysotile	634
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		652
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		653
RPM1	Penetration mastic	3452 Avocado - Roof - W	Non-ACM	ND		654
RPM1	Penetration mastic	810 Peach - Roof - S	ACM	3%	Chrysotile	691
RPM1	Penetration mastic	810 Peach - Roof - S	ACM	3%	Chrysotile	692
RPM1	Penetration mastic	810 Peach - Roof - S	ACM	3%	Chrysotile	693

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N.W.	Non-ACM	ND		2124-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N.W.	Non-ACM	ND		2124-Tar
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2125-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, N. Center	Non-ACM	ND		2125-Tar
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, S. Center	Non-ACM	ND		2126-Roof Penetration
RPM53	Painted White: Roof Penetration	3401-3403 Avacado Roof, S. Center	Non-ACM	ND		2126-Tar
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2127
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2128
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2129-Roof Penetration
RPM54	Roof Penetration	3401-3403 Avacado Roof, W. Area	Non-ACM	ND		2129-Tar
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Vapor Barrier Paper
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Shingle 1
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		33-Vapor Barrier Paper
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Shingle 1
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Shingle 2
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		34-Vapor Barrier Paper
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Shingle 1
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Shingle 2
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - NW	Non-ACM	ND		63-Vapor Barrier
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - South	Non-ACM	ND		64-Shingle
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - South	Non-ACM	ND		64-Vapor Barrier
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - SW	Non-ACM	ND		65-Shingle
RS1	Roofing shingle & vapor barrier	822 Plum ST - Roof - SW	Non-ACM	ND		65-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SE	Non-ACM	ND		102-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - South	Non-ACM	ND		103-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 1
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 2
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Shingle 3
RS1	Roofing shingles & vapor barrier	3334 Idaho - Roof - SW	Non-ACM	ND		104-Vapor Barrier
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - SE	Non-ACM	ND		161-Roof Shingle
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - SE	Non-ACM	ND		161-Vapor Barrier Paper
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - East	Non-ACM	ND		162-Roof Shingle
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - East	Non-ACM	ND		162-Vapor Barrier Paper
RS1	Roof shingle & vapor barrier	3370 Idaho - Roof - NE	Non-ACM	ND		163-Vapor Barrier Paper
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Shingle 1

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		170-Vapor Barrier
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Shingle 1
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		171-Vapor Barrier
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Shingle 1
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Shingle 2
RS1	Roofing shingle & vapor barrier	3429 Florida - Roof - SE	Non-ACM	ND		172-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - NW	Non-ACM	ND		225-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - West	Non-ACM	ND		226-Vapor Barrier
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Roof Shingle 1
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Roof Shingle 2
RS1	Roofing shingles & vapor barrier	3367 Utah - Roof - Roof - SW	Non-ACM	ND		227-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - North East	Non-ACM	ND		292-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		293-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		294-Shingle
RS1	Roofing shingles & vapor barrier	Unit 3308 Utah - Roof - East	Non-ACM	ND		294-Roofing
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Shingle 3
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SE	Non-ACM	ND		309-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - South	Non-ACM	ND		310-Vapor Barrier
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 1
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 2
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Shingle 3
RS1	Roofing shingles & vapor barrier	Unit 3384 Utah - Roof - SW	Non-ACM	ND		311-Vapor Barrier
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		466
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		467
RS1	Roofing shingles	873 Grape - Roof - Exterior S	Non-ACM	ND		468
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SE	Non-ACM	ND		499-Roof Shingle
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SE	Non-ACM	ND		499-Vapor Barrier

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - S	Non-ACM	ND		500-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SW	Non-ACM	ND		501-Shingle
RS1	Roofing shingles w/ vapor barrier	786 Blaine - Roof - SW	Non-ACM	ND		501-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NW	Non-ACM	ND		537-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Roof Shingle 1
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Roof Shingle 2
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - N	Non-ACM	ND		538-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NE	Non-ACM	ND		539-Shingle
RS1	Roofing shingles w/ vapor barrier	861 Cherry - Roof - NE	Non-ACM	ND		539-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - SE	Non-ACM	ND		574-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - SE	Non-ACM	ND		574-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - E	Non-ACM	ND		575-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - E	Non-ACM	ND		575-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - NE	Non-ACM	ND		576-Shingle
RS1	Roofing shingles w/ vapor paper	3419 Kentucky - Roof - NE	Non-ACM	ND		576-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Roof Shingle 1
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Roof Shingle 2
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - NE	Non-ACM	ND		577-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 1
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 2
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Roof Shingle 3
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		578-Vapor Barrier
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		579-Shingle
RS1	Roofing shingles w/ vapor paper	3434 Kentucky - Roof - E	Non-ACM	ND		579-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - SE	Non-ACM	ND		629-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - SE	Non-ACM	ND		629-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - NW	Non-ACM	ND		630-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - NW	Non-ACM	ND		630-Vapor Barrier
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - N	Non-ACM	ND		631-Shingle
RS1	Roofing shingles w/ vapor barrier	3446 Avocado - Roof - N	Non-ACM	ND		631-Vapor Barrier
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		688-Vapor Barrier
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Shingle 3
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - S	Non-ACM	ND		689-Vapor Barrier

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Shingle 1
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Shingle 2
RS1	Roofing shingles + vapor barrier	810 Peach - Roof - SE	Non-ACM	ND		690-Vapor Barrier
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		702-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		702-Vapor Barrier
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		703-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		703-Vapor Barrier
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		704-Shingle
RS1	Roofing Shingles + Vapor Barrier	Unit 860 Grape Roof South	Non-ACM	ND		704-Vapor Barrier
RS1	Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	811 Plum St Exterior SW	Non-ACM	ND		32-Shingle 1
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 1
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 2
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Roof Shingle 3
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		253-Vapor Barrier
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 1
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 2
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Roof Shingle 3
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		254-Vapor Barrier
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		255-Shingle
RS2	Roofing shingles & vapor barrier	3341 Utah - Roof - West	Non-ACM	ND		255-Vapor Barrier
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Roof Single 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Roof Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		334-Vapor Barrier
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Roof Shingle 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Roof Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		335-Vapor Barrier
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Shingle 1
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Shingle 2
RS2	Roofing shingles w/ vapor barrier paper	Unit 3350 Utah - Roof - West	Non-ACM	ND		336-Vapor Barrier
RS50	Roof shingles	849 Plum St-- Level 1st- SE	Non-ACM	ND		1051
RS50	Roof shingles	849 Plum St-- Level 1st- SE	Non-ACM	ND		1052
RS50	Roof shingles	849 Plum St- Level 1st- SE	Non-ACM	ND		1053
RS50	Red Roof Shingles	848 Peach St Roof N.E.	Non-ACM	ND		1096-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N.E.	Non-ACM	ND		1096-Shingle 2
RS50	Red Roof Shingles	848 Peach St Roof N. Center	Non-ACM	ND		1097-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N. Center	Non-ACM	ND		1097-Shingle 2
RS50	Red Roof Shingles	848 Peach St Roof N.W.	Non-ACM	ND		1098-Shingle 1
RS50	Red Roof Shingles	848 Peach St Roof N.W.	Non-ACM	ND		1098-Shingle 2
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.E.	Non-ACM	ND		1138-Shingle 1
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.E.	Non-ACM	ND		1138-Shingle 2
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S. Center	Non-ACM	ND		1139-Shingle 1

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S. Center	Non-ACM	ND		1139-Shingle 2
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.W.	Non-ACM	ND		1140-Shingle 1
RS50	Roof Shingles	821-823 Cherry St Roof - Level Roof - S.W.	Non-ACM	ND		1140-Shingle 2
RS50	Red Roof Shingles	801- 803 Cherry St Roof S.E.	Non-ACM	ND		1175
RS50	Red Roof Shingles	801- 803 Cherry St Roof S. Center	Non-ACM	ND		1176
RS50	Red Roof Shingles	801- 803 Cherry St Roof S.W.	Non-ACM	ND		1177
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof S.W.	Non-ACM	ND		1225
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof W. Center	Non-ACM	ND		1226-Shingle 1
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof W. Center	Non-ACM	ND		1226-Shingle 2
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof N.W.	Non-ACM	ND		1227-Shingle 1
RS50	Red Roof Shingles	3416 - 3407 Florida St Roof N.W.	Non-ACM	ND		1227-Shingle 2
RS50	Red Roof Shingles	3475- 3479 Florida St Roof N.W.	Non-ACM	ND		1259
RS50	Red Roof Shingles	3475- 3479 Florida St Roof W. Center	Non-ACM	ND		1260
RS50	Red Roof Shingles	3475- 3479 Florida St Roof S.W.	Non-ACM	ND		1261
RS50	Red roof shingles	3480-3488 Kentucky Roof N.W.	Non-ACM	ND		1306
RS50	Red roof shingles	3480-3488 Kentucky Roof W. Center	Non-ACM	ND		1307
RS50	Red roof shingles	3480-3488 Kentucky Roof S.W.	Non-ACM	ND		1308-Shingle 1
RS50	Red roof shingles	3480-3488 Kentucky Roof S.W.	Non-ACM	ND		1308-Shingle 2
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof W Center	Non-ACM	ND		1341-Shingles
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof W Center	Non-ACM	ND		1341-Shingles
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof S.W.	Non-ACM	ND		1342-Tar
RS50	Roof Shingles, Red	3401-3407 Kentucky Roof S.W.	Non-ACM	ND		1342-Shingles
RS50	Roof Shingles	3115-3117 Utah Roof-NE	Non-ACM	ND		1390-Shingle 1
RS50	Roof Shingles	3115-3117 Utah Roof-NE	Non-ACM	ND		1390-Shingle 2
RS50	Roof Shingles	3115-3117 Utah Roof-E Center	Non-ACM	ND		1391-Shingle 1
RS50	Roof Shingles	3115-3117 Utah Roof-E Center	Non-ACM	ND		1391-Shingle 2
RS50	Roof Shingles	3115-3117 Utah Roof-SE	Non-ACM	ND		1392
RS50	RED-ROOF SHINGLES-SE	725-737 Grape Roof, SE	Non-ACM	ND		1473-Shingle
RS50	RED-ROOF SHINGLES-SE	725-737 Grape Roof, SE	Non-ACM	ND		1473-Shingle 2
RS50	RED-ROOF SHINGLES-S CENTER	725-737 Grape Roof, S Center	Non-ACM	ND		1474-Shingle
RS50	RED-ROOF SHINGLES-S CENTER	725-737 Grape Roof, SW	Non-ACM	ND		1474-Shingle 2
RS50	RED-ROOF SHINGLES-SW	725-737 Grape Roof, SW	Non-ACM	ND		1475-Shingle
RS50	RED-ROOF SHINGLES-SW	725-737 Grape Roof, SW	Non-ACM	ND		1475-Shingle 2
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1513-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.W.	Non-ACM	ND		1514-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle
RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle



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RS50	Red - Roof Shingles	813-815 Grape Roof - 1st - S.E.	Non-ACM	ND		1515-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NW	Non-ACM	ND		1552-Tar
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, N Center	Non-ACM	ND		1553-Tar
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Shingle
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Shingle 2
RS50	RED-ROOF SHINGLES	840-842 Grape Roof, NE	Non-ACM	ND		1554-Tar
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1591-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1591-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1592-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.E.	Non-ACM	ND		1592-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.W.	Non-ACM	ND		1593-Shingle
RS50	Red Roof Shingles	876-878 Blaine Alley N.W.	Non-ACM	ND		1593-Shingle
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1630-Shingles
RS50	Roof Shingles, Red	758-760 Blaine AlleyvRoof N.E.	Non-ACM	ND		1631-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1631-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N.E.	Non-ACM	ND		1631-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Shingles
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Tar
RS50	Roof Shingles, Red	758-760 Blaine Alley Roof N. Center	Non-ACM	ND		1632-Shingles
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof, NE	Non-ACM	ND		1662
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof, NE	Non-ACM	ND		1663
RS50	RED-ROOF SHINGLES	3321-3323 Utah Roof , SE	Non-ACM	ND		1664
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, NE	Non-ACM	ND		1703-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, NE	Non-ACM	ND		1703-Shingle 2
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1704-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1704-Shingle 2
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1705-Shingle 1
RS50	RED-ROOF SHINGLES	3323-3325 Idaho Roof, SE	Non-ACM	ND		1705-Shingle 2
RS50	Roof Shingles	3359-3361 Idaho NW	Non-ACM	ND		1729-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho NW	Non-ACM	ND		1729-Shingle 2
RS50	Roof Shingles	3359-3361 Idaho NE	Non-ACM	ND		1730-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho NE	Non-ACM	ND		1730-Shingle 2
RS50	Roof Shingles	3359-3361 Idaho Roof	Non-ACM	ND		1731-Shingle 1
RS50	Roof Shingles	3359-3361 Idaho Roof	Non-ACM	ND		1731-Shingle 2
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1761-Shingle 1

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RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1761-Shingle 2
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1762-Shingle 1
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.E.	Non-ACM	ND		1762-Shingle 2
RS50	RED - ROOF SHINGLES	747-749 LINDEN ROOF - 1ST - S.W.	Non-ACM	ND		1763
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1793-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1793-Shingle 2
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1794-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.W.	Non-ACM	ND		1794-Shingle 2
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.E.	Non-ACM	ND		1795-Shingle
RS50	RED - ROOF SHINGLES	3411-3413 AVACADO ROOF - 1ST - N.E.	Non-ACM	ND		1795-Shingle 2
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 2
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1845-Roof Shingle 3
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 2
RS50	Roof Shingles	3459-3461 Avacado Roof NE	Non-ACM	ND		1846-Roof Shingle 3
RS50	Roof Shingles	3459-3461 Avacado Roof NW	Non-ACM	ND		1847-Roof Shingle 1
RS50	Roof Shingles	3459-3461 Avacado Roof NW	Non-ACM	ND		1847-Roof Shingle 2
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1880-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1880-Shingle 2
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1881-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NW	Non-ACM	ND		1881-Shingle 2
RS50	Roof Shingles	3489-3491 Avacado NE	Non-ACM	ND		1882-Shingle 1
RS50	Roof Shingles	3489-3491 Avacado NE	Non-ACM	ND		1882-Shingle 2
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1906-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1906-Shingle 2
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1907-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SE	Non-ACM	ND		1907-Shingle 2
RS50	Roof Shingles	3472-3474 Avacado SW	Non-ACM	ND		1908-Shingle 1
RS50	Roof Shingles	3472-3474 Avacado SW	Non-ACM	ND		1908-Shingle 2
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		266
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		267
USM1	Under sink mastic	Unit 3308 Utah - Level 1 - Kitchen South	Non-ACM	ND		268
USM1	Under Sink Mastic	Unit 3372 Utah Level 1 Kitchen North	Non-ACM	ND		755
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		731
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		732
USM2	Under Sink Mastic	Unit 3403 Florida Level 1 Kitchen North	Non-ACM	ND		733
USM2	Under Sink Mastic	Unit 3330 Idaho Level 1 Kitchen South	Non-ACM	ND		734
USM2	Under Sink Mastic	Unit 3360 Idaho Level 1 Kitchen South	Non-ACM	ND		735
USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		745
USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		746

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USM3	Under Sink Mastic	Unit 3380 Idaho Level 1 Kitchen South	Non-ACM	ND		747
USM50	Sink Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1141
USM50	Sink Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1142
USM50	Sink Mastic	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1143
USM50	Grey Sink Mastic	801 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1167
USM50	Grey Sink Mastic	801 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1168
USM50	Grey Sink Mastic	803 Cherry St 1st Level Kitchen Sink	Non-ACM	ND		1169
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1337
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1338
USM50	Under Sink Mastic, Gray	3407 Kentucky Kitchen	Non-ACM	ND		1339
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1465
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1466
USM50	GREY-SINK MASTIC-KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1467
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1692
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1693
USM50	GREY-SINK MASTIC	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1694
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1214
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1215
USM51	Black Sink Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1216
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1217
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1218
USM52	White Sink Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1219
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		010-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		010-Mastic
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom North	Non-ACM	ND		010-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom North	Non-ACM	ND		11-Mastic
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom West	Non-ACM	ND		12-Vinyl Sheet Flooring
VSF1	White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	811 Plum St Bathroom West	Non-ACM	ND		12-Mastic
VSF1	Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		13-Vinyl Sheet Flooring
VSF1	Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		13-Mastic
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		45-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SE	Non-ACM	ND		45-Mastic
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom NW	Non-ACM	ND		46-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom NW	Non-ACM	ND		46-Mastic
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SW	Non-ACM	ND		47-Vinyl Sheet Flooring
VSF1	White Gray Sheet Flooring With 6" Squares & Yellow Mastic	811 Plum St Bathroom SW	Non-ACM	ND		47-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		113-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		113-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom East	Non-ACM	ND		114-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom East	Non-ACM	ND		114-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		115-Sheet Flooring

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VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	3334 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		115-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NW	Non-ACM	ND		155-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NW	Non-ACM	ND		155-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		156-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom NE	Non-ACM	ND		156-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom East	Non-ACM	ND		157-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ yellow mastic	3370 Idaho - Level 1 - Bathroom East	Non-ACM	ND		157-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - East	Non-ACM	ND		207-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - East	Non-ACM	ND		207-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - NW	Non-ACM	ND		208-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - NW	Non-ACM	ND		208-Mastic
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - West	Non-ACM	ND		209-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ white mastic	3367 Utah - Level 1 - Bathroom - West	Non-ACM	ND		209-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Mastic 1
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - East	Non-ACM	ND		238-Mastic 2
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		239-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		239-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - West	Non-ACM	ND		240-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	3341 Utah - Level 1 - Bathroom - West	Non-ACM	ND		240-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bathroom - E	Non-ACM	ND		351-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Bathroom - E	Non-ACM	ND		351-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		352-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		352-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		353-Vinyl Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic (top layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		353-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		379-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		379-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		380-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		380-Mastic
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Bathroom - E	Non-ACM	ND		381-Vinyl Sheet Flooring
VSF1	Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Unit 3348 Utah - Level 1 - Bathroom - E	Non-ACM	ND		381-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - SE	Non-ACM	ND		429- Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		430- Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic ( top layer)	Unit 766 Grape - Level 1 - Kitchen - N	Non-ACM	ND		431-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		516-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		516-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		517-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - N	Non-ACM	ND		517-Mastic
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - S	Non-ACM	ND		518-Sheet Flooring
VSF1	Sheet flooring w/ 6" squares w/ yellow mastic	861 Cherry - Level 1 - Bathroom - S	Non-ACM	ND		518-Mastic

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		556-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		556-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		557-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom W	Non-ACM	ND		557-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		558-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3419 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		558-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		595-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		595-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		596-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		596-Mastic
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		597-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ yellow mastic	3434 Kentucky - Level 1 - Bathroom E	Non-ACM	ND		597-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		609-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		609-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		610-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		610-Mastic
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		611-Sheet Flooring
VSF1	Sheet flooring 6" squares w/ beige mastic	890 Blaine - Level 1 - Bathroom central	Non-ACM	ND		611-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		715-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		715-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		722-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		722-Mastic
VSF1	Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		728-Sheet Flooring
VSF1	Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		728-Mastic
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen NW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>534-Sheet Flooring</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Floor Tile
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Vapor Barrier 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Mastic 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		534-Vapor Barrier 2
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen W</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>535-Sheet Flooring</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Floor Tile
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Vapor Barrier 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Mastic 1
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		535-Vapor Barrier 2
<b>VSF10</b>	<b>Sheet flooring w/ flower pattern w/ black mastic &amp; vapor barrier (5th layer)</b>	<b>861 Cherry - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>536-Sheet Flooring 1</b>
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Sheet Flooring 2
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Vapor Barrier
VSF10	Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		536-Mastic
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Mastic
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		483-Backing

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Mastic
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		484-Backing
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		485-Sheet Flooring
VSF11	Sheet flooring 6" squares w/ yellow mastic (top layer)	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		485-Mastic
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Mastic 1
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562-Sheet Flooring
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		562- Mastic 2
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Mastic 1
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563-Sheet Flooring
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		563- Mastic 2
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Mastic
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Floor Tile
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Sheet Flooring
VSF12	Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		564-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Sheet Flooring 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Sheet Flooring 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		568-Mastic
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Vapor Barrier
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Sheet Flooring
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		569-Mastic
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Sheet Flooring 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Vapor Barrier 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Mastic 1
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Sheet Flooring 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Vapor Barrier 2
VSF13	Sheet flooring w/ black mastic & vapor barrier	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		570-Mastic 2
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3479 Kentucky Level 1 Bathroom East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>714-Sheet Flooring</b>
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3479 Kentucky Level 1 Bathroom East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>714-Mastic 1</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		714-Vapor Barrier
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		714-Mastic 2
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>717-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		717-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>718-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		718-Mastic
<b>VSF14</b>	<b>Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)</b>	<b>Unit 3400 Kentucky Level 1 Bathroom West</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>719-Sheet Flooring</b>
VSF14	Sheet Flooring w/ Brown Pattern Gold Specks w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		719-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		716-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		716-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		720-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		720-Sheet Flooring
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		721-Mastic
VSF15	Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Unit 3400 Kentucky Level 1 Bathroom West	Non-ACM	ND		721-Sheet Flooring
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>748-Sheet Flooring</b>
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		748-Mastic
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>749-Sheet Flooring</b>
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		749-Mastic
VSF16	Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Unit 3318 Utah Level 1 Bathroom West	Non-ACM	ND		749-Floor Tile
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>750-Sheet Flooring</b>
<b>VSF16</b>	<b>Sheet Flooring Beige &amp; Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)</b>	<b>Unit 3318 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>750-Mastic</b>
VSF2	White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen NE	Non-ACM	ND		16-Vinyl Sheet Flooring
VSF2	White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen NE	Non-ACM	ND		16-Mastic
VSF2	White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen SW	Non-ACM	ND		20-Mastic
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen NW	Non-ACM	ND		48-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen NW	Non-ACM	ND		48-Mastic
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		49-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SE	Non-ACM	ND		49-Mastic
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SW	Non-ACM	ND		50-Vinyl Sheet Flooring
VSF2	White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	811 Plum St Kitchen SW	Non-ACM	ND		50-Mastic
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - NW	Non-ACM	ND		75-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - NW	Non-ACM	ND		75-Mastic
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		76-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		76-Mastic
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - East	Non-ACM	ND		77-Sheet Flooring
VSF2	White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	3398 Idaho - Level 1 - Bathroom - East	Non-ACM	ND		77-Mastic
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		132-Sheet Flooring
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		132-Mastic
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		133-Mastic
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		134-Sheet Flooring
VSF2	Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		134-Mastic
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		216-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		216-Mastic
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Mastic
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		217-Floor Tile
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		218-Sheet Flooring
VSF2	Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		218-Mastic
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		277-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		277-Mastic

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - North East	Non-ACM	ND		278-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - North East	Non-ACM	ND		278-Mastic
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		279-Sheet Flooring
VSF2	Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		279-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		354-Vinyl Floor Tile
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		355-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - W	Non-ACM	ND		355-Mastic
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		356-Vinyl Sheet Flooring
VSF2	Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Unit 3350 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		356-Mastic
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - S	Non-ACM	ND		426- Sheet Flooring
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - NE	Non-ACM	ND		427- Sheet Flooring
VSF2	Sheet flooring mixed squares/triangles pattern w/ yellow mastic	Unit 766 Grape - Level 1 - Bathroom - N	Non-ACM	ND		428-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		525-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		525-Mastic
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		526-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		526-Mastic
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		527-Sheet Flooring
VSF2	Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		527-Mastic
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		635-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		635-Mastic
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		636-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		636-Mastic
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		637-Sheet Flooring
VSF2	Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		637-Mastic
VSF2	Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		712A-Sheet Flooring
VSF2	Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		712A-Mastic
VSF2	Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		740-Sheet Flooring
VSF2	White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	811 Plum St Kitchen SW	Non-ACM	ND		20-Vinyl Sheet Flooring
<b>VSF3</b>	<b>White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic</b>	<b>811 Plum St Kitchen NE</b>	<b>ACM</b>	<b>18%</b>	<b>Chrysotile</b>	<b>19-Vinyl Sheet Flooring 1</b>
VSF3	White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic	811 Plum St Kitchen NE	Non-ACM	ND		19-Vinyl Sheet Flooring 2
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		138-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>138-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		138-Mastic 2
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		139-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>139-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		139-Mastic 2
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (3rd layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>140-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		140-Mastic
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - West	Non-ACM	ND		193-Mastic 1



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - West</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>193-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - West	Non-ACM	ND		193-Mastic 2
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - NW	Non-ACM	ND		194-Mastic 1
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - NW</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>194-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - NW	Non-ACM	ND		194-Mastic 2
<b>VSF3</b>	<b>Pebble pattern sheet flooring w/ yellow mastic (Second layer)</b>	<b>3429 Florida - Level 1 - Bath room - East</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>195-Sheet Flooring</b>
VSF3	Pebble pattern sheet flooring w/ yellow mastic (Second layer)	3429 Florida - Level 1 - Bath room - East	Non-ACM	ND		195-Mastic
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		373-Mastic 1
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>373-Vinyl Sheet Flooring</b>
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		373-Mastic 2
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		374-Mastic 1
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - W</b>	<b>ACM</b>	<b>28%</b>	<b>Chrysotile</b>	<b>374-Vinyl Sheet Flooring</b>
VSF3	Pebble pattern w/ yellow mastic (3rd layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		374-Mastic 2
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - E</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>375-Sheet Flooring</b>
<b>VSF3</b>	<b>Pebble pattern w/ yellow mastic (3rd layer)</b>	<b>Unit 3348 Utah - Level 1 - Kitchen - E</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>375-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>448-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>448-Sheet Flooring</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>449-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>449-Sheet Flooring</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen N</b>	<b>Non-ACM</b>	<b>ND</b>		<b>450-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring pebble pattern w/ mastic (3rd layer)</b>	<b>873 Grape - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>450-Sheet Flooring</b>
VSF3	Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	786 Blaine - Level 1 - Kitchen E	Non-ACM	ND		486-Floor Tile
<b>VSF3</b>	<b>Sheet flooring w/ pebble pattern w/ mastic (3rd layer)</b>	<b>786 Blaine - Level 1 - Kitchen E</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>486-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring w/ pebble pattern w/ mastic (3rd layer)</b>	<b>786 Blaine - Level 1 - Kitchen E</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>486-Sheet Flooring</b>
<b>VSF3</b>	<b>Sheet flooring w/ pebble pattern w/ mastic (3rd layer)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>487-Mastic</b>
<b>VSF3</b>	<b>Sheet flooring w/ pebble pattern w/ mastic (3rd layer)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>487-Sheet Flooring</b>
<b>VSF3</b>	<b>Sheet flooring w/ pebble pattern w/ mastic (3rd layer)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>488-Sheet Flooring</b>
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		531-Sheet Flooring
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		531-Mastic
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		532-Sheet Flooring
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		532-Mastic
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		533-Sheet Flooring 1
VSF3	Sheet floor w/ pebble pattern w/ mastic (4th mastic)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		533-Mastic
<b>VSF3</b>	<b>Sheet floor w/ pebble pattern w/ mastic (4th mastic)</b>	<b>861 Cherry - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>533-Sheet Flooring 2</b>
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		674-Vapor Barrier
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Mastic
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Sheet Flooring
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom central	Non-ACM	ND		675-Vapor Barrier
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Mastic 1

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Sheet Flooring 1
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Mastic 2
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Sheet Flooring 2
VSF3	Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	810 Peach - Level 1 - Bathroom SW	Non-ACM	ND		676-Vapor Barrier
<b>VSF3</b>	<b>White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic</b>	<b>811 Plum St Kitchen SW</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>23</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen NW	Non-ACM	ND		51-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen NW	Non-ACM	ND		51-Mastic
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen SE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>52-Vinyl Sheet Flooring 1</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SE	Non-ACM	ND		52-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SE	Non-ACM	ND		52-Mastic
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen SW</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>53-Vinyl Sheet Flooring 1</b>
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SW	Non-ACM	ND		53-Vinyl Sheet Flooring 2
VSF4	Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	811 Plum St Kitchen SW	Non-ACM	ND		53-Mastic
VSF4	Sheet flooring squares w/ yellow mastic (3rd layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		283-Mastic
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - West</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>283-Sheet Flooring</b>
VSF4	Sheet flooring squares w/ yellow mastic (3rd layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		284-Mastic
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>284-Sheet Flooring</b>
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>285-Sheet Flooring</b>
<b>VSF4</b>	<b>Sheet flooring squares w/ yellow mastic (3rd layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>285-Mastic</b>
<b>VSF4</b>	<b>Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)</b>	<b>811 Plum St Kitchen NW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>51-Vinyl Sheet Flooring 1</b>
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		78-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		78-Mastic
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		79-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		79-Mastic
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		80-Sheet Flooring
VSF5	White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	3398 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		80-Mastic
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Sheet Flooring
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Mastic
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		445-Backing
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		446- Sheet Flooring
VSF5	Sheet flooring w/ rectangle pattern w/ mastic (top layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		447-Sheet Flooring
VSF5	Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		713A-Sheet Flooring
VSF5	Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Unit 3479 Kentucky Level 1 Bathroom East	Non-ACM	ND		713A-Mastic
VSF5	Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		723-Sheet Flooring
VSF5	Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		723-Mastic
VSF50	White sheet flooring squares, w/ mastic	851 Plum St Level 1st- Bathroom	Non-ACM	ND		1019-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	851 Plum St- Level 1st- Bathroom	Non-ACM	ND		1019-Mastic
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Bathroom	Non-ACM	ND		1020-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Bathroom	Non-ACM	ND		1020-Mastic
VSF50	White sheet flooring squares, w/ mastic	849 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1021-Vinyl Sheet Flooring
VSF50	White sheet flooring squares, w/ mastic	849 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1021-Mastic

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Mastic 1
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St- Level 1st- Kitchen (2)	Non-ACM	ND		1022-Mastic 2
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Mastic 1
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1026-Mastic 2
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1030-Vinyl Sheet Flooring
VSF51	Sheet flooring plain w/ mastic	849 Plum St-- Level 1st- Kitchen (2)	Non-ACM	ND		1030-Mastic
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>17%</b>	<b>Chrysotile</b>	<b>1619-Sheet Flooring</b>
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1619-Vapor
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1620-Sheet Flooring</b>
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1620-Vapor
<b>VSF51</b>	<b>Bottom Layer Plain White Sheet w/ Mastic and Vapor</b>	<b>760 Blaine Alley Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1621-Sheet Flooring</b>
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1621-Vapor
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	760 Blaine Alley Kitchen	Non-ACM	ND		1622-Sheet Flooring
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	758 Blaine Alley Kitchen	Non-ACM	ND		1622-Mastic
VSF51	Bottom Layer Plain White Sheet w/ Mastic and Vapor	758 Blaine Alley Kitchen	Non-ACM	ND		1622-Leveler
VSF52	Marble sheet flooring, w/ mastic	849 Plum St Level 1st- Kitchen (4)	Non-ACM	ND		1024-Mastic 1
VSF52	Marble sheet flooring, w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1024-Vinyl Sheet Flooring
VSF52	Marble sheet flooring, w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1024-Mastic 2
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Mastic 1
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Vinyl Sheet Flooring
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1028-Mastic 2
VSF52	Marble sheet flooring w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Vinyl Sheet Flooring
VSF52	Marble sheet flooring w/ mastic	849 Plum St-- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Mastic 1
VSF52	Marble sheet flooring w/ mastic	849 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1032-Mastic 2
VSF53	Off white sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1025-Mastic 1
<b>VSF53</b>	<b>Off white sheet flooring w/ vapor paper</b>	<b>849 Plum St-- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1025-Vinyl Sheet Flooring</b>
VSF53	Off white sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1025-Mastic 2
VSF53	Sheet flooring w/ vapor paper	849 Plum St-- Level 1st- Kitchen (5)	Non-ACM	ND		1029-Mastic 1
<b>VSF53</b>	<b>Sheet flooring w/ vapor paper</b>	<b>849 Plum St-- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>1029-Vinyl Sheet Flooring</b>
VSF53	Sheet flooring w/ vapor paper	849 Plum St-- Level 1st- Kitchen (5)	Non-ACM	ND		1029-Mastic 2

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
<b>VSF53</b>	<b>Sheet flooring w/ vapor paper</b>	<b>849 Plum St- Level 1st- Kitchen (5)</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1033-Vinyl Sheet Flooring</b>
VSF53	Sheet flooring w/ vapor paper	849 Plum St- Level 1st- Kitchen (5)	Non-ACM	ND		1033-Vapor Paper
VSF54	Sheet flooring plain w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1034-Vinyl Sheet Flooring
VSF54	Sheet flooring plain w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1034-Mastic
VSF54	Sheet flooring brown, w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1038-Vinyl Sheet Flooring
VSF54	Sheet flooring brown, w/ mastic	851 Plum St Level 1st- Kitchen (1)	Non-ACM	ND		1038-Mastic
VSF54	Red/blue tile, vapor paper, black mastic	851 Plum St- Level 1st- Kitchen (4)	Non-ACM	ND		1041-Vapor Paper
VSF54	Sheet flooring brown, w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1042-Vinyl Sheet Flooring
VSF54	Sheet flooring brown, w/ mastic	851 Plum St- Level 1st- Kitchen (1)	Non-ACM	ND		1042-Mastic
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1334-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3407 Kentucky Kitchen	Non-ACM	ND		1335-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Adhesive
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Flooring
VSF54	Vinyl Sheet Flooring, Beige Plain	3401 Kentucky Kitchen	Non-ACM	ND		1336-Adhesive
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Sheet Flooring
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1456-Vapor
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Sheet Flooring
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1457-Vapor
<b>VSF54</b>	<b>TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1458-Sheet Flooring</b>
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1458-Mastic
VSF54	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1458-Vapor
VSF55	Marble sheet flooring w/ mastic	851 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1036-Mastic 1
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>U851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1036-Vinyl Sheet Flooring</b>
VSF55	Marble sheet flooring w/ mastic	851 Plum St- Level 1st- Kitchen (3)	Non-ACM	ND		1036-Mastic 2
VSF55	Marble sheet flooring w/ mastic	851 Plum St Level 1st- Kitchen (3)	Non-ACM	ND		1040-Mastic
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1040-Vinyl Sheet Flooring</b>
VSF55	Marble sheet flooring w/ mastic	851 Plum St Level 1st- Kitchen (3)	Non-ACM	ND		1044-Mastic
<b>VSF55</b>	<b>Marble sheet flooring w/ mastic</b>	<b>851 Plum St Level 1st- Kitchen (3)</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>1044-Vinyl Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1073-Mastic
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1073-Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1074-Mastic
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1074-Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor & Mastic	850 Peach St 1st Level Kitchen	Non-ACM	ND		1075-Mastic
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor &amp; Mastic</b>	<b>850 Peach St 1st Level Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1075-Sheet Flooring</b>
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1121-Sheet Flooring</b>

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1121-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1122-Sheet Flooring</b>
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1122-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1123-Sheet Flooring</b>
VSF55	Middle Layer: Marble Sheet Floor w/ Mastic	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1123-Mastic
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1205-Vinyl Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1205-Mastic
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3416 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>13%</b>	<b>Chrysotile</b>	<b>1206-Vinyl Sheet Flooring</b>
<b>VSF55</b>	<b>Beige Middle Layer: Marble Sheet Floor w/ Mastic</b>	<b>3408 Florida St 1st Level Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1207-Vinyl Sheet Flooring</b>
VSF55	Beige Middle Layer: Marble Sheet Floor w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1207-Mastic
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1295-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1295-Mastic
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1296-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1296-Mastic
<b>VSF55</b>	<b>Beige (Marble) pattern-yellow mastic</b>	<b>Unit 3480 1st Level Bathroom</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1297-Sheet Flooring</b>
VSF55	Beige (Marble) pattern-yellow mastic	Unit 3480 1st Level Bathroom	Non-ACM	ND		1297-Mastic
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1373</b>
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1374</b>
<b>VSF55</b>	<b>Middle Layer: Marble Sheet Floor w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1375</b>
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1680-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1680-Mastic
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>10%</b>	<b>Chrysotile</b>	<b>1681-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1681-Mastic
<b>VSF55</b>	<b>YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC</b>	<b>3325 Idaho 1st Floor Bathroom</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1682-Vinyl Sheet Flooring</b>
VSF55	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1682-Mastic
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1079-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1079-Mastic
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1080-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1080-Mastic
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1081-Sheet Flooring
VSF56	Beige Square Sheet Floor & Mastic	850 Peach St 1st Level Bathroom	Non-ACM	ND		1081-Mastic
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1118-Sheet Flooring
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1118-Mastic
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1119-Sheet Flooring
VSF56	Top Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1119-Mastic
VSF56	Single Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St 1 Level 1st - Bathroom	Non-ACM	ND		1120-Sheet Flooring
VSF56	Single Layer: "6 Square Floor Sheet w/ Mastic	821 Cherry St Level 1st - Bathroom	Non-ACM	ND		1120-Mastic
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1161-Sheet Flooring
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1161-Mastic
VSF56	White 6" Square Sheet Floor & Mastic	801 Cherry St 1st Level Bathroom	Non-ACM	ND		1162-Sheet Flooring
VSF56	White 6" Square Sheet Floor & Mastic	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1163-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF56	White 6" Square Sheet Floor & Mastic	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1163-Mastic
VSF56	White 6" Square Sheet Floor w/ Mastic	3475 Florida St 1st Level Bathrm	Non-ACM	ND		1240-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3475 Florida St 1st Level Bathrm	Non-ACM	ND		1240-Mastic
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S 1st Level Bathrm	Non-ACM	ND		1241-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S 1st Level Bathrm	Non-ACM	ND		1242-Sheet Flooring
VSF56	White 6" Square Sheet Floor w/ Mastic	3479 Florida S1st Level Bathrm	Non-ACM	ND		1242-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1286-Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1286-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1287-Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1287-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Vinyl Sheet Flooring
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Mastic
VSF56	White 1st layer: 6" square sheet floor w/ mastic	3488 Kentucky 1st Level Bathroom	Non-ACM	ND		1288-Leveler
VSF56	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1289-Sheet Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1328-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1328-Mastic
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Bathroom	Non-ACM	ND		1329-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3407 Kentucky Bathroom	Non-ACM	ND		1329-Mastic
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3401 Kentucky Bathroom	Non-ACM	ND		1330-Flooring
VSF56	Vinyl Sheet Flooring, Beige 6" Small Squares with Beige Mastic	3401 Kentucky Bathroom	Non-ACM	ND		1330-Mastic
VSF56	6" Square Sheet Floor w/Mastic	Unit 3317-Bathrm	Non-ACM	ND		1370-Sheet Flooring
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1370-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1371-Sheet Flooring
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1371-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1372-Sheet Flooring
VSF56	6" Square Sheet Floor w/Mastic	3317 Utah-Bathrm	Non-ACM	ND		1372-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3342 Utah Bathrm	Non-ACM	ND		1412-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3342 Utah Bathrm	Non-ACM	ND		1412-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1413-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1413-Mastic
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1414-Sheet Floor
VSF56	6" Square Sheet Floor w/Mastic	3344 Utah Bathrm	Non-ACM	ND		1414-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1450-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1450-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1451-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1451-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1452-Sheet Floor
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1452-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1496-Vapor Barrier

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1497-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Kitchen	Non-ACM	ND		1497-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape - 1st - Kitchen	Non-ACM	ND		1497-Vapor Barrier
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Sheet Flooring
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Mastic
VSF56	White - 6" Square Sheet Floor w/ Mastic & Vapor	813 Grape- 1st - Bathrm	Non-ACM	ND		1498-Vapor Barrier
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1541-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1541-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1542-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1542-Mastic
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1543-Vinyl Sheet Flooring
VSF56	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC	Unit 842 Grape 1st Floor Bathroom	Non-ACM	ND		1543-Mastic
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Kitchen	Non-ACM	ND		1574-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Kitchen	Non-ACM	ND		1574-Mastic
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Bathroom	Non-ACM	ND		1575-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	876 Blaine Alley Bathroom	Non-ACM	ND		1575-Mastic
VSF56	White Top layer: 6" Square Sheet H	878 Blaine Alley Kitchen	Non-ACM	ND		1576-Sheet Flooring
VSF56	White Top layer: 6" Square Sheet H	878 Blaine Alley Kitchen	Non-ACM	ND		1576-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	758 Blaine Alley Bathrm	Non-ACM	ND		1623-Leveler
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Blaine Alley Bathrm	Non-ACM	ND		1624-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Bathrm	Non-ACM	ND		1624-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	760 Blaine Alley Bathrm	Non-ACM	ND		1624-Leveler
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1642-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1642-Mastic
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1643-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1643-Mastic
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1644-Sheet Floor
VSF56	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1644-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1715-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1715-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1716-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3359 Idaho Bathrm	Non-ACM	ND		1716-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3361 Idaho Bathrm	Non-ACM	ND		1717-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3361 Idaho Bathrm	Non-ACM	ND		1717-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1741-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1741-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1742-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1742-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	749 LINDEN -- BATHRM	Non-ACM	ND		1743-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	749 LINDEN – BATHRM	Non-ACM	ND		1743-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1773-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1773-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1774-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1774-Mastic
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3411 AVACADO- 1ST - BATHRM	Non-ACM	ND		1775-Sheet Flooring
VSF56	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC	3411 AVACADO- 1ST - BATHRM	Non-ACM	ND		1775-Mastic
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1831-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1831-Mastic
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1832-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3459 Avacado-Bathroom	Non-ACM	ND		1832-Mastic
VSF56	6" Square Sheet Flooring with Mastic	3461 Avacado-Bathroom	Non-ACM	ND		1833-Sheet Flooring
VSF56	6" Square Sheet Flooring with Mastic	3461 Avacado-Bathroom	Non-ACM	ND		1833-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1857-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1857-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1858-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1858-Mastic
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1859-Sheet Flooring
VSF56	Top Layer 6" Square Sheet Floor w/Mastic	3489 Avacado Bathrm	Non-ACM	ND		1859-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1860-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1860-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1861-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1861-Mastic
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1862-Sheet Flooring
VSF56	Top Layer Small Triangle Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1862-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1892-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1892-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1893-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1893-Mastic
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1894-Sheet Flooring
VSF56	6" Square Sheet Flooring w/ Mastic	3474 Avacado Bathrm	Non-ACM	ND		1894-Mastic
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1082-Sheet Flooring
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1082-Mastic
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1083-Sheet Flooring
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1084-Sheet Flooring
VSF57	White Triangle Sheet Floor & Mastic	848 Peach St 1st Level Bathroom	Non-ACM	ND		1084-Mastic
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1202-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1203-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1203-Mastic
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1204-Vinyl Sheet Flooring
VSF57	White Top Layer: Small Triangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1204-Mastic



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1289-Mastic
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1290-Sheet Flooring
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1290-Mastic
VSF57	White small triangles white; beige w/ white mastic	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1291-Sheet Flooring
VSF57	White small triangles white; beige w/ white mastic	3488 Kentucky Level Bathroom	Non-ACM	ND		1291-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1387-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1387-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1388-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1388-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1389-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor w/Mastic	3117 Utah Kitchen	Non-ACM	ND		1389-Mastic
VSF57	White - Small Triangle Sheet Flooring	815 -Grape 1st - Kitchen	Non-ACM	ND		1502
VSF57	White - Small Triangle Sheet Flooring	815 Grape- 1st - Kitchen	Non-ACM	ND		1503
VSF57	White - Small Triangle Sheet Flooring	815 Grape- 1st - Kitchen	Non-ACM	ND		1504
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1535-Vinyl Sheet Flooring
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1536-Vinyl Sheet Flooring
VSF57	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1537-Vinyl Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1577-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1577-Mastic
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1578-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1578-Mastic
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1579-Sheet Flooring
VSF57	White Small Triangles Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	Non-ACM	ND		1579-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1616-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1616-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1617-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1617-Mastic
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1618-Sheet Flooring
VSF57	Top Layer Small Triangle Sheet Flooring w/Mastic	760 Blaine Alley Kitchen	Non-ACM	ND		1618-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah1st Floor Bathroom	Non-ACM	ND		1645-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1645-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1646-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1646-Mastic
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1647-Sheet Floor
VSF57	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1647-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1683-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1683-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1684-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1684-Mastic
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1685-Vinyl Sheet Flooring
VSF57	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	3325 Idaho1st Floor Bathroom	Non-ACM	ND		1685-Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1744-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1744-Mastic
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1745-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1745-Mastic
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1746-Sheet Flooring
VSF57	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL.	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1746-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1805-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1805-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1806-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3424 Avacado -Bathroom	Non-ACM	ND		1806-Mastic
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3422 Avacado -Bathroom	Non-ACM	ND		1807-Sheet Flooring
VSF57	Top Layer: Small Triangle Sheet Floor with Mastic	3422 Avacado -Bathroom	Non-ACM	ND		1807-Mastic
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1085-Mastic
VSF58	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1085-Sheet Flooring</b>
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1086-Mastic
VSF58	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1086-Sheet Flooring</b>
VSF58	Yellow Middle Layer Flower Sheet Floor w/ Mastic	848 Peach St 1st Level Middle Layer Kitchen	Non-ACM	ND		1087-Mastic
VSF58	<b>Yellow Middle Layer Flower Sheet Floor w/ Mastic</b>	<b>848 Peach St 1st Level Middle Layer Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1087-Sheet Flooring</b>
VSF58	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>821 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1124-Sheet Flooring</b>
VSF58	Bottom Middle Layer: Flower Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1124-Mastic
VSF58	Bottom Middle Layer: Flower Sheet Floor w/ Mastic	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1124-Backing Paper
VSF58	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1125-Sheet Flooring</b>
VSF58	<b>Bottom Middle Layer: Flower Sheet Floor w/ Mastic</b>	<b>823 Cherry St Level 1st - Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1126-Sheet Flooring</b>
VSF58	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>Florida St 1st Level Bottom Middle Layer: Kit</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1246-Sheet Flooring</b>
VSF58	Yellow Flower Floor Sheeting w/ Mastic	75 Florida St 1st Level Bottom Middle Layer: Kitc	Non-ACM	ND		1246-Mastic
VSF58	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>3479 Florida S 1st Level Bottom Layer: Kitche</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1247-Sheet Flooring</b>
VSF58	<b>Yellow Flower Floor Sheeting w/ Mastic</b>	<b>3479 Florida S 1st Level Bottom Layer: Kitche</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1248-Sheet Flooring</b>
VSF58	Yellow Flower Floor Sheeting w/ Mastic	3479 Florida S 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1248-Mastic
VSF58	<b>White flower pattern yellow w/ beige mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1292-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1292-Leveler
VSF58	<b>White flower pattern yellow w/ beige mastic</b>	<b>3488 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>1293-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1293-Leveler
VSF58	<b>White flower pattern yellow w/ beige mastic</b>	<b>3480 Kentucky 1st Level Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1294-Sheet Flooring</b>
VSF58	White flower pattern yellow w/ beige mastic	3480 Kentucky 1st Level Kitchen	Non-ACM	ND		1294-Leveler
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>3315 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1376</b>
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>Unit 3317-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1377</b>
VSF58	<b>Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic</b>	<b>3317 Utah-Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1378</b>
VSF58	<b>Bottom Middle Layer; Flower Sheet Floor</b>	<b>3342 Utah Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1418</b>
VSF58	<b>Bottom Middle Layer; Flower Sheet Floor</b>	<b>3342 Utah Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1419-Sheet Floor</b>
VSF58	Bottom Middle Layer; Flower Sheet Floor	3342 Utah Kitchen	Non-ACM	ND		1419-Floor Tile
VSF58	Bottom Middle Layer; Flower Sheet Floor	3342 Utah Kitchen	Non-ACM	ND		1419-Mastic

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF58	Bottom Middle Layer; Flower Sheet Floor	3342 Utah Kitchen	ACM	15%	Chrysotile	1420
VSF58	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER	Unit 842 Grape 1st Floor Kitchen	ACM	25%	Chrysotile	1538-Vinyl Sheet Flooring
VSF58	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER	Unit 840 Grape 1st Floor Kitchen	ACM	25%	Chrysotile	1539-Vinyl Sheet Flooring
VSF58	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1539-Mastic
VSF58	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER	Unit 840 Grape 1st Floor Kitchen	ACM	25%	Chrysotile	1540-Vinyl Sheet Flooring
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	ACM	40%	Chrysotile	1580-Sheet Flooring
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	Non-ACM	ND		1580-Mastic
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	ACM	40%	Chrysotile	1581-Sheet Flooring
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	876 Blaine Alley Kitchen	Non-ACM	ND		1581-Mastic
VSF58	White Middle layer: Brown Flower Sheet Flooring w/Mastic	878 Blaine Alley Bathroom	ACM	40%	Chrysotile	1582
VSF58	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	ACM	25%	Chrysotile	1648-Sheet Floor
VSF58	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	ACM	25%	Chrysotile	1649-Sheet Floor
VSF58	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC	3321 Utah 1st Floor Bathroom	ACM	25%	Chrysotile	1650-Sheet Floor
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3323 Idaho 1st Floor Bathroom	ACM	10%	Chrysotile	1686-Vinyl Sheet Flooring
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1686-Mastic
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	ACM	10%	Chrysotile	1687-Vinyl Sheet Flooring
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1687-Mastic
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1688-Vinyl Sheet Flooring
VSF58	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC	3325 Idaho 1st Floor Bathroom	Non-ACM	ND		1688-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1776-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1776-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1777-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1777-Mastic
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1778-Sheet Flooring
VSF58	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1778-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Vinyl Sheet Flooring
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1130-Vapor Paper
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Vinyl Sheet Flooring
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1131-Vapor Paper
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vinyl Sheet Flooring 1
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Mastic
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vinyl Sheet Flooring 2
VSF59	Bottom Layer: Beige Sheet Floor w/ Vapor Paper	823 Cherry St Level 1st - Bathroom	Non-ACM	ND		1132-Vapor Paper
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1298-Mastic
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1298-Sheet Flooring
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1299-Mastic
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1299-Sheet Flooring
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Mastic 1
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF59	Yellow a/w compact wood board; vapor paper	3480 Kentucky Kitchen	Non-ACM	ND		1300-Mastic 2
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1415-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1415-Mastic
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1416-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1416-Mastic
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1417-Sheet Floor
VSF59	Middle Layer: Yellow Sheet Floor w/Beige Mastic	3342 Utah Kitchen	Non-ACM	ND		1417-Mastic
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1499-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1499-Mastic
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1500-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1500-Mastic
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1501-Sheet Flooring
VSF59	Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	813 Grape- 1st - Bathrm	Non-ACM	ND		1501-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		122-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>122-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		122-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		123-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - SE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>123-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - SE	Non-ACM	ND		123-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		124-Mastic 1
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)</b>	<b>3334 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>124-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	3334 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		124-Mastic 2
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>141-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Mastic 1
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		141-Mastic 2
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - East</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>142-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Mastic 1
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		142-Mastic 2
<b>VSF6</b>	<b>Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)</b>	<b>3370 Idaho - Level 1 - Kitchen - SW</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>143-Sheet Flooring</b>
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		143-Vapor Barrier Paper
VSF6	Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		143-Mastic 2
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		190-Mastic 1
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen SW</b>	<b>ACM</b>	<b>40%</b>	<b>Chrysotile</b>	<b>190-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		190-Mastic 2
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		191-Mastic 1
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen West</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>191-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		191-Mastic 2
<b>VSF6</b>	<b>Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)</b>	<b>3429 Florida - Level 1 - Kitchen NE</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>192-Sheet Flooring</b>
VSF6	Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		192-Mastic

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom S	ACM	30%	Chrysotile	328-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom S	Non-ACM	ND		328-Mastic
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom SW	ACM	30%	Chrysotile	329-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom SW	Non-ACM	ND		329-Mastic
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom N	ACM	30%	Chrysotile	330-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern (bottom layer)	Unit 3384 Utah - Level 1 - Bathroom N	Non-ACM	ND		330-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	ACM	30%	Chrysotile	376-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	ACM	30%	Chrysotile	376-Vinyl Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		376-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	ACM	30%	Chrysotile	377-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	ACM	32%	Chrysotile	377-Vinyl Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - W	Non-ACM	ND		377-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - E	ACM	25%	Chrysotile	378-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Unit 3348 Utah - Level 1 - Kitchen - E	Non-ACM	ND		378-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - SE	Non-ACM	ND		435-Mastic
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - SE	ACM	30%	Chrysotile	435-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		436-Mastic 1
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - E	ACM	35%	Chrysotile	436-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Kitchen - E	Non-ACM	ND		436-Mastic 2
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Bathroom - N	ACM	15%	Chrysotile	437-Sheet Flooring
VSF6	Sheet flooring w/ brown flower pattern w/ brown mastic	Unit 766 Grape - Level 1 - Bathroom - N	Non-ACM	ND		437-Mastic
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	ACM	25%	Chrysotile	641-Sheet Flooring
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		641-Mastic
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	ACM	25%	Chrysotile	642-Sheet Flooring
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		642-Mastic
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	ACM	30%	Chrysotile	643-Sheet Flooring
VSF6	Sheet flooring brown flower pattern w/ black mastic	3446 Avocado - Level 1 - Bathroom N	Non-ACM	ND		643-Mastic
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3415 Florida Level 1 Bathroom East	ACM	25%	Chrysotile	727-Sheet Flooring
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3415 Florida Level 1 Bathroom East	ACCM	<1%	Chrysotile	727-Mastic
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND	0	727-Vapor Barrier
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)	Unit 3403 Florida Level 1 Bathroom East	ACM	30%	Chrysotile	730-Sheet Flooring
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)	Unit 3403 Florida Level 1 Bathroom East	Non-ACM	ND		730-Mastic
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)	Unit 3374 Idaho Level 1 Bathroom West	ACM	30%	Chrysotile	743-Sheet Flooring
VSF6	Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		743-Mastic
VSF6	Sheet Flooring Pebble Patern w/ Blk Mastic (3rd & Bottom Layer)	Unit 3380 Idaho Level 1 Bathroom West	ACM	25%	Chrysotile	744-Sheet Flooring
VSF6	Sheet Flooring Pebble Patern w/ Blk Mastic (3rd & Bottom Layer)	Unit 3380 Idaho Level 1 Bathroom West	Non-ACM	ND		744-Mastic
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1199-Vinyl Sheet Flooring
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1199-Mastic
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3416 Florida St 1st Level Bathroom	Non-ACM	ND		1200-Vinyl Sheet Flooring
VSF60	White Small Rectangles Sheet Fl. w/ Mastic	3408 Florida St 1st Level Bathroom	Non-ACM	ND		1201-Vinyl Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah Kitchen	Non-ACM	ND		1367-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah -Kitchen	Non-ACM	ND		1367-Mastic
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah -Bathrm	Non-ACM	ND		1368-Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1368-Mastic
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1369-Sheet Flooring
VSF60	Top Layer: Small Rectangle Sheet Floor w/Mastic	3315 Utah-Bathrm	Non-ACM	ND		1369-Mastic
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1447-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1447-Mastic
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1448-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1448-Mastic
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1449-Sheet Flooring
VSF60	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	725 Grape 1st Floor Bathroom	Non-ACM	ND		1449-Mastic
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1505-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1505-Mastic
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1506-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1506-Mastic
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1507-Sheet Flooring
VSF60	White - Rectangle Sheet Floor w/ Mastic	815 Grape- 1st - Bathrm	Non-ACM	ND		1507-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1544-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1544-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1545-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1545-Mastic
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1546-Vinyl Sheet Flooring
VSF60	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC	Unit 840 Grape 1st Floor Bathroom	Non-ACM	ND		1546-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1895-Felt
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1896-Felt
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Sheet Flooring
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Mastic
VSF60	Small Rectangle Sheet Flooring w/ Mastic	3472 Avacado Bathrm	Non-ACM	ND		1897-Felt
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3475 Florida St 1st Level Middle Layer: Kitchen	Non-ACM	ND		1243-Sheet Flooring
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3475 Florida St 1st Level Middle Layer: Kitchen	Non-ACM	ND		1243-Mastic
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1244-Sheet Flooring</b>
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>1244-Mastic</b>
VSF61	Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	3479 Florida S 1st Level Middle Layer: Kitchen	Non-ACM	ND		1245-Mastic
<b>VSF61</b>	<b>Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic</b>	<b>3479 Florida S 1st Level Middle Layer: Kitchen</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>1245-Sheet Flooring</b>
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1331-Flooring
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1331-Mastic
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1332-Flooring

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3407 Kentucky Kitchen	Non-ACM	ND		1332-Mastic
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3401 Kentucky Kitchen	Non-ACM	ND		1333-Flooring
VSF61	Vinyl Sheet Flooring, Beige w /Brown Design with Beige Mastic	3401 Kentucky Kitchen	Non-ACM	ND		1333-Mastic
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1459-Sheet Flooring</b>
VSF61	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1459-Mastic
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1460-Sheet Flooring</b>
VSF61	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1460-Mastic
<b>VSF61</b>	<b>BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1461-Sheet Flooring</b>
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1866
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1867
VSF61	Bottom Middle Layer Brown Design Sheet Fl w/Mastic	3491 Avacado Bathrm	Non-ACM	ND		1868
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1462-Backing</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1462-Vapor
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>1463-Backing</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1463-Vapor
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Sheet Flooring
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Mastic
<b>VSF62</b>	<b>GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC &amp; VAPOR-BOTTOM LAYER</b>	<b>727 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>22%</b>	<b>Chrysotile</b>	<b>1464-Backing</b>
VSF62	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	727 Grape 1st Floor Kitchen	Non-ACM	ND		1464-Vapor
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1651-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1651-Vapor Barrier
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1652-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1652-Vapor Barrier
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1653-Sheet Flooring
VSF62	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR	3321 Utah 1st Floor Bathroom	Non-ACM	ND		1653-Vapor Barrier
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1779-Vapor
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1780-Vapor
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Sheet Flooring
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Mastic
VSF62	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING	3413 AVACADO- 1ST - BATHRM	Non-ACM	ND		1781-Vapor
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1453-Sheet Flooring</b>
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1453-Mastic
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>12%</b>	<b>Chrysotile</b>	<b>1454-Sheet Flooring</b>

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1454-Mastic
<b>VSF63</b>	<b>BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER</b>	<b>725 Grape 1st Floor Kitchen</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1455-Sheet Flooring</b>
VSF63	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	725 Grape 1st Floor Kitchen	Non-ACM	ND		1455-Mastic
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1869-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Vapor 1
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Vapor 2
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1869-Other
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1870-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1870-Vapor
VSF69	<b>Bottom Layer Yellow Sheet Floor w/Mastic &amp; Vapor</b>	<b>3491 Avacado Bathrm</b>	<b>ACM</b>	<b>15%</b>	<b>Chrysotile</b>	<b>1871-Sheet Flooring</b>
VSF69	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor	3491 Avacado Bathrm	Non-ACM	ND		1871-Vapor
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Mastic 1
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - NE	Non-ACM	ND		135-Mastic 2
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Mastic 1
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		136-Mastic 2
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		137-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ white mastic (2nd layer)	3370 Idaho - Level 1 - Kitchen - SW	Non-ACM	ND		137-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		187-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen SW	Non-ACM	ND		187-Sheet Flooring
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		188-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen West	Non-ACM	ND		188-Sheet Flooring
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		189-Mastic
VSF7	Sheet flooring w. brown specs w/ white mastic ( second layer)	3429 Florida - Level 1 - Kitchen NE	Non-ACM	ND		189-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		219-Mastic
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		219-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		220-Mastic
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		220-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Mastic 1
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Sheet Flooring
VSF7	Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		221-Mastic 2
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		244-Vinyl Floor Tile
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		245-Vinyl Floor Tile
VSF7	Sheet flooring w/ brown specs w/ beige mastic (2nd layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		246-Sheet Flooring
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		528-Floor Tile
<b>VSF7</b>	<b>Sheet flooring w/ brown specks w/ mastic (3rd layer)</b>	<b>861 Cherry - Level 1 - Kitchen NW</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>528-Mastic</b>
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen NW	Non-ACM	ND		528-Sheet Flooring
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		529-Floor Tile
<b>VSF7</b>	<b>Sheet flooring w/ brown specks w/ mastic (3rd layer)</b>	<b>861 Cherry - Level 1 - Kitchen W</b>	<b>ACM</b>	<b>2%</b>	<b>Chrysotile</b>	<b>529-Mastic</b>
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen W	Non-ACM	ND		529-Sheet Flooring



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		530-Mastic
VSF7	Sheet flooring w/ brown specks w/ mastic (3rd layer)	861 Cherry - Level 1 - Kitchen S	Non-ACM	ND		530-Sheet Flooring
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Mastic
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Sheet Flooring 1
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>661-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		661-Vapor Barrier
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Mastic
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Sheet Flooring 1
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>25%</b>	<b>Chrysotile</b>	<b>662-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		662-Vapor Barrier
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Sheet Flooring 1
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Mastic
<b>VSF7</b>	<b>Sheet flooring w/ brown specs w/ yellow mastic &amp; vapor barrier (2nd layer)</b>	<b>3452 Avocado - Level 1 - Bathroom central</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>663-Sheet Flooring 2</b>
VSF7	Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	3452 Avocado - Level 1 - Bathroom central	Non-ACM	ND		663-Vapor Barrier
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Floor Tile
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Mastic
VSF7	Sheet Flooring w/ Brown Specks + Yellow Mastic (5th Layer)	Unit 3415 Florida Level 1 Bathroom East	Non-ACM	ND		726-Sheet Flooring
VSF7	Sheet Floor w/ Brown Specks w/ Yellow Mastic (4th Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		742-Mastic
VSF7	Sheet Floor w/ Brown Specks w/ Yellow Mastic (4th Layer)	Unit 3374 Idaho Level 1 Bathroom West	Non-ACM	ND		742-Sheet Flooring
VSF7	Sheet Flooring w/ Brown Specks & Black Mastic (Bottom Layer)	Unit 3364 Utah Level 1 Bathroom West	Non-ACM	ND		754-Sheet Flooring 1
VSF7	Sheet Flooring w/ Brown Specks & Black Mastic (Bottom Layer)	Unit 3364 Utah Level 1 Bathroom West	Non-ACM	ND		754-Mastic
<b>VSF7</b>	<b>Sheet Flooring w/ Brown Specks &amp; Black Mastic (Bottom Layer)</b>	<b>Unit 3364 Utah Level 1 Bathroom West</b>	<b>ACM</b>	<b>30%</b>	<b>Chrysotile</b>	<b>754-Sheet Flooring 2</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Mastic 1
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		222-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		223-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	3367 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		224-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Mastic 1
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Vinyl Floor Tile
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - East	Non-ACM	ND		247-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		248-Vinyl Floor Tile
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		248-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3341 Utah - Level 1 - Kitchen - West	Non-ACM	ND		249-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Sheet Flooring

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**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - West	Non-ACM	ND		286-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - NE</b>	<b>ACM</b>	<b>3%</b>	<b>Chrysotile</b>	<b>287-Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - NE	Non-ACM	ND		287-Mastic 2
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ black mastic &amp; vapor barrier (bottom layer)</b>	<b>Unit 3308 Utah - Level 1 - Kitchen - East</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>288-Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3308 Utah - Level 1 - Kitchen - East	Non-ACM	ND		288-Mastic 2
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		325-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - S	Non-ACM	ND		325-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		326-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		326-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		327-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		327-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink w/ black mastic &amp; vapor (bottom layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>451-Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451- Vapor Barrier
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		451- Mastic 2
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink w/ black mastic &amp; vapor (bottom layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>452- Sheet Flooring 1</b>
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink w/ black mastic &amp; vapor (bottom layer)</b>	<b>873 Grape - Level 1 - Kitchen S</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>452- Mastic 1</b>
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452-- Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452- Vapor Barrier
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen S	Non-ACM	ND		452- Mastic 2
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink w/ black mastic &amp; vapor (bottom layer)</b>	<b>873 Grape - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>453-Sheet Flooring 1</b>
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Mastic
VSF8	Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	873 Grape - Level 1 - Kitchen N	Non-ACM	ND		453-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ blk mastic &amp; vapor barrier (4th layers)</b>	<b>786 Blaine - Level 1 - Kitchen W</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>489- Sheet Flooring 1</b>
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ blk mastic &amp; vapor barrier (4th layers)</b>	<b>786 Blaine - Level 1 - Kitchen W</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>489-Mastic</b>
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		489-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		489-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ blk mastic &amp; vapor barrier (4th layers)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>20%</b>	<b>Chrysotile</b>	<b>490- Sheet Flooring 1</b>
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ blk mastic &amp; vapor barrier (4th layers)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACCM</b>	<b>&lt;1%</b>	<b>Chrysotile</b>	<b>490-Mastic</b>
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		490-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		490-Vapor Barrier
<b>VSF8</b>	<b>Sheet flooring w/ blue &amp; pink specs w/ blk mastic &amp; vapor barrier (4th layers)</b>	<b>786 Blaine - Level 1 - Kitchen N</b>	<b>ACM</b>	<b>35%</b>	<b>Chrysotile</b>	<b>491-Sheet Flooring 1</b>
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Sheet Flooring 2
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	786 Blaine - Level 1 - Kitchen N	Non-ACM	ND		491-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		565-Sheet Flooring

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - W	Non-ACM	ND		565-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - S	Non-ACM	ND		566-Vapor Barrier
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Mastic
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Sheet Flooring
VSF8	Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	3419 Kentucky - Level 1 - Kitchen - E	Non-ACM	ND		567-Vapor Barrier
VSF9	Sheet flooring flower frame design w/ yellow mastic (2nd layer)	Unit 766 Grape - Level 1 - Bathroom - N	ACM	20%	Chrysotile	432-Sheet Flooring
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - E	ACM	20%	Chrysotile	433-Sheet Flooring
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - E	ACCM	<1%	Chrysotile	433-Mastic
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - N	ACM	15%	Chrysotile	434-Sheet Flooring
VSF9	Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Unit 766 Grape - Level 1 - Kitchen - N	ACCM	<1%	Chrysotile	434-Mastic
WP1	Window putty	3419 Kentucky - Level 1 - Exterior E	Non-ACM	ND		571
WP1	Window putty	3419 Kentucky - Level 1 - Exterior SE	Non-ACM	ND		572
WP1	Window putty	3419 Kentucky - Level 1 - Exterior N	Non-ACM	ND		573
WP1	Window putty	890 Blaine - Level 1 - N	Non-ACM	ND		603
WP1	Window putty	890 Blaine - Level 1 - W	Non-ACM	ND		604
WP1	Window putty	890 Blaine - Level 1 - SW	Non-ACM	ND		605
WP1	Window putty	3446 Avocado - Level 1 - Exterior NW	Non-ACM	ND		615
WP1	Window putty	3446 Avocado - Level 1 - Exterior W	Non-ACM	ND		616
WP1	Window putty	3446 Avocado - Level 1 - Exterior SE	Non-ACM	ND		617
WP1	Window Putty	Unit 860 Grape Level 1 Exterior NW	Non-ACM	ND		708
WP1	Window Putty	Unit 860 Grape Level 1 Exterior SW	Non-ACM	ND		709
WP1	Window Putty	Unit 860 Grape Level 1 Exterior NE	Non-ACM	ND		710
WPF1	White Plaster	811 Plum St Living Room North	Non-ACM	ND		24
WPF1	White Plaster	811 Plum St Bedroom 2 North	Non-ACM	ND		25
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		26
WPF1	White Plaster	811 Plum St Kitchen North	Non-ACM	ND		27
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		28
WPF1	White Plaster	811 Plum St Living Room East	Non-ACM	ND		54-Skim Coat
WPF1	White Plaster	811 Plum St Living Room East	Non-ACM	ND		54-Plaster
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		55-Plaster
WPF1	White Plaster	811 Plum St Bedroom 1 East	Non-ACM	ND		55-Drywall
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Skim Coat
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Plaster
WPF1	White Plaster	811 Plum St Bedroom 2 South	Non-ACM	ND		56-Drywall
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Skim Coat
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Plaster
WPF1	White Plaster	811 Plum St Kitchen South	Non-ACM	ND		57-Drywall
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Skim Coat
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Plaster

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	White Plaster	811 Plum St Hallway South	Non-ACM	ND		58-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Hall - North	Non-ACM	ND		84-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Hall - North	Non-ACM	ND		84-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 1 - West	Non-ACM	ND		85-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 1 - West	Non-ACM	ND		85-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		86-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Kitchen - East	Non-ACM	ND		86-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bath Rm - N.West	Non-ACM	ND		87-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bath Rm - N.West	Non-ACM	ND		87-Drywall
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 2 - East	Non-ACM	ND		88-Plaster
WPF1	Plaster	3398 Idaho - Level 1 - Bedroom 2 - East	Non-ACM	ND		88-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Living room - NW	Non-ACM	ND		108-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Living room - NW	Non-ACM	ND		108-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Kitchen - South	Non-ACM	ND		109-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Kitchen - South	Non-ACM	ND		109-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		110-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 1 - East	Non-ACM	ND		110-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		111-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Bathroom - South	Non-ACM	ND		111-Drywall
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Skim Coat
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Plaster
WPF1	Plaster	3334 Idaho - Level 1 - Bedroom 2 - NE	Non-ACM	ND		112-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Living room - SW	Non-ACM	ND		144-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Living room - SW	Non-ACM	ND		144-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		145-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 1 - South	Non-ACM	ND		145-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 2 - North	Non-ACM	ND		146-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bedroom 2 - North	Non-ACM	ND		146-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		147-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Bathroom SW	Non-ACM	ND		147-Drywall
WPF1	Plaster	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		148-Plaster
WPF1	Plaster	3370 Idaho - Level 1 - Kitchen - North	Non-ACM	ND		148-Drywall
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 2 - North	Non-ACM	ND		173-Skim Coat
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 2 - North	Non-ACM	ND		173-Plaster
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 2 - North	Non-ACM	ND		173-Drywall
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 1 - East	Non-ACM	ND		174-Skim Coat
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 1 - East	Non-ACM	ND		174-Plaster
WPF1	Plaster	3429 Florida - Level 1 - Bedroom 1 - East	Non-ACM	ND		174-Drywall
WPF1	Plaster	3429 Florida - Level 1 - Living room - NE	Non-ACM	ND		175-Skim Coat
WPF1	Plaster	3429 Florida - Level 1 - Living room - NE	Non-ACM	ND		175-Plaster
WPF1	Plaster	3429 Florida - Level 1 - Living room - NE	Non-ACM	ND		175-Drywall

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Plaster
WPF1	Plaster	3429 Florida - Level 1- Hall - SE	Non-ACM	ND		176-Drywall
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Skim Coat
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Plaster
WPF1	Plaster	3429 Florida - Level 1- Kitchen- South	Non-ACM	ND		177-Drywall
WPF1	Plaster	3367 Utah - Level 1 - Living room - North	Non-ACM	ND		196-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Living room - North	Non-ACM	ND		196-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Kitchen - East	Non-ACM	ND		197-Drywall
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Hallway - NE	Non-ACM	ND		198-Drywall
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Skim Coat
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Plaster
WPF1	Plaster	3367 Utah - Level 1 - Bedroom 2 - North	Non-ACM	ND		199-Drywall
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Skim Coat
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Plaster
WPF1	Plaster ceiling	3367 Utah - Level 1 - Bedroom 1 - West	Non-ACM	ND		200-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Living room - North	Non-ACM	ND		232-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Kitchen - SE	Non-ACM	ND		233-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Bedroom 1 - South	Non-ACM	ND		234-Drywall
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Skim Coat
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Plaster
WPF1	Plaster	3341 Utah - Level 1 - Hallway - NE	Non-ACM	ND		235-Drywall
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Skim Coat
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Plaster
WPF1	Plaster ceiling	3341 Utah - Level 1 - Bedroom 2 - West	Non-ACM	ND		236-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Livig room - South	Non-ACM	ND		269-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Kitchen North	Non-ACM	ND		270-Drywall

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Hall - NW	Non-ACM	ND		271-Drywall
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Skim Coat
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Plaster
WPF1	Plaster ceiling	Unit 3308 Utah - Level 1 - Bath - South	Non-ACM	ND		272-Drywall
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Skim Coat
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Plaster
WPF1	Plaster	Unit 3308 Utah - Level 1 - Bedroom 2 - South	Non-ACM	ND		273-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		298-Joint Compound
WPF1	Plaster	Unit 3384 Utah - Level 1 - Living room - East	Non-ACM	ND		298-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Kitchen NW	Non-ACM	ND		299-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Hall NE	Non-ACM	ND		300-Drywall
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Skim Coat
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Plaster
WPF1	Plaster	Unit 3384 Utah - Level 1 - Bedroom 1 - East	Non-ACM	ND		301-Drywall
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Skim Coat
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Plaster
WPF1	Plaster ceiling	Unit 3384 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		302-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Living room - N	Non-ACM	ND		340-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Kitchen SW	Non-ACM	ND		341-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Hall - NW	Non-ACM	ND		342-Drywall
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Skim Coat
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Plaster
WPF1	Plaster	Unit 3350 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		343-Drywall
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Skim Coat
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Plaster
WPF1	Plaster Ceiling	Unit 3350 Utah - Level 1 - Bathroom - SE	Non-ACM	ND		344-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Living room - NW	Non-ACM	ND		382-Drywall

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bedroom 1 - S	Non-ACM	ND		383-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Kitchen - S	Non-ACM	ND		384-Drywall
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Skim Coat
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Plaster
WPF1	Plaster	Unit 3348 Utah - Level 1 - Bathroom - N	Non-ACM	ND		385-Drywall
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Skim Coat
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Plaster
WPF1	Plaster Ceiling	Unit 3348 Utah - Level 1 - Bedroom 2 - SE	Non-ACM	ND		386-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Living room - E	Non-ACM	ND		409-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Living room - E	Non-ACM	ND		409-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		410-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Kitchen - W	Non-ACM	ND		410-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 2 - E	Non-ACM	ND		411-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 2 - E	Non-ACM	ND		411-Drywall
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 1 - S	Non-ACM	ND		412-Plaster
WPF1	Plaster	Unit 766 Grape - Level 1 - Bedroom 1 - S	Non-ACM	ND		412-Drywall
WPF1	Plaster Ceiling	Unit 766 Grape - Level 1 - Bathroom - S	Non-ACM	ND		413
WPF1	Plaster	873 Grape - Level 1 - Kitchen E	Non-ACM	ND		454-Plaster
WPF1	Plaster	873 Grape - Level 1 - Kitchen E	Non-ACM	ND		454-Drywall
WPF1	Plaster	873 Grape - Level 1 - Bedroom 1 W	Non-ACM	ND		455-Plaster
WPF1	Plaster	873 Grape - Level 1 - Bedroom 1 W	Non-ACM	ND		455-Drywall
WPF1	Plaster	873 Grape - Level 1 - Bedroom 2 W	Non-ACM	ND		456-Plaster
WPF1	Plaster	873 Grape - Level 1 - Living room W	Non-ACM	ND		457-Plaster
WPF1	Plaster	873 Grape - Level 1 - Living room W	Non-ACM	ND		457-Drywall
WPF1	Plaster Ceiling	873 Grape - Level 1 - Bathroom S	Non-ACM	ND		458
WPF1	Plaster	786 Blaine - Level 1 - Living room E	Non-ACM	ND		472-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Living room E	Non-ACM	ND		472-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 1 E	Non-ACM	ND		473-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 1 E	Non-ACM	ND		473-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		474-Plaster
WPF1	Plaster	786 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		474-Drywall
WPF1	Plaster	786 Blaine - Level 1 - Kitchen W	Non-ACM	ND		475-Drywall
WPF1	Plaster ceiling	786 Blaine - Level 1 - Bathroom N	Non-ACM	ND		476
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Skim Coat
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Living room - W	Non-ACM	ND		505-Drywall
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Skim Coat

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Hall SW	Non-ACM	ND		506-Drywall
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Skim Coat
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 2 - N	Non-ACM	ND		507-Drywall
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 1 - W	Non-ACM	ND		508-Plaster
WPF1	Plaster	861 Cherry - Level 1 - Bedroom 1 - W	Non-ACM	ND		508-Drywall
WPF1	Plaster ceiling	861 Cherry - Level 1 - Bathroom N	Non-ACM	ND		509-Plaster
WPF1	Plaster ceiling	861 Cherry - Level 1 - Bathroom N	Non-ACM	ND		509-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Living room SW	Non-ACM	ND		583-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Living room SW	Non-ACM	ND		583-Drywall
WPF1	Plaster	3434 Kentcuky - Level 1 - Kitchen N	Non-ACM	ND		584-Plaster
WPF1	Plaster	3434 Kentcuky - Level 1 - Kitchen N	Non-ACM	ND		584-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Hall NW	Non-ACM	ND		585-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Hall NW	Non-ACM	ND		585-Drywall
WPF1	Plaster	3434 Kentucky - Level 1 - Bedroom 2 E	Non-ACM	ND		586-Plaster
WPF1	Plaster	3434 Kentucky - Level 1 - Bedroom 2 E	Non-ACM	ND		586-Drywall
WPF1	Plaster ceiling	3434 Kentucky - Level 1 - Bathroom SE	Non-ACM	ND		587-Plaster
WPF1	Plaster ceiling	3434 Kentucky - Level 1 - Bathroom SE	Non-ACM	ND		587-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Texture
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Living room N	Non-ACM	ND		598-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Texture
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 1 W	Non-ACM	ND		599-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Texture
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Bedroom 2 E	Non-ACM	ND		600-Drywall
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Texture
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Plaster
WPF1	Plaster	890 Blaine - Level 1 - Hallway NW	Non-ACM	ND		601-Drywall
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Texture
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Plaster
WPF1	Plaster ceiling	890 Blaine - Level 1 - Bathroom SE	Non-ACM	ND		602-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Living room - E	Non-ACM	ND		644-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Bedroom 1 E	Non-ACM	ND		645-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Skim Coat



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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Hallway NW	Non-ACM	ND		646-Drywall
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Skim Coat
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Plaster
WPF1	Plaster	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		647-Drywall
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Skim Coat
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Plaster
WPF1	Plaster ceiling	3452 Avocado - Level 1 - Bathroom S	Non-ACM	ND		648-Drywall
WPF1	Plaster	810 Peach - Level 1 - Kitchen W	Non-ACM	ND		677-Plaster
WPF1	Plaster	810 Peach - Level 1 - Kitchen W	Non-ACM	ND		677-Drywall
WPF1	Plaster	810 Peach - Level 1 - Bathroom 1 NE	Non-ACM	ND		678-Plaster
WPF1	Plaster	810 Peach - Level 1 - Bathroom 1 NE	Non-ACM	ND		678-Drywall
WPF1	Plaster	810 Peach - Level 1 - Bedroom 2 - S	Non-ACM	ND		679-Plaster
WPF1	Plaster	810 Peach - Level 1 - Bedroom 2 - S	Non-ACM	ND		679-Drywall
WPF1	Plaster	810 Peach - Level 1 - Hallway NW	Non-ACM	ND		680-Plaster
WPF1	Plaster	810 Peach - Level 1 - Hallway NW	Non-ACM	ND		680-Drywall
WPF1	Plaster ceiling	810 Peach - Level 1 - Bedroom 1 SE	Non-ACM	ND		681-Plaster
WPF1	Plaster ceiling	810 Peach - Level 1 - Bedroom 1 SE	Non-ACM	ND		681-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Living room - E	Non-ACM	ND		544-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Living room - E	Non-ACM	ND		544-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Hallway NW	Non-ACM	ND		545-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Hallway NW	Non-ACM	ND		545-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		546-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 1 - E	Non-ACM	ND		546-Drywall
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Texture
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Plaster
WPF2	Plaster w/ heavy texture	3419 Kentucky - Level 1 - Bedroom 2 - N	Non-ACM	ND		547-Drywall
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Texture
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Plaster
WPF2	Plaster w/ heavy texture ceiling	3419 Kentucky - Level 1 - Bathroom SW	Non-ACM	ND		548-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Living room - S	Non-ACM	ND		624-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		625-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Kitchen SE	Non-ACM	ND		625-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Hall W	Non-ACM	ND		626-Drywall
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bedroom E	Non-ACM	ND		627-Drywall

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MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Texture
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Plaster
WPF2	Plaster heavy texture	3446 Avocado - Level 1 - Bathroom NW	Non-ACM	ND		628-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Kitchen West	Non-ACM	ND		694-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 2 South	Non-ACM	ND		695-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Bedroom 1 East	Non-ACM	ND		696-Drywall
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Paint/Coating
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Plaster
WPF2	Plaster Heavy Texture	Unit 860 Grape Level 1 Hallway NW	Non-ACM	ND		697-Drywall
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Paint/Coating
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Plaster
WPF2	Plaster Heavy Texture Ceiling	Unit 860 Grape Level 1 Bathroom South	Non-ACM	ND		698-Drywall
WPF50	Plaster w/ button board	851 Plum St- Level 1st- N Center living room	Non-ACM	ND		1000-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- N Center living room	Non-ACM	ND		1000-Button Board
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bedroom 2	Non-ACM	ND		1001-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bedroom 2	Non-ACM	ND		1001-Button Board
WPF50	Plaster w/ button board	851 Plum St Level 1st- W ceiling of bedroom 1	Non-ACM	ND		1002-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- W ceiling of bedroom 1	Non-ACM	ND		1002-Button Board
WPF50	Plaster w/ button board	851 Plum St Level 1st- S center - living room	Non-ACM	ND		1003-Plaster
WPF50	Plaster w/ button board	849 Plum St - Level 1st- S center - living room	Non-ACM	ND		1003-Button Board
WPF50	Plaster w/ button board	849 Plum St- Level 1st- W center - bath room	Non-ACM	ND		1004-Plaster
WPF50	Plaster w/ button board	849 Plum St- Level 1st- W center - bath room	Non-ACM	ND		1004-Buttonboard
WPF50	Plaster w/ button board	849 Plum St Level 1st- S center - bedroom 2	Non-ACM	ND		1005-Plaster
WPF50	Plaster w/ button board	849 Plum St- Level 1st- S center - bedroom 2	Non-ACM	ND		1005-Buttonboard
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bathroom	Non-ACM	ND		1006-Plaster
WPF50	Plaster w/ button board	851 Plum St- Level 1st- NE corner of bathroom	Non-ACM	ND		1006-Buttonboard
WPF50	Smooth drywall w/ joint compound	851 Plum St-- Level 1st- SE corner of kitchen	Non-ACM	ND		1007-Joint Compound
WPF50	Smooth drywall w/ joint compound	851 Plum St-- Level 1st- SE corner of kitchen	Non-ACM	ND		1007-Drywall
WPF50	Smooth drywall w/ joint compound	849 Plum St- Level 1st- SW corner of kitchen	Non-ACM	ND		1008-Joint Compound
WPF50	Smooth drywall w/ joint compound	849 Plum St- Level 1st- SW corner of kitchen	Non-ACM	ND		1008-Drywall
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Living Room	Non-ACM	ND		1054-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Plaster

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White Plaster w/ Button	850 Peach St 1st Level Kitchen	Non-ACM	ND		1055-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 2	Non-ACM	ND		1056-Button Board
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Skim Coat
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Plaster
WPF50	White Plaster w/ Button	850 Peach St 1st Level Bedroom 1	Non-ACM	ND		1057-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Kitchen	Non-ACM	ND		1058-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Kitchen	Non-ACM	ND		1058-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Living Room	Non-ACM	ND		1059-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Living Room	Non-ACM	ND		1059-Button Board
WPF50	White Plaster w/ Button	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1060-Plaster
WPF50	White Plaster w/ Button	848 Peach St 1st Level Bedroom 2	Non-ACM	ND		1060-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1099-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Living Room	Non-ACM	ND		1099-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1100-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1100-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1101-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Bedroom 2	Non-ACM	ND		1101-Button Board
WPF50	Plaster w/Button	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1102-Plaster
WPF50	Plaster w/Button	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1102-Button Board
WPF50	Plaster w/Button	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1103-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Living Room	Non-ACM	ND		1103-Button Board
WPF50	Plaster w/Button	823 Cherry St Level 1st - Hall	Non-ACM	ND		1104-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Hall	Non-ACM	ND		1104-Buttonboard
WPF50	Plaster w/Button	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1105-Plaster
WPF50	Plaster w/Button	823 Cherry St Level 1st - Bedroom 1	Non-ACM	ND		1105-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Living Room	Non-ACM	ND		1144-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 1	Non-ACM	ND		1145-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1146-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1146-Buttonboard
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Skim Coat
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Plaster
WPF50	White Plaster w/ Button	801 Cherry St 1st Level Kitchen	Non-ACM	ND		1147-Buttonboard
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1148-Plaster
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1148-Buttonboard
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1149-Plaster

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Bedroom 2	Non-ACM	ND		1149-Buttonboard
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Skim Coat
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Plaster
WPF50	White Plaster w/ Button	803 Cherry St 1st Level Living Room	Non-ACM	ND		1150-Buttonboard
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1180-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Living Rm	Non-ACM	ND		1180-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1181-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 2	Non-ACM	ND		1181-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Ceiling: Bathroom	Non-ACM	ND		1182-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Ceiling: Bathroom	Non-ACM	ND		1182-Button Board
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1183-Plaster
WPF50	White Plaster w/ Button	3416 Florida St 1st Level Bedrm 1	Non-ACM	ND		1183-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1184-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Living Rm	Non-ACM	ND		1184-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1185-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1185-Button Board
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1186-Plaster
WPF50	White Plaster w/ Button	3408 Florida St 1st Level Bedrm 2	Non-ACM	ND		1186-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1228-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Living Rm	Non-ACM	ND		1228-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Kitchen	Non-ACM	ND		1229-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Kitchen	Non-ACM	ND		1229-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Bathroom	Non-ACM	ND		1230-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Bathroom	Non-ACM	ND		1230-Button Board
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Ceiling: Bedrm 1	Non-ACM	ND		1231-Plaster
WPF50	White Plaster w/ Button	3475 Florida St 1st Level Ceiling: Bedrm 1	Non-ACM	ND		1231-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Living Rm	Non-ACM	ND		1232-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Living Rm	Non-ACM	ND		1232-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 2	Non-ACM	ND		1233-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 2	Non-ACM	ND		1233-Button Board
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 1	Non-ACM	ND		1234-Plaster
WPF50	White Plaster w/ Button	3479 Florida St 1st Level Bedrm 1	Non-ACM	ND		1234-Button Board
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1267-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Living Rm	Non-ACM	ND		1267-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Skim Coat
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1268-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Skim Coat
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 1	Non-ACM	ND		1269-Buttonboard
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Skim Coat

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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Plaster
WPF50	White plaster w/buttonboard	3488 Kentucky 1st Level Bedrm 2	Non-ACM	ND		1270-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1271-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Living Rm	Non-ACM	ND		1271-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Skim Coat
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bathroom	Non-ACM	ND		1272-Buttonboard
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bedrm 1, Ceiling	Non-ACM	ND		1273-Plaster
WPF50	White plaster w/buttonboard	3480 Kentucky 1st Level Bedrm 1, Ceiling	Non-ACM	ND		1273-Buttonboard
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Living Rm.	Non-ACM	ND		1309-Button
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Kitchen	Non-ACM	ND		1310-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1311-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 1	Non-ACM	ND		1312-Button
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Living Rm	Non-ACM	ND		1313-Button
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Plaster
WPF50	White Plaster with Button Board	3401 Kentucky Kitchen (Ceiling)	Non-ACM	ND		1314-Button
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1315-Plaster
WPF50	White Plaster with Button Board	3407 Kentucky Bed Rm 2	Non-ACM	ND		1315-Plaster
WPF50	White Plaster with Button Board	3407 KentuckyBed Rm 2	Non-ACM	ND		1315-Button
WPF50	Plaster w/Button	3315 Utah -Living Room	Non-ACM	ND		1348-Plaster
WPF50	Plaster w/Button	3315 Utah Living Room	Non-ACM	ND		1348-Drywall
WPF50	Plaster w/Button	3315 Utah -Kitchen	Non-ACM	ND		1349-Plaster
WPF50	Plaster w/Button	U3315 Utah-Kitchen	Non-ACM	ND		1349-Drywall
WPF50	Plaster w/Button	3315 Utah-Ceiling Bedrm 2	Non-ACM	ND		1350-Plaster
WPF50	Plaster w/Button	3315 Utah-Ceiling Bedrm 2	Non-ACM	ND		1350-Drywall
WPF50	Plaster w/Button	3315 Utah-Bathrm	Non-ACM	ND		1351-Plaster
WPF50	Plaster w/Button	3315 Utah-Bathrm	Non-ACM	ND		1351-Drywall
WPF50	Plaster w/Button	3317 Utah Living Rm	Non-ACM	ND		1352-Plaster
WPF50	Plaster w/Button	3317 Utah-Living Rm	Non-ACM	ND		1352-Drywall
WPF50	Plaster w/Button	3317 Utah-Bedrm 2	Non-ACM	ND		1353-Plaster

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/Button	3317 Utah-Bedrm 2	Non-ACM	ND		1353-Drywall
WPF50	Plaster w/Button	3317 Utah-Bedrm 1	Non-ACM	ND		1354-Plaster
WPF50	Plaster w/Button	3317 Utah-Bedrm 1	Non-ACM	ND		1354-Drywall
WPF50	Plaster W/Button	3342 Utah Living Rm	Non-ACM	ND		1393-Plaster
WPF50	Plaster W/Button	3342 Utah Living Rm	Non-ACM	ND		1393-Drywall
WPF50	Plaster W/Button	3342 Utah Kitchen	Non-ACM	ND		1394-Plaster
WPF50	Plaster W/Button	3342 Utah Kitchen	Non-ACM	ND		1394-Drywall
WPF50	Plaster W/Button	3342 Utah Bedrm1	Non-ACM	ND		1395-Plaster
WPF50	Plaster W/Button	3342 Utah Bedrm1	Non-ACM	ND		1395-Drywall
WPF50	Plaster W/Button	3342 Utah Bedrm2	Non-ACM	ND		1396-Plaster
WPF50	Plaster W/Button	3342 Utah Bedrm2	Non-ACM	ND		1396-Drywall
WPF50	Plaster W/Button	3344 Utah Living Rm	Non-ACM	ND		1397-Plaster
WPF50	Plaster W/Button	3344 Utah Living Rm	Non-ACM	ND		1397-Drywall
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Plaster 1
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Plaster 2
WPF50	Plaster W/Button	3344 Utah Kitchen	Non-ACM	ND		1398-Drywall
WPF50	Plaster W/Button	3344 Utah Bedrm 2	Non-ACM	ND		1399-Plaster
WPF50	Plaster W/Button	3344 Utah Bedrm 2	Non-ACM	ND		1399-Drywall
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Living Room	Non-ACM	ND		1429-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Living Room	Non-ACM	ND		1429-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Skim Coat
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Bedroom 1	Non-ACM	ND		1430-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Hall	Non-ACM	ND		1431-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	727 Grape 1st Floor Hall	Non-ACM	ND		1431-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Living Room	Non-ACM	ND		1432-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Living Room	Non-ACM	ND		1432-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 2	Non-ACM	ND		1433-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 2	Non-ACM	ND		1433-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1434-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	725 Grape 1st Floor Bedroom 1	Non-ACM	ND		1434-Button Board
WPF50	WHITE-PLASTER W/ BUTTON-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1476-Plaster
WPF50	WHITE-PLASTER W/ BUTTON-BATHRM	727 Grape 1st Floor Bathroom	Non-ACM	ND		1476-Button Board
WPF50	White - Plaster w/ Button	815 Grape - 1st - Living Room	Non-ACM	ND		1477-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Living Room	Non-ACM	ND		1477-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Kitchen	Non-ACM	ND		1478-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Kitchen	Non-ACM	ND		1478-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 1	Non-ACM	ND		1479-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 1	Non-ACM	ND		1479-Drywall
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 2	Non-ACM	ND		1480-Plaster
WPF50	White - Plaster w/ Button	815 Grape- 1st - Bedroom 2	Non-ACM	ND		1480-Drywall

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	White - Plaster w/ Button	813 Grape- 1st - Living Rm	Non-ACM	ND		1481-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Living Rm	Non-ACM	ND		1481-Drywall
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bathroom	Non-ACM	ND		1482-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bathroom	Non-ACM	ND		1482-Drywall
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1483-Plaster
WPF50	White - Plaster w/ Button	813 Grape- 1st - Bedroom 2	Non-ACM	ND		1483-Drywall
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1516-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Living Room	Non-ACM	ND		1516-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Hall	Non-ACM	ND		1517-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Hall	Non-ACM	ND		1517-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1518-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Bedroom 2	Non-ACM	ND		1518-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1519-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1519-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1520-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Living Room	Non-ACM	ND		1520-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1521-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 1	Non-ACM	ND		1521-Drywall
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 2	Non-ACM	ND		1522-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	Unit 840 Grape 1st Floor Bedroom 2	Non-ACM	ND		1522-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley Living Rm	Non-ACM	ND		1555-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Living Rm	Non-ACM	ND		1555-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley kitchen	Non-ACM	ND		1556-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley kitchen	Non-ACM	ND		1556-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 1	Non-ACM	ND		1557-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 1	Non-ACM	ND		1557-Drywall
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 2	Non-ACM	ND		1558-Plaster
WPF50	White Plaster w/Button	870 Blaine Alley Bedroom 2	Non-ACM	ND		1558-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Living Rm.	Non-ACM	ND		1559-Plaster
WPF50	White Plaster w/Button	878 Blaine Alley Living Rm.	Non-ACM	ND		1559-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 1	Non-ACM	ND		1560-Plaster
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 1	Non-ACM	ND		1560-Drywall
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 2	Non-ACM	ND		1561-Plaster
WPF50	White Plaster w/Button	878 Blaine Alley Bedroom 2	Non-ACM	ND		1561-Drywall
WPF50	Plaster w/Button Board	758 Blaine Alley Living Rm	Non-ACM	ND		1594-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Living Rm	Non-ACM	ND		1594-Button
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bathrm	Non-ACM	ND		1595-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bathrm	Non-ACM	ND		1595-Button
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Bedrm 2	Non-ACM	ND		1596-Button

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Ceiling: Bedrm 1	Non-ACM	ND		1597-Plaster
WPF50	Plaster w/Button Board	Unit 758 Blaine Alley Ceiling: Bedrm 1	Non-ACM	ND		1597-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Texture
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Living Rm	Non-ACM	ND		1598-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1599-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1599-Button
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Texture
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Plaster
WPF50	Plaster w/Button Board	Unit 760 Blaine Alley Bedrm 1	Non-ACM	ND		1600-Button
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Living Room	Non-ACM	ND		1633-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Living Room	Non-ACM	ND		1633-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1634-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1634-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Skim Coat
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Texture
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 2	Non-ACM	ND		1635-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 1	Non-ACM	ND		1636-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3321 Utah 1st Floor Bedroom 1	Non-ACM	ND		1636-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Living Room	Non-ACM	ND		1637-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Living Room	Non-ACM	ND		1637-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 1	Non-ACM	ND		1638-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 1	Non-ACM	ND		1638-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 2	Non-ACM	ND		1639-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Utah 1st Floor Bedroom 2	Non-ACM	ND		1639-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Living Room	Non-ACM	ND		1668-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Living Room	Non-ACM	ND		1668-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1669-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1669-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1670-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1670-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1671-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3323 Idaho 1st Floor Bathroom	Non-ACM	ND		1671-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Living Room	Non-ACM	ND		1672-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Living Room	Non-ACM	ND		1672-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1673-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 2	Non-ACM	ND		1673-Button Board
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 1	Non-ACM	ND		1674-Plaster
WPF50	WHITE-PLASTER W/ BUTTON	3325 Idaho 1st Floor Bedroom 1	Non-ACM	ND		1674-Button Board



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/ Button	3359 Idaho Living Rm	Non-ACM	ND		1706-Plaster
WPF50	Plaster w/ Button	3359 Idaho Living Rm	Non-ACM	ND		1706-Drywall
WPF50	Plaster w/ Button	3359 Idaho Kitchen	Non-ACM	ND		1707-Plaster
WPF50	Plaster w/ Button	3359 Idaho Kitchen	Non-ACM	ND		1707-Drywall
WPF50	Plaster w/ Button	3359 Idaho Bedrm 1	Non-ACM	ND		1708-Plaster
WPF50	Plaster w/ Button	3359 Idaho Bedrm 1	Non-ACM	ND		1708-Drywall
WPF50	Plaster w/ Button	3359 Idaho Bedrm 2	Non-ACM	ND		1709-Plaster
WPF50	Plaster w/ Button	3359 Idaho Bedrm 2	Non-ACM	ND		1709-Drywall
WPF50	Plaster w/ Button	3361 Idaho Living Rm	Non-ACM	ND		1710-Plaster
WPF50	Plaster w/ Button	3361 Idaho Living Rm	Non-ACM	ND		1710-Drywall
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Drywall
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Plaster
WPF50	Plaster w/ Button	3361 Idaho Hall	Non-ACM	ND		1711-Texture
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Drywall
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Plaster
WPF50	Plaster w/ Button	3361 Idaho Bedrm 1	Non-ACM	ND		1712-Texture
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN - 1ST - LIVING RM.	Non-ACM	ND		1732-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - LIVING RM.	Non-ACM	ND		1732-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1733-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BATHRM	Non-ACM	ND		1733-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1734-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1734-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 2	Non-ACM	ND		1735-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	747 LINDEN -- 1ST - BEDRM 2	Non-ACM	ND		1735-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - LIVING RM	Non-ACM	ND		1736-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - LIVING RM	Non-ACM	ND		1736-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1737-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - BEDRM 1	Non-ACM	ND		1737-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - HALL	Non-ACM	ND		1738-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	749 LINDEN -- 1ST - HALL	Non-ACM	ND		1738-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - LIVING RM.	Non-ACM	ND		1764-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - LIVING RM.	Non-ACM	ND		1764-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - HALL	Non-ACM	ND		1765-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - HALL	Non-ACM	ND		1765-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1766-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1767-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3413 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1767-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Skim Coat

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - LIVING RM	Non-ACM	ND		1768-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 1	Non-ACM	ND		1769-Button Board
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO - 1ST - BEDRM 2	Non-ACM	ND		1770-Plaster
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1770-Skim Coat
WPF50	WHITE - PLASTER W/ BUTTON	3411 AVACADO- 1ST - BEDRM 2	Non-ACM	ND		1770-Button Board
WPF50	White Plaster with Button	3424 Avacado -Living Room	Non-ACM	ND		1796-Plaster
WPF50	White Plaster with Button	3424 Avacado -Living Room	Non-ACM	ND		1796-Drywall
WPF50	White Plaster with Button	3424 Avacado -Bathroom	Non-ACM	ND		1797-Plaster
WPF50	White Plaster with Button	3424 Avacado -Bathroom	Non-ACM	ND		1797-Drywall
WPF50	White Plaster with Button	3424 Avacado -Bedroom 1	Non-ACM	ND		1798-Plaster
WPF50	White Plaster with Button	3424 Avacado -Bedroom 1	Non-ACM	ND		1798-Drywall
WPF50	White Plaster with Button	3424 Avacado -bedroom 2	Non-ACM	ND		1799-Plaster
WPF50	White Plaster with Button	3424 Avacado -bedroom 2	Non-ACM	ND		1799-Drywall
WPF50	White Plaster with Button	3422 Avacado -Living Room	Non-ACM	ND		1800-Plaster
WPF50	White Plaster with Button	3422 Avacado -Living Room	Non-ACM	ND		1800-Drywall
WPF50	White Plaster with Button	3422 Avacado -Bedroom 1	Non-ACM	ND		1801-Plaster
WPF50	White Plaster with Button	3422 Avacado -Bedroom 1	Non-ACM	ND		1801-Drywall
WPF50	White Plaster with Button	3422 Avacado -Bedroom 2	Non-ACM	ND		1802-Plaster
WPF50	White Plaster with Button	3422 Avacado -Bedroom 2	Non-ACM	ND		1802-Drywall
WPF50	White Plaster with Button	3459 Avacado-Living Room	Non-ACM	ND		1822-Plaster
WPF50	White Plaster with Button	3459 Avacado-Living Room	Non-ACM	ND		1822-Drywall
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Top Plaster
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Bottom Plaster
WPF50	White Plaster with Button	3459 Avacado-Kitchen	Non-ACM	ND		1823-Drywall
WPF50	White Plaster with Button	3459 Avacado-Bedroom 1	Non-ACM	ND		1824-Plaster
WPF50	White Plaster with Button	3459 Avacado-Bedroom 1	Non-ACM	ND		1824-Drywall
WPF50	White Plaster with Button	3459 Avacado-Ceiling Bedroom 2	Non-ACM	ND		1825-Plaster
WPF50	White Plaster with Button	3459 Avacado-Ceiling Bedroom 2	Non-ACM	ND		1825-Drywall
WPF50	White Plaster with Button	3461 Avacado-Living Room Bedroom 1	Non-ACM	ND		1826-Plaster
WPF50	White Plaster with Button	3461 Avacado-Living Room Bedroom 1	Non-ACM	ND		1826-Drywall
WPF50	White Plaster with Button	3461 Avacado-Bedroom 1	Non-ACM	ND		1827-Plaster
WPF50	White Plaster with Button	3461 Avacado-Bedroom 1	Non-ACM	ND		1827-Drywall
WPF50	White Plaster with Button	3461 Avacado Bathroom	Non-ACM	ND		1828-Plaster
WPF50	White Plaster with Button	3461 Avacado Bathroom	Non-ACM	ND		1828-Drywall
WPF50	Plaster w/Button	3489 Avacado Living Rm	Non-ACM	ND		1848-Plaster
WPF50	Plaster w/Button	3489 Avacado Living Rm	Non-ACM	ND		1848-Drywall
WPF50	Plaster w/Button	3489 Avacado Kitchen	Non-ACM	ND		1849-Plaster
WPF50	Plaster w/Button	3489 Avacado Kitchen	Non-ACM	ND		1849-Drywall
WPF50	Plaster w/Button	3489 Avacado Bedrm 1	Non-ACM	ND		1850-Plaster

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF50	Plaster w/Button	3489 Avacado Bedrm 1	Non-ACM	ND		1850-Drywall
WPF50	Plaster w/Button	3489 Avacado Bedrm 2	Non-ACM	ND		1851-Plaster
WPF50	Plaster w/Button	3489 Avacado Bedrm 2	Non-ACM	ND		1851-Drywall
WPF50	Plaster w/Button	3491 Avacado Living Rm	Non-ACM	ND		1852-Plaster
WPF50	Plaster w/Button	3491 Avacado Living Rm	Non-ACM	ND		1852-Drywall
WPF50	Plaster w/Button	3491 Avacado Bathrm	Non-ACM	ND		1853-Plaster
WPF50	Plaster w/Button	3491 Avacado Bathrm	Non-ACM	ND		1853-Drywall
WPF50	Plaster w/Button	3491 Avacado Bedrm 2	Non-ACM	ND		1854-Plaster
WPF50	Plaster w/Button	3491 Avacado Bedrm 2	Non-ACM	ND		1854-Drywall
WPF50	Plaster w/ Button	3472 Avacado Living Room	Non-ACM	ND		1883-Plaster
WPF50	Plaster w/ Button	3472 Avacado Living Room	Non-ACM	ND		1883-Drywall
WPF50	Plaster w/ Button	3472 Avacado Hall	Non-ACM	ND		1884-Plaster
WPF50	Plaster w/ Button	3472 Avacado Hall	Non-ACM	ND		1884-Drywall
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Plaster
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Drywall
WPF50	Plaster w/ Button	3472 Avacado Bedrm 2	Non-ACM	ND		1885-Texture
WPF50	Plaster w/ Button	3472 Avacado Bedrm 1	Non-ACM	ND		1886-Plaster
WPF50	Plaster w/ Button	3472 Avacado Bedrm 1	Non-ACM	ND		1886-Drywall
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Plaster Base Coat
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Plaster Skim Coat
WPF50	Plaster w/ Button	3474 Avacado Living Room	Non-ACM	ND		1887-Drywall
WPF50	Plaster w/ Button	3474 Avacado Bedrm 1	Non-ACM	ND		1888-Plaster
WPF50	Plaster w/ Button	3474 Avacado Bedrm 1	Non-ACM	ND		1888-Drywall
WPF50	Plaster w/ Button	3474 Avacado Bedrm 2	Non-ACM	ND		1889-Plaster
WPF50	Plaster w/ Button	3474 Avacado Bedrm 2	Non-ACM	ND		1889-Drywall
WS/J1	White Smooth Dry Wall	811 Plum St Kitchen SE	Non-ACM	ND		35-Joint Compound
WS/J1	White Smooth Dry Wall	811 Plum St Kitchen SE	Non-ACM	ND		35-Drywall
WS/J1	White Drywall Smooth	811 Plum St Kitchen NE	Non-ACM	ND		59-Joint Compound
WS/J1	White Drywall Smooth	811 Plum St Kitchen NE	Non-ACM	ND		59-Drywall
WS/J1	Smooth drywall	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		92-Joint Compound
WS/J1	Smooth drywall	3398 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		92-Drywall
WS/J1	Smooth drywall	3334 Idaho - Level 1 - Kitchen - NW	Non-ACM	ND		125
WS/J1	Smooth drywall	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		231-Joint Compound
WS/J1	Smooth drywall	3367 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		231-Drywall
WS/J1	Smooth drywall	3341 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		237-Joint Compound
WS/J1	Smooth drywall	3341 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		237-Drywall
WS/J1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Joint Compound
WS/J1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Skim Coat
WS/J1	Drywall smooth	Unit 3308 Utah - Level 1 - Kitchen SW	Non-ACM	ND		265-Drywall
WS/J1	Drywall smooth	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		321-Joint Compound
WS/J1	Drywall smooth	Unit 3384 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		321-Drywall

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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J1	Smooth drywall	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		363-Joint Compound
WS/J1	Smooth drywall	Unit 3350 Utah - Level 1 - Kitchen - SW	Non-ACM	ND		363-Drywall
WS/J1	Smooth drywall	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		387-Joint Compound
WS/J1	Smooth drywall	Unit 3348 Utah - Level 1 - Kitchen - NW	Non-ACM	ND		387-Drywall
WS/J1	Drywall Smooth	Unit 766 Grape - Level 1 - Kitchen - NE	Non-ACM	ND		438-Joint Compound
WS/J1	Drywall Smooth	Unit 766 Grape - Level 1 - Kitchen - NE	Non-ACM	ND		438-Drywall
WS/J1	Smooth drywall	873 Grape - Level 1 - Kitchen SW	Non-ACM	ND		462-Joint Compound
WS/J1	Smooth drywall	873 Grape - Level 1 - Kitchen SW	Non-ACM	ND		462-Drywall
WS/J1	Drywall smooth	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		495-Joint Compound
WS/J1	Drywall smooth	786 Blaine - Level 1 - Kitchen NE	Non-ACM	ND		495-Drywall
WS/J1	Drywall smooth	861 Cherry - Roof -Kitchen SE	Non-ACM	ND		543
WS/J1	Drywall w/ heavy texture	3419 Kentucky - Level 1 - Kitchen	Non-ACM	ND		552
WS/J1	Drywall smooth	3434 Kentucky - Level 1 - Kitchen SW	Non-ACM	ND		588
WS/J1	Drywall smooth	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		670-Joint Compound
WS/J1	Drywall smooth	3452 Avocado - Level 1 - Kitchen NE	Non-ACM	ND		670-Drywall
WS/J1	Drywall	Unit 860 Grape Level 1 Kitchen	Non-ACM	ND		711A-Joint Compound
WS/J1	Drywall	Unit 860 Grape Level 1 Kitchen	Non-ACM	ND		711A-Drywall
WS/J50	White Drywall w/ J.C.	850 Peach St 1st Level Kitchen	Non-ACM	ND		1061-Joint Compound
WS/J50	White Drywall w/ J.C.	850 Peach St 1st Level Kitchen	Non-ACM	ND		1061-Drywall
WS/J50	White Drywall w/ J.C.	848 Peach St 1st Level Kitchen	Non-ACM	ND		1062-Drywall
WS/J50	Drywall w/ J.C	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1106-Joint Compound
WS/J50	Drywall w/ J.C	821 Cherry St Level 1st - Kitchen	Non-ACM	ND		1106-Drywall
WS/J50	Drywall w/ J.C	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1107-Joint Compound
WS/J50	Drywall w/ J.C	823 Cherry St Level 1st - Kitchen	Non-ACM	ND		1107-Drywall
WS/J50	White Drywall w/ J.C.	801 Cherry St1st Level Kitchen	Non-ACM	ND		1178-Joint Compound
WS/J50	White Drywall w/ J.C.	801 Cherry St1st Level Kitchen	Non-ACM	ND		1178-Drywall
WS/J50	White Drywall w/ J.C.	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1179-Joint Compound
WS/J50	White Drywall w/ J.C.	803 Cherry St 1st Level Kitchen	Non-ACM	ND		1179-Drywall
WS/J50	White Drywall w/ J.C.	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1187-Joint Compound
WS/J50	White Drywall w/ J.C.	3416 Florida St 1st Level Kitchen	Non-ACM	ND		1187-Drywall
WS/J50	White Drywall w/ J.C.	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1188-Joint Compound
WS/J50	White Drywall w/ J.C.	3408 Florida St 1st Level Kitchen	Non-ACM	ND		1188-Drywall
WS/J50	White Drywall w/ J.C	3475 Florida St 1st Level Bottom Layer: Kitchen	Non-ACM	ND		1252-Drywall
WS/J50	White Drywall w/ J.C	3479 Florida St 1st Level Kitchen	Non-ACM	ND		1253-Joint Compound
WS/J50	White Drywall w/ J.C	3479 Florida St 1st Level Kitchen	Non-ACM	ND		1253-Drywall
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Joint Compound 1
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Joint Compound 2
WS/J50	White drywall w/JC	3488 Kentucky 1st Level Kitchen	Non-ACM	ND		1274-Drywall
WS/J50	White Smooth Dry Wall	3407 Kentucky Kitchen	Non-ACM	ND		1316
WS/J50	White Smooth Dry Wall	3401 Kentucky Kitchen	Non-ACM	ND		1317
WS/J50	Drywall w/JC	3317 UtahKitchen	Non-ACM	ND		1365-Drywall

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1365-Joint Compound
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Drywall
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Joint Compound
WS/J50	Drywall w/JC	3317 Utah-Kitchen	Non-ACM	ND		1366-Texture
WS/J50	Drywall w/JC	3342 Utah Kitchen	Non-ACM	ND		1400-Drywall
WS/J50	Drywall w/JC	3342 Utah Kitchen	Non-ACM	ND		1400-Joint Compound
WS/J50	Drywall w/JC	3344 Utah Kitchen	Non-ACM	ND		1401-Drywall
WS/J50	Top Layer 12" Beige w/Specks Tile w/ Beige Mastic	3344 Utah Kitchen	Non-ACM	ND		1401-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	727 Grape 1st Floor Kitchen	Non-ACM	ND		1435-Drywall
WS/J50	WHITE-DRYWALL W/ JC	727 Grape 1st Floor Kitchen	Non-ACM	ND		1435-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	725 Grape 1st Floor Kitchen	Non-ACM	ND		1436-Drywall
WS/J50	WHITE-DRYWALL W/ JC	725 Grape 1st Floor Kitchen	Non-ACM	ND		1436-Joint Compound
WS/J50	White - Drywall w/ J.C.	815 Grape- 1st - Kitchen	Non-ACM	ND		1484-Drywall
WS/J50	White - Drywall w/ J.C.	815 Grape- 1st - Kitchen	Non-ACM	ND		1484-Joint Compound
WS/J50	White - Drywall w/ J.C.	813 Grape- 1st - Kitchen	Non-ACM	ND		1485-Drywall
WS/J50	White - Drywall w/ J.C.	813 Grape- 1st - Kitchen	Non-ACM	ND		1485-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1523-Drywall
WS/J50	WHITE-DRYWALL W/ JC	Unit 842 Grape 1st Floor Kitchen	Non-ACM	ND		1523-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Drywall
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Joint Compound
WS/J50	WHITE-DRYWALL W/ JC	Unit 840 Grape 1st Floor Kitchen	Non-ACM	ND		1524-Joint Compound 2
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1562-Drywall
WS/J50	White Drywall w/Joint C.	876 Blaine Alley Kitchen	Non-ACM	ND		1562-Joint Compound
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1563-Drywall
WS/J50	White Drywall w/Joint C.	878 Blaine Alley Kitchen	Non-ACM	ND		1563-Joint Compound
WS/J50	Drywall w/Joint Compound	Unit 758 Blaine Alley Kitchen	Non-ACM	ND		1601-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 758 Blaine Alley Kitchen	Non-ACM	ND		1601-Drywall
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Tape
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Joint C.
WS/J50	Drywall w/Joint Compound	Unit 760 Blaine Alley Kitchen	Non-ACM	ND		1602-Drywall
WS/J50	WHITE-DRYWALL W/ JOINT C.	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1675-Drywall
WS/J50	WHITE-DRYWALL W/ JOINT C.	3323 Idaho 1st Floor Kitchen	Non-ACM	ND		1675-Joint Compound
WS/J50	WHITE-DRYWALL W/ JOINT C.	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1676-Drywall
WS/J50	WHITE-DRYWALL W/ JOINT C.	3325 Idaho 1st Floor Kitchen	Non-ACM	ND		1676-Joint Compound
WS/J50	Drywall w/ Joint C.	3361 Idaho Kitchen	Non-ACM	ND		1713-Drywall
WS/J50	Drywall w/ Joint C.	3361 Idaho Kitchen	Non-ACM	ND		1713-Joint Compound
WS/J50	Drywall w/ Joint C.	3359 Idaho Kitchen	Non-ACM	ND		1714-Drywall
WS/J50	Drywall w/ Joint C.	3359 Idaho Kitchen	Non-ACM	ND		1714-Texture
WS/J50	WHITE - DRYWALL W/ JOINT C.	747 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1739-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	747 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1739-Joint Compound

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WS/J50	WHITE - DRYWALL W/ JOINT C.	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1740-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	749 LINDEN -- 1ST - KITCHEN	Non-ACM	ND		1740-Joint Compound
WS/J50	WHITE - DRYWALL W/ JOINT C.	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1771-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	3413 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1771-Joint Compound
WS/J50	WHITE - DRYWALL W/ JOINT C.	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1772-Drywall
WS/J50	WHITE - DRYWALL W/ JOINT C.	3411 AVACADO- 1ST - KITCHEN	Non-ACM	ND		1772-Joint Compound
WS/J50	Drywall with Joint Compund	3424 Avacado Kitchen	Non-ACM	ND		1803-Joint Compound
WS/J50	Drywall with Joint Compund	3424 Avacado Kitchen	Non-ACM	ND		1803-Drywall
WS/J50	Drywall with Joint Compund	3422 Avacado -Kitchen	Non-ACM	ND		1804-Joint Compound
WS/J50	Drywall with Joint Compund	3422 Avacado -Kitchen	Non-ACM	ND		1804-Drywall
WS/J50	Dry Wall with Joint Compund	3459 Avacado-Kitchen	Non-ACM	ND		1829-Joint Compound
WS/J50	Dry Wall with Joint Compund	3459 Avacado-Kitchen	Non-ACM	ND		1829-Drywall
WS/J50	Dry Wall with Joint Compund	3461 Avacado-Kitchen	Non-ACM	ND		1830-Joint Compound
WS/J50	Dry Wall with Joint Compund	3461 Avacado-Kitchen	Non-ACM	ND		1830-Drywall
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Drywall
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Joint Compound
WS/J50	Drywall w/Joint C.	3489 Avacado Kitchen	Non-ACM	ND		1855-Texture
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Drywall
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Caulk
WS/J50	Drywall w/Joint C.	3491 Avacado Kitchen	Non-ACM	ND		1856-Texture
WS/J50	Drywall w/ Joint C.	3474 Avacado Kitchen	Non-ACM	ND		1890-Drywall
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1890-Joint Compound
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1891-Drywall
WS/J50	Drywall w/ Joint C.	3472 Avacado Kitchen	Non-ACM	ND		1891-Joint Compound
WS/J51	WHITE-DRYWALL W/ JOINT C.	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1640-Drywall
WS/J51	WHITE-DRYWALL W/ JOINT C.	3321 Utah 1st Floor Kitchen	Non-ACM	ND		1640-Joint Compound
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Drywall
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Joint Compound
WS/J51	WHITE-DRYWALL W/ JOINT C.	3323 Utah 1st Floor Kitchen	Non-ACM	ND		1641-Skim Coat

## *SUPPORT BUILDINGS*



**TABLE 2.0  
SUMMARY BY MATERIAL  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
MAINTENANCE AND GROUNDS SHOP (3458 AVOCADO ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, N.W.	Non-ACM	ND		1923-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, N.W.	Non-ACM	ND		1923-Mastic
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, S. Center	Non-ACM	ND		1924-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, S. Center	Non-ACM	ND		1924-Mastic
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, E. Center	Non-ACM	ND		1925-Floor Tile
12VT58	Beige Floor Tile w/ Beige Mastic	Unit E, E. Center	Non-ACM	ND		1925-Mastic
FVB52	Sub Floor Vapor Bar.	Unit D, E. Center	Non-ACM	ND		1926
FVB52	Sub Floor Vapor Bar.	Unit D, S.W.	Non-ACM	ND		1927
FVB52	Sub Floor Vapor Bar.	Unit A, S.W.	Non-ACM	ND		1928
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Fiberboard
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Joint Compound
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Tape
MISC51	Compact Wood Boards	Unit F, N. Center	Non-ACM	ND		1917-Texture
MISC51	Compact Wood Boards	Unit F, E. Center	Non-ACM	ND		1918-Fiberboard
MISC51	Compact Wood Boards	Unit F, E. Center	Non-ACM	ND		1918-Texture
MISC51	Compact Wood Boards	Unit D, S.E.	Non-ACM	ND		1919-Fiberboard
MISC51	Compact Wood Boards	Unit D, S.E.	Non-ACM	ND		1919-Texture
MISC52	Exterior Transite 1x2 Panels	Exterior, N.W.	ACM	15	Chrysotile	1932
MISC52	Exterior Transite 1x2 Panels	Exterior, N.	ACM	17	Chrysotile	1933
MISC52	Exterior Transite 1x2 Panels	Exterior, E.	ACM	17	Chrysotile	1934-Transite
MISC52	Exterior Transite 1x2 Panels	Exterior, E.	Non-ACM	ND		1934-Tar Felt
MISC52	Exterior Transite 1x2 Panels	Exterior, S.E.	ACM	17	Chrysotile	1935-Transite
MISC52	Exterior Transite 1x2 Panels	Exterior, S.E.	Non-ACM	ND		1935-Tar Felt
MISC52	Exterior Transite 1x2 Panels	Exterior, S.W.	ACM	17	Chrysotile	1936
RS51	Roof Shingles	Roof, E. Center	Non-ACM	ND		1937
RS51	Roof Shingles	Roof, N.E.	Non-ACM	ND		1938
RS51	Roof Shingles	Roof, N.W.	Non-ACM	ND		1939
RS51	Roof Shingles	Roof, S.E.	Non-ACM	ND		1940
RS51	Roof Shingles	Roof, S.W.	Non-ACM	ND		1941
WP50	Window Putty	Exterior, Garage: N.W.	Non-ACM	ND		1929
WP50	Window Putty	Exterior, E. of Rm. G	Non-ACM	ND		1930
WP50	Window Putty	Exterior, E of Rm. D	Non-ACM	ND		1931
WPF51	Plaster	Unit F, S.W.	Non-ACM	ND		1914
WPF51	Plaster	Unit F, S.E.	Non-ACM	ND		1915
WPF51	Plaster	Unit F, N.E.	Non-ACM	ND		1916
WS/J51	Drywall Panels	Unit D, S.E.Area	Non-ACM	ND		1909
WS/J51	Drywall Panels	Unit E, E. Center	Non-ACM	ND		1910
WS/J51	Drywall Panels	Unit G, S.E. Area	Non-ACM	ND		1911
WS/J51	Drywall Panels	Unit D, Ceiling S.W.	Non-ACM	ND		1912
WS/J51	Drywall Panels	Unit D, N.W.	Non-ACM	ND		1913
WS/J52	Drywall	Unit E, S. Center	Non-ACM	ND		1920
WS/J52	Drywall	Unit E, S.E.	Non-ACM	ND		1921
WS/J52	Drywall	Unit E, N. Center	Non-ACM	ND		1922





**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**PARKS AND RECREATION RESTROOM**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, S.E.	Non-ACM	ND		1942-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N.E.	Non-ACM	ND		1943-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, N. Center	Non-ACM	ND		1944-Shingle
RS52	Roof Shingles	Roof, S. Center	Non-ACM	ND		1945-Shingle
RS52	Roof Shingles	Roof, S. Center	Non-ACM	ND		1945-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle
RS52	Roof Shingles	Roof, W. Center	Non-ACM	ND		1946-Shingle

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit E	ACM	2	Chrysotile	1960-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit E	ACM	5	Chrysotile	1960-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit H	ACM	3	Chrysotile	1961-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit H	ACM	5	Chrysotile	1961-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit I	ACM	2	Chrysotile	1962-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit I	ACM	5	Chrysotile	1962-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit A	ACM	2	Chrysotile	1963-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NE-Unit A	ACM	5	Chrysotile	1963-Mastic
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NW-Unit B	ACM	2	Chrysotile	1964-Floor Tile
12VFT59	Middle Layer: Beige Floor Tile with Black Mastic	NW-Unit B	ACM	5	Chrysotile	1964-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	ACM	6	Chrysotile	1965-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	Non-ACM	ND		1965-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit E	Non-ACM	ND		1965-Vapor Paper
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit H	ACM	6	Chrysotile	1966-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit H	Non-ACM	ND		1966-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit H	Non-ACM	ND		1966-Vapor Paper
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit I	ACM	8	Chrysotile	1967-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit I	ACM	2	Chrysotile	1967-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit I	Non-ACM	ND		1967-Vapor Paper
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit A	ACM	5	Chrysotile	1968-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit A	Non-ACM	ND		1968-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NE-Unit A	Non-ACM	ND		1968-Vapor Paper
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NW-Unit B	ACM	5	Chrysotile	1969-Floor Tile
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NW-Unit B	Non-ACM	ND		1969-Mastic
9VFT51	Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	NW-Unit B	Non-ACM	ND		1969-Vapor Paper
ES53	Stucco	N Center-Exterior	Non-ACM	ND		1988-Coating
ES53	Stucco	N Center-Exterior	Non-ACM	ND		1988-Stucco
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Coating
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Stucco
ES53	Stucco	NE-Exterior	Non-ACM	ND		1989-Base Coat
ES53	Stucco	SE-Exterior	Non-ACM	ND		1990-Coating
ES53	Stucco	SE-Exterior	Non-ACM	ND		1990-Stucco
ES53	Stucco	SW-Exterior	Non-ACM	ND		1991-Coating
ES53	Stucco	SW-Exterior	Non-ACM	ND		1991-Stucco
ES53	Stucco	W Center-Exterior	Non-ACM	ND		1992-Coating
ES53	Stucco	W Center-Exterior	Non-ACM	ND		1992-Stucco
FBM52	Grey Baseboard Vinyl Mastic	SE-Unit D	Non-ACM	ND		1979
FBM52	Grey Baseboard Vinyl Mastic	S Center-Unit H	Non-ACM	ND		1980
FBM52	Grey Baseboard Vinyl Mastic	NW-Unit B	Non-ACM	ND		1981
FCM50	Carpet Mastic	NW-Unit E	Non-ACM	ND		1976
FCM50	Carpet Mastic	NW-Unit F	Non-ACM	ND		1977

**TABLE 2.0**  
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**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FCM50	Carpet Mastic	SW-Unit B	Non-ACM	ND		1978
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1993-Shingle 1
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1993-Shingle 2
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1994-Shingle 1
RS53	Roof Shingles	NW-Roof	Non-ACM	ND		1994-Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1995-Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1995-Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1996-Roof Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1996-Roof Shingle 2
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1997-Roof Shingle 1
RS53	Roof Shingles	NE-Roof	Non-ACM	ND		1997-Roof Shingle 2
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1985
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1986
USM53	Sink Mastic	E Center-Exterior	Non-ACM	ND		1987
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit H	Non-ACM	ND		1957-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit H	Non-ACM	ND		1957-Mastic
VSF64	Top Layer:6" Square Sheet Floor with Mastic	S Center- Unit C	Non-ACM	ND		1958-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	S Center- Unit C	Non-ACM	ND		1958-Mastic
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit A	Non-ACM	ND		1959-Sheet Flooring
VSF64	Top Layer:6" Square Sheet Floor with Mastic	NE-Unit A	Non-ACM	ND		1959-Mastic
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1970-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NE-Unit G</b>	<b>ACCM</b>	<b>&lt;1</b>		<b>1970-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1970-Barrier Paper
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1971-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NE-Unit G</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>1971-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NE-Unit G	Non-ACM	ND		1971-Barrier Paper
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NW-Unit G	Non-ACM	ND		1972-Sheet Flooring
<b>VSF65</b>	<b>Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper</b>	<b>NW-Unit G</b>	<b>ACM</b>	<b>2</b>	<b>Chrysotile</b>	<b>1972-Mastic</b>
VSF65	Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	NW-Unit G	Non-ACM	ND		1972-Barrier Paper
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>NW-Unit F</b>	<b>ACM</b>	<b>8</b>	<b>Chrysotile</b>	<b>1973-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Vapor Paper
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1973-Leveler
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>NW-Unit F</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1974-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1974-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	NW-Unit F	Non-ACM	ND		1974-Vapor Paper
<b>VSF66</b>	<b>Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper</b>	<b>N Center-Unit F</b>	<b>ACM</b>	<b>5</b>	<b>Chrysotile</b>	<b>1975-Mastic</b>
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Floor Tile
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Vapor Paper
VSF66	Bottom Layer: Beige with Specks Sheet Floor with Black Mastic and Vapor Paper	N Center-Unit F	Non-ACM	ND		1975-Leveler
WP51	Window Putty	NE-Exterior	Non-ACM	ND		1982

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**COMMUNITY CENTER/COMPUTER LAB (DUPLEX UNITS 890/892 PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WP51	Window Putty	S Center-Exterior	Non-ACM	ND		1983
WP51	Window Putty	S Cente-Exteriorr	Non-ACM	ND		1984
WPF52	White Plaster with Button	SE-Unit E	Non-ACM	ND		1947-Plaster
WPF52	White Plaster with Button	SE-Unit E	Non-ACM	ND		1947-Drywall
WPF52	White Plaster with Button	E. Center- Unit H	Non-ACM	ND		1948-Plaster
WPF52	White Plaster with Button	E. Center- Unit H	Non-ACM	ND		1948-Drywall
WPF52	White Plaster with Button	NW-Unit D	Non-ACM	ND		1949-Plaster
WPF52	White Plaster with Button	NW-Unit D	Non-ACM	ND		1949-Drywall
WPF52	White Plaster with Button	S Center-Unit B	Non-ACM	ND		1950-Plaster
WPF52	White Plaster with Button	S Center-Unit B	Non-ACM	ND		1950-Drywall
WPF52	White Plaster with Button	W Center- Unit A	Non-ACM	ND		1951-Plaster
WPF52	White Plaster with Button	W Center- Unit A	Non-ACM	ND		1951-Drywall
WPF52	White Plaster with Button	NW-Unit I	Non-ACM	ND		1952-Finish Coat
WPF52	White Plaster with Button	NW-Unit I	Non-ACM	ND		1952-Plaster
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Finish Coat
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Plaster
WPF52	White Plaster with Button	N. Center- Unit H	Non-ACM	ND		1953-Drywall
WS/J53	Drywall with Joint	SE-Unit E	Non-ACM	ND		1954-Joint Compound
WS/J53	Drywall with Joint	SE-Unit E	Non-ACM	ND		1954-Drywall
WS/J53	Drywall with Joint	NE-Unit D	Non-ACM	ND		1955-Joint Compound
WS/J53	Drywall with Joint	NE-Unit D	Non-ACM	ND		1955-Drywall
WS/J53	Drywall with Joint	NE-Unit B	Non-ACM	ND		1956-Joint Compound
WS/J53	Drywall with Joint	NE-Unit B	Non-ACM	ND		1956-Drywall

**TABLE 2.0  
SUMMARY BY MATERIAL  
CITADEL PROJECT NO. 7076.1017.0  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
LAUNDRY BUILDING (PLUM ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, S.E.	Non-ACM	ND		2003-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, S.E.	Non-ACM	ND		2003-Mastic
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, N.W.	Non-ACM	ND		2004-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit A, 1st Level, N.W.	Non-ACM	ND		2004-Mastic
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit B, 1st Level, S.Center	Non-ACM	ND		2005-Floor Tile
12VFT60	Beige Floor Tile w/ Beige Mastic	Unit B, 1st Level, S.Center	Non-ACM	ND		2005-Mastic
ES54	Exterior Stucco	Exterior, 1st Level, S.W.	Non-ACM	ND		2012
ES54	Exterior Stucco	Exterior, 1st Level, N.Center	Non-ACM	ND		2013
ES54	Exterior Stucco	Exterior, 1st Level, W.Center	Non-ACM	ND		2014
PP50	Pitch Pocket Mastic	Roof, N.E.	Non-ACM	ND		2021
PP50	Pitch Pocket Mastic	Roof, E.Center	Non-ACM	ND		2022
PP50	Pitch Pocket Mastic	Roof, N.E.	Non-ACM	ND		2023
RFM50	Roof Membrane	Roof, N.Center	Non-ACM	ND		2015-Shingle
RFM50	Roof Membrane	Roof, N.Center	Non-ACM	ND		2015-Built Up Roofing
RFM50	Roof Membrane	Roof, E.Center	Non-ACM	ND		2016-Shingle
RFM50	Roof Membrane	Roof, E.Center	Non-ACM	ND		2016-Built Up Roofing
RFM50	Roof Membrane	Roof, W.Center	Non-ACM	ND		2017-Shingle
RFM50	Roof Membrane	Roof, W.Center	Non-ACM	ND		2017-Built Up Roofing
RPM50	Roof Penetration	Roof, N.E.	Non-ACM	ND		2018
RPM50	Roof Penetration	Roof, E.Center	Non-ACM	ND		2019
RPM50	Roof Penetration	Roof, N.W.	Non-ACM	ND		2020
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, N.E.	Non-ACM	ND		2006-Leveler
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.E.	Non-ACM	ND		2007-Leveler
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Vinyl Sheet Flooring
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Mastic
VSF57	Small Triangle Sheet Floor w/ Mastic	Unit F, 1st Floor, S.W.	Non-ACM	ND		2008-Leveler
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2009
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2010
WP52	Window Putty	Exterior, 1st Level, S.W. Window	Non-ACM	ND		2011
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, S.E.	Non-ACM	ND		1998-Drywall
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, S.E.	Non-ACM	ND		1998-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit B, 1st Level, S.W.	Non-ACM	ND		1999-Drywall
WS/J54	Drywall w/ Joint C.	Unit B, 1st Level, S.W.	Non-ACM	ND		1999-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Drywall
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit F, 1st Level, S.E.	Non-ACM	ND		2000-Tape
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, Ceiling: W. Center	Non-ACM	ND		2001-Drywall
WS/J54	Drywall w/ Joint C.	Unit A, 1st Level, Ceiling: W. Center	Non-ACM	ND		2001-Joint Compound
WS/J54	Drywall w/ Joint C.	Unit D, 1st Level, S.E.	Non-ACM	ND		2002-Drywall
WS/J54	Drywall w/ Joint C.	Unit D, 1st Level, S.E.	Non-ACM	ND		2002-Joint Compound

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**CARPENTER SHOP (3358 UTAH ST)**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
ES55	Exterior Stucco	Exterior, W	Non-ACM	ND		2033-Stucco
ES55	Exterior Stucco	Exterior, W	Non-ACM	ND		2033-Concrete
ES55	Exterior Stucco	Exterior, S.W.	Non-ACM	ND		2034-Stucco
ES55	Exterior Stucco	Exterior, S.W.	Non-ACM	ND		2034-Concrete
ES55	Exterior Stucco	Exterior, S.E.	Non-ACM	ND		2035-Stucco
ES55	Exterior Stucco	Exterior, S.E.	Non-ACM	ND		2035-Concrete
ES55	Exterior Stucco	Exterior S	Non-ACM	ND		2036-Stucco
ES55	Exterior Stucco	Exterior S	Non-ACM	ND		2036-Concrete
ES55	Exterior Stucco	Exterior S.W.	Non-ACM	ND		2037
FBM53	Baseboard Mastic	Unit F, 1st Level, S.W.	Non-ACM	ND		2027-Mastic
FBM53	Baseboard Mastic	Unit F, 1st Level, S.W.	Non-ACM	ND		2027-Baseboard
FBM53	Baseboard Mastic	Unit C, 1st Level, S.E.	Non-ACM	ND		2028
FBM53	Baseboard Mastic	Unit E, 1st Level, E.Center	Non-ACM	ND		2029
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Membrane
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Shingle
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Tar Felt
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Tar Felt
RFM51	Roof Field Membrane	Roof S.E.	Non-ACM	ND		2038-Shingle
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Membrane
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Shingle
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Tar Felt
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Tar Felt
RFM51	Roof Field Membrane	Roof Center	Non-ACM	ND		2039-Shingle
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Membrane
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Shingle
RFM51	Roof Field Membrane	Roof N.W.	Non-ACM	ND		2040-Shingle
RP50	Roof Patch	Roof Center	Non-ACM	ND		2044
RP50	Roof Patch	Roof W. Center	Non-ACM	ND		2045
RP50	Roof Patch	Roof N.W.	ACM	3	Chrysotile	2046
RPM51	Penetration	Roof S.E.	ACM	7	Chrysotile	2041
RPM51	Penetration	Roof N.W.	ACM	6	Chrysotile	2042
RPM51	Penetration	Roof N.E.	Non-ACM	ND		2043
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.W.	Non-ACM	ND		2030-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.W.	Non-ACM	ND		2030-Mastic
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.E.	Non-ACM	ND		2031-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, N.E.	Non-ACM	ND		2031-Mastic
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, S.E.	Non-ACM	ND		2032-Vinyl Sheet Flooring
VSF67	Brown Specks Floor Sheet w/ Mastic	Unit F, 1st Level, S.E.	Non-ACM	ND		2032-Mastic
WS/J53	Drywall w/ Joint	Unit E, 1st Level, N.W.	Non-ACM	ND		2024-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, N.W.	Non-ACM	ND		2024-Joint Compound
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Joint Compound
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.W.	Non-ACM	ND		2025-Caulk
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Drywall
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Woven Tape
WS/J53	Drywall w/ Joint	Unit E, 1st Level, S.E.	Non-ACM	ND		2026-Joint Compound

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	ACCM	<1	Chrysotile	2059-Floor Tile
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	ACM	2	Chrysotile	2059-Mastic
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	Non-ACM	ND		2059-Vapor Barrier
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	ACCM	<1	Chrysotile	2060-Floor Tile
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	ACM	3	Chrysotile	2060-Mastic
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ CENTER	Non-ACM	ND		2060-Vapor Barrier
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ W CENTER	ACM	2	Chrysotile	2061-Floor Tile
12VFT61	12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ W CENTER	ACCM	<1	Chrysotile	2061-Mastic
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2065-Sheet Flooring
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	ACM	2	Chrysotile	2065-Mastic
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2066-Sheet Flooring
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	ACM	4	Chrysotile	2066-Mastic
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2066-Vapor Barrier
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2067-Sheet Flooring
12VFT62	12" BEIGE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	ACCM	<1	Chrysotile	2067-Mastic
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	ACM	4	Chrysotile	2071-Floor Tile
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2071-Mastic
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	ACM	5	Chrysotile	2072-Floor Tile
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2072-Mastic
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ SW	ACM	2	Chrysotile	2073-Floor Tile
12VFT63	12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	1ST FL/ SW	Non-ACM	ND		2073-Mastic
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Glue
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Joint Compound
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM	ND		2074-Sheetrock
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ W CENTER	Non-ACM	ND		2075-Ceiling Tile
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ W CENTER	Non-ACM	ND		2075-Sheetrock
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ NE	Non-ACM	ND		2076-Ceiling Tile
CT50	FISSURED CEILING TILE: GLUED	1ST FL/ NE	Non-ACM	ND		2076-Sheetrock
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2077-Ceiling Tile
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	2	Anthophyllite	2077-Adhesive
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2078-Ceiling Tile
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	2	Anthophyllite	2078-Adhesive
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	Non-ACM	ND		2079-Ceiling Tile
CT51	WALL TILE: SMALL HOLE TILE W/ ADHESIVE	1ST FL/ S WALL	ACCM	<1	Anthophyllite	2079-Adhesive
ES56	EXTERIOR STUCCO	1ST FL/ E OF RM Q	Non-ACM	ND		2092
ES56	EXTERIOR STUCCO	1ST FL/ E OF RM A	Non-ACM	ND		2093
ES56	EXTERIOR STUCCO	1ST FL/ S OF RM A	Non-ACM	ND		2094
ES56	EXTERIOR STUCCO	1ST FL/ W OF RM Q	Non-ACM	ND		2095
ES56	EXTERIOR STUCCO	1ST FL/ W OF RM A	Non-ACM	ND		2096
ES57	EXTERIOR STUCCO	1ST FL/ S OF RM V	Non-ACM	ND		2097
ES57	EXTERIOR STUCCO	1ST FL/ S OF RM T	Non-ACM	ND		2098
ES57	EXTERIOR STUCCO	1ST FL/ N O FRM U	Non-ACM	ND		2099
ES58	EXTERIOR STUCCO	1ST FL/ W OF RM R	ACM	5	Chrysotile	2100
ES58	EXTERIOR STUCCO	1ST FL/ W OF RM R	ACM	5	Chrysotile	2101
ES58	EXTERIOR STUCCO	1ST FL/ E OF RM R	ACM	3	Chrysotile	2102
FBM54	BASEBOARD MASTIC	1ST FL/ SW	Non-ACM	ND		2083
FBM54	BASEBOARD MASTIC	1ST FL/ CENTER	Non-ACM	ND		2084

**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
FBM54	BASEBOARD MASTIC	1ST FL/ N	Non-ACM	ND		2085
FBM54	BASEBOARD MASTIC	1ST FL/ E	Non-ACM	ND		2086
FBM55	BASEBOARD MASTIC	1ST FL/ NE	Non-ACM	ND		2087
FBM55	BASEBOARD MASTIC	1ST FL/ E	Non-ACM	ND		2088
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2115
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2116
HVT50	HVAC MASTIC	ROOF/ N CENTER	Non-ACM	ND		2117
MISC53	TRANSITE PANELS	1ST FL/ FLOOR: CENTER	ACM	14	Chrysotile	2080
MISC53	TRANSITE PANELS	1ST FL/ WALL N	ACM	10	Chrysotile	2081
MISC53	TRANSITE PANELS	1ST FL/ WALL N	ACM	13	Chrysotile	2082
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ N	Non-ACM	ND		2103
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ SW	Non-ACM	ND		2104
RFM52	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ CENTER	Non-ACM	ND		2105
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ SW	Non-ACM	ND		2106
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ E	Non-ACM	ND		2107
RFM53	MULTIPLE LAYERS: ROOF MEMBRANE	ROOF/ CENTER	Non-ACM	ND		2108
RPM2	PENETRATION MASTIC	ROOF/ NW	ACM	8	Chrysotile	2112
RPM2	PENETRATION MASTIC	ROOF/ E	ACM	5	Chrysotile	2113
RPM2	PENETRATION MASTIC	ROOF/ SE	ACM	8	Chrysotile	2114
RS54	ROOF SHINGLES	ROOF/ SW	Non-ACM	ND		2109
RS54	ROOF SHINGLES	ROOF/ N	Non-ACM	ND		2110
RS54	ROOF SHINGLES	ROOF/ CENTER	ACM	ND		2111
VSF68	GREY/ WHITE SHEET FL W/ VAPOR	1ST FL/ NE	ACM	15	Chrysotile	2062
VSF68	GREY/ WHITE SHEET FL W/ VAPOR	1ST FL/ SW	ACM	15	Chrysotile	2063-Sheet Flooring
VSF68	GREY/ WHITE SHEET FL W/ VAPOR	1ST FL/ SW	Non-ACM	ND		2063-Vapor Barrier
VSF68	GREY/ WHITE SHEET FL W/ VAPOR	1ST FL/ NW	ACM	20	Chrysotile	2064
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Sheet Flooring
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Mastic
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NE	Non-ACM	ND		2068-Vapor Barrier
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Sheet Flooring
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Mastic
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2069-Vapor Barrier
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	Non-ACM	ND		2070-Sheet Flooring
VSF69	MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	1ST FL/ NW	ACM	2	Chrysotile	2070-Mastic
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2089
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2090
WP53	WINDOW PUTTY	1ST FL/ NW WINDOW	Non-ACM	ND		2091
WPF53	PLASTER W/ BUTTON	1ST FL/ SW	Non-ACM	ND		2047-Plaster
WPF53	PLASTER W/ BUTTON	1ST FL/ SW	Non-ACM	ND		2047-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NE	Non-ACM	ND		2048-Plaster
WPF53	PLASTER W/ BUTTON	1ST FL/ NE	Non-ACM	ND		2048-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NW	Non-ACM	ND		2049-Sheetrock
WPF53	PLASTER W/ BUTTON	1ST FL/ NW	Non-ACM	ND		2049-Plaster
WPF53	FISSURED CEILING TILE: GLUED	1ST FL/ SE	Non-ACM			2074-Ceiling Tile
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2050-Skim Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2050-Rough Coat
WPF54	PLASTER	1ST FL/ NE	Non-ACM	ND		2051-Skim Coat



**TABLE 2.0**  
**SUMMARY BY MATERIAL**  
**CITADEL PROJECT NO. 7076.1017.0**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**HDRS FACILITIES WAREHOUSE**

MATERIAL TYPE	SAMPLE DESCRIPTION	SAMPLE AREA/LOCATION	CLASSIFICATION	ASBESTOS CONTENT	ASBESTOS TYPE	SAMPLE NO.
WPF54	PLASTER	1ST FL/ NE	Non-ACM	ND		2051-Rough Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2052-Skim Coat
WPF54	PLASTER	1ST FL/ SW	Non-ACM	ND		2052-Rough Coat
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Joint Compound
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Tape
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2053-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2054-Joint Compound
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ NW	Non-ACM	ND		2054-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ SE	Non-ACM	ND		2055-Sheetrock
WS/J56	DRYWALL W/ JOINT C.	1ST FL/ SE	Non-ACM	ND		2055-Joint Compound
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NE	Non-ACM	ND		2056-Sheetrock
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ NW	Non-ACM	ND		2057-Sheetrock
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Texture
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Tape
WS/J57	DRYWALL W/ TEXTURE	1ST FL/ SW	Non-ACM	ND		2058-Sheetrock



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix E**

## **Asbestos Laboratory Results**

*HOUSING UNITS*



*CITADEL ENVIRONMENTAL SERVICES, INC.*



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649  
Phone/Fax: (714) 828-4999 / (714) 828-4944  
<http://www.LATesting.com> / [gardengrovelab@lateesting.com](mailto:gardengrovelab@lateesting.com)

**LA Testing Order:** 331815990  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626  
**Phone:** (562) 599-9918  
**Fax:** (714) 547-4647  
**Received:** 08/08/2018 11:30 AM  
**Analysis Date:** 08/14/2018  
**Collected:** 07/25/2018  
**Project:** Reference #331815365 / 7076.1017.0/ Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation using the 1,000 Point Count Procedure

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
131 331815990-0001	3370 Idaho - Level 1 - Exterior West - Stucco Skim Coat	Beige Non-Fibrous Heterogeneous		99.7% Non-fibrous (Other)	0.3% Chrysotile

Analyst(s)  
Sotheyry Son (1)

Michael DeCavallas, Laboratory Manager  
or other approved signatory

Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.1%. EMSL Analytical Inc suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/14/2018 17:45:43



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / [gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/24/2018 8:00 AM

**Analysis Date:** 07/27/2018

**Collected Date:** 07/23/2018

**Project:** 7076.1017.0 Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 1 - 01-Floor Tile 331815187-0001	Living Room SW - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 1 - 01-Mastic 331815187-0001A	Living Room SW - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 1 - 02-Floor Tile 331815187-0002	Living Room NE - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 1 - 02-Mastic 331815187-0002A	Living Room NE - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 1 - 03-Floor Tile 331815187-0003	Hallway East - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 1 - 03-Mastic 331815187-0003A	Hallway East - Beige 12" Beige Floor Tile w/ Gray Streaks & Yellow mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 04-Floor Tile 331815187-0004	Bedroom 1 NW - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Brown Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
12VFT 2 - 04-Mastic 331815187-0004A	Bedroom 1 NW - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 05-Floor Tile 331815187-0005	Bedroom 2 SW - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Brown Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 15:57:49



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 2 - 05-Mastic 331815187-0005A	Bedroom 2 SW - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 06-Floor Tile 331815187-0006	Bedroom 2 NE - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Brown Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
12VFT 2 - 06-Mastic 331815187-0006A	Bedroom 2 NE - Brown 12" Brown Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 3 - 07-Floor Tile 331815187-0007	Bathroom 1 NW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
12VFT 3 - 07-Mastic 331815187-0007A	Bathroom 1 NW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 3 - 07-Felt 331815187-0007B	Bathroom 1 NW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
12VFT 3 - 08-Floor Tile 331815187-0008	Bedroom 2 SW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
12VFT 3 - 08-Mastic 331815187-0008A	Bedroom 2 SW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 3 - 08-Felt 331815187-0008B	Bedroom 2 SW - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
12VFT 3 - 09-Floor Tile 331815187-0009	Bedroom 2 NE - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

Initial report from: 07/27/2018 15:57:49



# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 3 - 09-Mastic 331815187-0009A	Bedroom 2 NE - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 3 - 09-Felt 331815187-0009B	Bedroom 2 NE - Dark Brown 12" w/ Brown Streaks & Black Mastic & Moisture Barrier Paper ( Bottom Layer)	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
VSF 1 - 10-Vinyl Sheet Flooring 331815187-0010	Bathroom SE - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 1 - 10-Mastic 331815187-0010A	Bathroom SE - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 1 - 11-Vinyl Sheet Flooring 331815187-0011	Bathroom North - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 1 - 11-Mastic 331815187-0011A	Bathroom North - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 1 - 12-Vinyl Sheet Flooring 331815187-0012	Bathroom West - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 1 - 12-Mastic 331815187-0012A	Bathroom West - White / Gray / Brown Sheet Floorin w/ 6" squares & Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 1 - 13-Vinyl Sheet Flooring 331815187-0013	Kitchen SE - Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 1 - 13-Mastic 331815187-0013A	Kitchen SE - Wht / Gry Sheet Flooring mixed square / triangle Pattern w/ Yellow Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 14-Vinyl Floor Tile 331815187-0014A	Kitchen SE - Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 14-Mastic 331815187-0014B	Kitchen SE - Beige 2nd layer 12" Floor Tile Beige w/ Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 15:57:49



# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 5 - 15-Vinyl Floor Tile 331815187-0015	Kitchen SE - Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 5 - 15-Mastic 331815187-0015A	Kitchen SE - Beige 3rd layer w/ Brown White Streaks 12" floor tiles w/ Brown Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 2- 16-Vinyl Sheet Flooring 331815187-0016	Kitchen NE - White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 2- 16-Mastic 331815187-0016A	Kitchen NE - White Gray 1st Layer Wht/Gry sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 17-Vinyl Floor Tile 331815187-0017	Kitchen NE - Biege 2nd Layer 12" Floor Tile w/ Black Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 17-Mastic 331815187-0017A	Kitchen NE - Biege 2nd Layer 12" Floor Tile w/ Black Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 5 - 18-Vinyl Floor Tile 331815187-0018	Kitchen NE - Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 5 - 18-Mastic 331815187-0018A	Kitchen NE - Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 3 - 19-Vinyl Sheet Flooring 1 331815187-0019	Kitchen NE - White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic	Gray/Yellow Fibrous Heterogeneous	3% Cellulose	79% Non-fibrous (Other)	18% Chrysotile
VSF 3 - 19-Vinyl Sheet Flooring 2 331815187-0019A	Kitchen NE - White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic	Tan/Black/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
VSF 2 - 20-Vinyl Sheet Flooring 331815187-0020	Kitchen SW - White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
VSF 2 - 20-Mastic 331815187-0020A	Kitchen SW - White Gray 1st Layer sheet flooring mixed square / Triangle Pattern w/ yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 15:57:49





# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 4 - 21-Vinyl Floor Tile <small>331815187-0021</small>	Kitchen SW - Biege 2nd Layer 12" Floor Tile w/ Black Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 21-Mastic <small>331815187-0021A</small>	Kitchen SW - Biege 2nd Layer 12" Floor Tile w/ Black Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 5 - 22-Vinyl Floor Tile <small>331815187-0022</small>	Kitchen SW - Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 5 - 22-Mastic <small>331815187-0022A</small>	Kitchen SW - Beige 3rd layer Beige w/ Brown White Streaks 12" Floor Tile w/ Brown Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 3 - 23 <small>331815187-0023</small>	Kitchen SW - White / Yellow 4th Layer pebble pattern Sheet Flooring w/ Black Mastic <i>Insufficient mastic material for analysis</i>	Gray/Yellow Fibrous Heterogeneous	2% Cellulose	83% Non-fibrous (Other)	15% Chrysotile
WPF 1 - 24 <small>331815187-0024</small>	Living Room North - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 25 <small>331815187-0025</small>	Bedroom 2 North - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 26 <small>331815187-0026</small>	Bedroom 1 East - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 27 <small>331815187-0027</small>	Kitchen North - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 28 <small>331815187-0028</small>	Hallway South - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
ES 1 - 29 <small>331815187-0029</small>	Exterior South - Yellow Stucco Skim Coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
ES 1 - 30 <small>331815187-0030</small>	Exterior West - Yellow Stucco Skim Coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
ES 1 - 31 <small>331815187-0031</small>	Exterior North - Yellow Stucco Skim Coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
RS 1 - 32-Shingle 1 <small>331815187-0032</small>	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Tan/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
RS 1 - 32-Shingle 2 <small>331815187-0032A</small>	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 15:57:49



# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
RS 1 - 32-Vapor Barrier Paper 331815187-0032B	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
RS 1 - 33-Shingle 1 331815187-0033	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Tan/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
RS 1 - 33-Shingle 2 331815187-0033A	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
RS 1 - 33-Vapor Barrier Paper 331815187-0033B	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
RS 1 - 34-Shingle 1 331815187-0034	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
RS 1 - 34-Shingle 2 331815187-0034A	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
RS 1 - 34-Vapor Barrier Paper 331815187-0034B	Exterior SW - Black Brown Roof Shingles w/ Black & Brown Gravel & Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
WS/J 1 - 35-Joint Compound 331815187-0035	Kitchen SE - White Smooth Dry Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WS/J 1 - 35-Drywall 331815187-0035A	Kitchen SE - White Smooth Dry Wall	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
FBM 1 - 36 331815187-0036	Kitchen SE - Beige Baseboard Mastic Beige A/W / 4" Black BB	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
FBM 1 - 37 331815187-0037	Kitchen SW - Beige Baseboard Mastic Beige A/W / 4" Black BB	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
FBM 1 - 38 331815187-0038	Kitchen West - Beige Baseboard Mastic Beige A/W / 4" Black BB	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 39-Vinyl Floor Tile 331815187-0039	Living Room SW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 2 - 39-Mastic 331815187-0039A	Living Room SW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 40-Vinyl Floor Tile 331815187-0040	Bedroom 2 SW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 40-Mastic 331815187-0040A	Bedroom 2 SW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 41-Vinyl Floor Tile 331815187-0041	Bedroom 1 NW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 2 - 41-Mastic 331815187-0041A	Bedroom 1 NW - 12" Brown Floortile W/ White & Brown Streaks & Yellow Mastic ( Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 42-Mastic 1 331815187-0042	Living Room SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12VFT 4 - 42-Vinyl Floor Tile 331815187-0042A	Living Room SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Beige Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
12VFT 4 - 42-Mastic 2 331815187-0042B	Living Room SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
12VFT 4 - 42-Vapor Barrier Paper 331815187-0042C	Living Room SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
12VFT 4 - 43-Vinyl Floor Tile 331815187-0043	Bedroom 2 SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Beige Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
12VFT 4 - 43-Mastic 331815187-0043A	Bedroom 2 SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					

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LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
12VFT 4 - 43-Vapor Barrier Paper 331815187-0043B	Bedroom 2 SW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
RVFT 4 - 44-Vinyl Floor Tile 331815187-0044	Bedroom 1 NW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Beige Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
RVFT 4 - 44-Mastic 331815187-0044A	Bedroom 1 NW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
RVFT 4 - 44-Vapor Barrier Paper 331815187-0044B	Bedroom 1 NW - Bottom Layer 12" Beige Floor Tile w/ Black Mastic & Vapor Barrier Paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
VSF 1 - 45-Vinyl Sheet Flooring 331815187-0045	Bathroom SE - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
VSF 1 - 45-Mastic 331815187-0045A	Bathroom SE - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 1 - 46-Vinyl Sheet Flooring 331815187-0046	Bathroom NW - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
VSF 1 - 46-Mastic 331815187-0046A	Bathroom NW - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 1 - 47-Vinyl Sheet Flooring 331815187-0047	Bathroom SW - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
VSF 1 - 47-Mastic 331815187-0047A	Bathroom SW - White Gray Sheet Flooring With 6" Squares & Yellow Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 2 - 48-Vinyl Sheet Flooring 331815187-0048	Kitchen NW - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
VSF 2 - 48-Mastic 331815187-0048A	Kitchen NW - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
VSF 2 - 49-Vinyl Sheet Flooring 331815187-0049	Kitchen SE - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
VSF 2 - 49-Mastic 331815187-0049A	Kitchen SE - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 2 - 50-Vinyl Sheet Flooring 331815187-0050	Kitchen SW - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
VSF 2 - 50-Mastic 331815187-0050A	Kitchen SW - White Gray Sheet Flooring With Square / Triangle pattern & Beige Mastic ( Top Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 4 - 51-Vinyl Sheet Flooring 1 331815187-0051	Kitchen NW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Gray/Yellow/Green Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
VSF 4 - 51-Vinyl Sheet Flooring 2 331815187-0051A	Kitchen NW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Tan/Black Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
VSF 4 - 51-Mastic 331815187-0051B	Kitchen NW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 4 - 52-Vinyl Sheet Flooring 1 331815187-0052	Kitchen SE - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Gray/Yellow/Green Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
VSF 4 - 52-Vinyl Sheet Flooring 2 331815187-0052A	Kitchen SE - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Tan/Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
VSF 4 - 52-Mastic 331815187-0052B	Kitchen SE - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
VSF 4 - 53-Vinyl Sheet Flooring 1 331815187-0053	Kitchen SW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Yellow/Green Fibrous Homogeneous	5% Cellulose	60% Non-fibrous (Other)	35% Chrysotile

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LA Testing Order: 331815187

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
VSF 4 - 53-Vinyl Sheet Flooring 2 331815187-0053A	Kitchen SW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Tan/Black Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
VSF 4 - 53-Mastic 331815187-0053B	Kitchen SW - Green / Yellow Sheet Flooring Squares Pattern w/ Black Mastic ( Third Layer)	Brown/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 54-Skim Coat 331815187-0054	Living Room East - White Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 54-Plaster 331815187-0054A	Living Room East - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 55-Plaster 331815187-0055	Bedroom 1 East - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 55-Drywall 331815187-0055A	Bedroom 1 East - White Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
WPF 1 - 56-Skim Coat 331815187-0056	Bedroom 2 South - White Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 56-Plaster 331815187-0056A	Bedroom 2 South - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 56-Drywall 331815187-0056B	Bedroom 2 South - White Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
WPF 1 - 57-Skim Coat 331815187-0057	Kitchen South - White Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 57-Plaster 331815187-0057A	Kitchen South - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 57-Drywall 331815187-0057B	Kitchen South - White Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
WPF 1 - 58-Skim Coat 331815187-0058	Hallway South - White Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 58-Plaster 331815187-0058A	Hallway South - White Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WPF 1 - 58-Drywall 331815187-0058B	Hallway South - White Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
WS/J 1 - 59-Joint Compound 331815187-0059	Kitchen NE - White Drywall Smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
WS/J 1 - 59-Drywall 331815187-0059A	Kitchen NE - White Drywall Smooth	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 08/01/2018 - 08/03/2018

**Collected Date:** 07/25/2018

**Project:** 7076.1017.0/ Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
60-Skim Coat 331815365-0001	822 Plum ST - Level 1 - Exterior NW - Stucco Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
60-Stucco 331815365-0001A	822 Plum ST - Level 1 - Exterior NW - Stucco Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
61-Skim Coat 331815365-0002	822 Plum ST - Level 1 - Exterior SW - Stucco Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
61-Stucco 331815365-0002A	822 Plum ST - Level 1 - Exterior SW - Stucco Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
62-Skim Coat 331815365-0003	822 Plum ST - Level 1 - Exterior SE - Stucco Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
62-Stucco 331815365-0003A	822 Plum ST - Level 1 - Exterior SE - Stucco Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
63-Shingle 1 331815365-0004	822 Plum ST - Roof - NW - Roofing shingle & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
63-Shingle 2 331815365-0004A	822 Plum ST - Roof - NW - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
63-Vapor Barrier 331815365-0004B	822 Plum ST - Roof - NW - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
64-Shingle 331815365-0005	822 Plum ST - Roof - South - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
64-Vapor Barrier 331815365-0005A	822 Plum ST - Roof - South - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
65-Shingle 331815365-0006	822 Plum ST - Roof - SW - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
65-Vapor Barrier 331815365-0006A	822 Plum ST - Roof - SW - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
66 331815365-0007	822 Plum ST - Roof - South - Roof penetration mastic	Brown/Gray Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
67 331815365-0008	822 Plum ST - Roof - South - Roof penetration mastic	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
68 331815365-0009	822 Plum ST - Roof - South - Roof penetration mastic	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
69-Floor Tile 331815365-0010	3398 Idaho - Level 1 - Living room - SW - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
69-Mastic 331815365-0010A	3398 Idaho - Level 1 - Living room - SW - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
70-Floor Tile 331815365-0011	3398 Idaho - Level 1 - Bedroom 1 - South - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
70-Mastic 331815365-0011A	3398 Idaho - Level 1 - Bedroom 1 - South - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
71-Floor Tile 331815365-0012	3398 Idaho - Level 1 - Bedroom 2 - NE - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
71-Mastic 331815365-0012A	3398 Idaho - Level 1 - Bedroom 2 - NE - 12' Brn floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
72-Mastic 1 331815365-0013	3398 Idaho - Level 1 - Living room - SW - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	White/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
72-Floor Tile 331815365-0013A	3398 Idaho - Level 1 - Living room - SW - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Tan Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
72-Mastic 2 331815365-0013B	3398 Idaho - Level 1 - Living room - SW - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
72-Barrier Paper 331815365-0013C	3398 Idaho - Level 1 - Living room - SW - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
72-Mastic 3 331815365-0013D	3398 Idaho - Level 1 - Living room - SW - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
73-Mastic 1 331815365-0014	3398 Idaho - Level 1 - Bedroom 1 - South - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
73-Floor Tile 331815365-0014A	3398 Idaho - Level 1 - Bedroom 1 - South - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Tan Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
73-Mastic 2 331815365-0014B	3398 Idaho - Level 1 - Bedroom 1 - South - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
73-Barrier Paper 331815365-0014C	3398 Idaho - Level 1 - Bedroom 1 - South - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
73-Mastic 3 331815365-0014D	3398 Idaho - Level 1 - Bedroom 1 - South - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
74-Mastic 1 331815365-0015	3398 Idaho - Level 1 - Bedroom 2 - NE - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	White/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
74-Floor Tile 331815365-0015A	3398 Idaho - Level 1 - Bedroom 2 - NE - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
74-Mastic 2 331815365-0015B	3398 Idaho - Level 1 - Bedroom 2 - NE - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
74-Barrier Paper 331815365-0015C	3398 Idaho - Level 1 - Bedroom 2 - NE - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
74-Mastic 3 331815365-0015D	3398 Idaho - Level 1 - Bedroom 2 - NE - 12" Beige floor tile w/ black mastic & vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
75-Sheet Flooring 331815365-0016	3398 Idaho - Level 1 - Bathroom - NW - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
75-Mastic 331815365-0016A	3398 Idaho - Level 1 - Bathroom - NW - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
76-Sheet Flooring 331815365-0017	3398 Idaho - Level 1 - Bathroom - South - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
76-Mastic 331815365-0017A	3398 Idaho - Level 1 - Bathroom - South - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
77-Sheet Flooring 331815365-0018	3398 Idaho - Level 1 - Bathroom - East - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
77-Mastic 331815365-0018A	3398 Idaho - Level 1 - Bathroom - East - White/ gray sheet flooring w/ square/ triangle pattern w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
78-Sheet Flooring 331815365-0019	3398 Idaho - Level 1 - Kitchen - NW - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
78-Mastic 331815365-0019A	3398 Idaho - Level 1 - Kitchen - NW - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
79-Sheet Flooring 331815365-0020	3398 Idaho - Level 1 - Kitchen - SW - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
79-Mastic 331815365-0020A	3398 Idaho - Level 1 - Kitchen - SW - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
80-Sheet Flooring 331815365-0021	3398 Idaho - Level 1 - Kitchen - SE - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Gray/Beige Fibrous Heterogeneous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
80-Mastic 331815365-0021A	3398 Idaho - Level 1 - Kitchen - SE - White/ gray sheet flooring w/ rectangle pattern w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
81-Skim Coat 331815365-0022	3398 Idaho - Level 1 - Exterior - NW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
81-Stucco 331815365-0022A	3398 Idaho - Level 1 - Exterior - NW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
82-Skim Coat 331815365-0023	3398 Idaho - Level 1 - Exterior - SW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
82-Stucco 331815365-0023A	3398 Idaho - Level 1 - Exterior - SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
83-Skim Coat 331815365-0024	3398 Idaho - Level 1 - Exterior - SE - Stucco skim coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
83-Stucco 331815365-0024A	3398 Idaho - Level 1 - Exterior - SE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
84-Plaster 331815365-0025	3398 Idaho - Level 1 - Hall - North - Plaster	White/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
84-Drywall 331815365-0025A	3398 Idaho - Level 1 - Hall - North - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
85-Plaster 331815365-0026	3398 Idaho - Level 1 - Bedroom 1 - West - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
85-Drywall 331815365-0026A	3398 Idaho - Level 1 - Bedroom 1 - West - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
86-Plaster 331815365-0027	3398 Idaho - Level 1 - Kitchen - East - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
86-Drywall 331815365-0027A	3398 Idaho - Level 1 - Kitchen - East - Plaster	Brown/White Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
87-Plaster 331815365-0028	3398 Idaho - Level 1 - Bath Rm - N.West - Plaster	Tan/Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
87-Drywall 331815365-0028A	3398 Idaho - Level 1 - Bath Rm - N.West - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
88-Plaster 331815365-0029	3398 Idaho - Level 1 - Bedroom 2 - East - Plaster	Tan/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
88-Drywall 331815365-0029A	3398 Idaho - Level 1 - Bedroom 2 - East - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
89- Mastic 331815365-0030	3398 Idaho - Level 1 - Bathroom - SW - 4" Black vinyl baseboard w/ beige mastic	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
90- Mastic 331815365-0031	3398 Idaho - Level 1 - Bath Rm - West - 4" Black vinyl baseboard w/ beige mastic	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
91-Mastic 331815365-0032	3398 Idaho - Level 1 - Kitchen - West - 4" Black vinyl baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>baseboard not present</i>					
91-Drywall 331815365-0032A	3398 Idaho - Level 1 - Kitchen - West - 4" Black vinyl baseboard w/ beige mastic	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
92-Joint Compound 331815365-0033	3398 Idaho - Level 1 - Kitchen - NW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
92-Drywall 331815365-0033A	3398 Idaho - Level 1 - Kitchen - NW - Smooth drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
93- -Roofing 331815365-0034	3398 Idaho - Roof - NE - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
93- -Insulation 331815365-0034A	3398 Idaho - Roof - NE - Tar roof w/ insulation w/ vapor barrier + styrofoam	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
93- -Vapor Barrier 331815365-0034B	3398 Idaho - Roof - NE - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
93- -Styrofoam 331815365-0034C	3398 Idaho - Roof - NE - Tar roof w/ insulation w/ vapor barrier + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
94- -Roofing 331815365-0035	3398 Idaho - Roof - West - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
94- -Insulation 331815365-0035A	3398 Idaho - Roof - West - Tar roof w/ insulation w/ vapor barrier + styrofoam	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
94- -Vapor Barrier 331815365-0035B	3398 Idaho - Roof - West - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
94- Styrofoam 331815365-0035C	3398 Idaho - Roof - West - Tar roof w/ insulation w/ vapor barrier + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
95-Roofing 331815365-0036	3398 Idaho - Roof - Central - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Non-Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
95-Insulation 331815365-0036A	3398 Idaho - Roof - Central - Tar roof w/ insulation w/ vapor barrier + styrofoam	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
95-Vapor Barrier 331815365-0036B	3398 Idaho - Roof - Central - Tar roof w/ insulation w/ vapor barrier + styrofoam	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
95-Styrofoam 331815365-0036C	3398 Idaho - Roof - Central - Tar roof w/ insulation w/ vapor barrier + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
96-Mastic 1 331815365-0037	3398 Idaho - Roof - South central - Roof penetration mastic	Gray/Black Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
96-Mastic 2 331815365-0037A	3398 Idaho - Roof - South central - Roof penetration mastic	Gray/Black Fibrous Homogeneous	2% Glass	93% Non-fibrous (Other)	5% Chrysotile
97 331815365-0038	3398 Idaho - Roof - Central - Roof penetration mastic	Gray/Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
98 331815365-0039	3398 Idaho - Roof - East - Roof penetration mastic	Gray/Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
99 331815365-0040	3334 Idaho - Level 1 - Exterior West - Stucco skim coat	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
100 331815365-0041	3334 Idaho - Level 1 - Exterior SE - Stucco skim coat	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
101 331815365-0042	3334 Idaho - Level 1 - Exterior NE - Stucco skim coat	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
102-Shingle 1 331815365-0043	3334 Idaho - Roof - SE - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
102-Shingle 2 331815365-0043A	3334 Idaho - Roof - SE - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
102-Vapor Barrier 331815365-0043B	3334 Idaho - Roof - SE - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
103-Shingle 1 331815365-0044	3334 Idaho - Roof - South - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
103-Shingle 2 331815365-0044A	3334 Idaho - Roof - South - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
103-Vapor Barrier 331815365-0044B	3334 Idaho - Roof - South - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
104-Shingle 1 331815365-0045	3334 Idaho - Roof - SW - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
104-Shingle 2 331815365-0045A	3334 Idaho - Roof - SW - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
104-Shingle 3 331815365-0045B	3334 Idaho - Roof - SW - Roofing shingles & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
104-Vapor Barrier 331815365-0045C	3334 Idaho - Roof - SW - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
105 331815365-0046	3334 Idaho - Roof - South - Roof penetration mastic	Gray/Black Fibrous Heterogeneous		96% Non-fibrous (Other)	4% Chrysotile
106 331815365-0047	3334 Idaho - Roof - South - Roof penetration mastic	Gray/Black Fibrous Heterogeneous		96% Non-fibrous (Other)	4% Chrysotile
107 331815365-0048	3334 Idaho - Roof - South - Roof penetration mastic	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
108-Plaster 331815365-0049	3334 Idaho - Level 1 - Living room - NW - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
108-Drywall 331815365-0049A	3334 Idaho - Level 1 - Living room - NW - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
109-Plaster 331815365-0050	3334 Idaho - Level 1 - Kitchen - South - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
109-Drywall 331815365-0050A	3334 Idaho - Level 1 - Kitchen - South - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
110-Plaster 331815365-0051	3334 Idaho - Level 1 - Bedroom 1 - East - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
110-Drywall 331815365-0051A	3334 Idaho - Level 1 - Bedroom 1 - East - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
111-Plaster 331815365-0052	3334 Idaho - Level 1 - Bathroom - South - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
111-Drywall 331815365-0052A	3334 Idaho - Level 1 - Bathroom - South - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
112-Skim Coat 331815365-0053	3334 Idaho - Level 1 - Bedroom 2 - NE - Plaster	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
112-Plaster 331815365-0053A	3334 Idaho - Level 1 - Bedroom 2 - NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
112-Drywall 331815365-0053B	3334 Idaho - Level 1 - Bedroom 2 - NE - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
113-Sheet Flooring 331815365-0054	3334 Idaho - Level 1 - Bathroom SW - Sheet flooring w/ 6" squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
113-Mastic 331815365-0054B	3334 Idaho - Level 1 - Bathroom SW - Sheet flooring w/ 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
114-Sheet Flooring 331815365-0055	3334 Idaho - Level 1 - Bathroom East - Sheet flooring w/ 6" squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
114-Mastic 331815365-0055A	3334 Idaho - Level 1 - Bathroom East - Sheet flooring w/ 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
115-Sheet Flooring 331815365-0056	3334 Idaho - Level 1 - Bathroom NE - Sheet flooring w/ 6" squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
115-Mastic 331815365-0056A	3334 Idaho - Level 1 - Bathroom NE - Sheet flooring w/ 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
116-Floor Tile 331815365-0057	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
116-Mastic 331815365-0057A	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
117-Floor Tile 331815365-0058	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
117-Mastic 331815365-0058A	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
118-Floor Tile 331815365-0059	3334 Idaho - Level 1 - Bedroom 2 - Central - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
118-Mastic 331815365-0059A	3334 Idaho - Level 1 - Bedroom 2 - Central - 12" Floor tile w/ white & BRN streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
119-Floor Tile 331815365-0060	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
119-Mastic 1 331815365-0060A	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
119-Vapor Barrier Paper 331815365-0060B	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
119-Mastic 2 331815365-0060C	3334 Idaho - Level 1 - Living room - West - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
120-Floor Tile 331815365-0061	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
120-Mastic 1 331815365-0061A	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
120-Vapor Barrier Paper 331815365-0061B	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
120-Mastic 2 331815365-0061C	3334 Idaho - Level 1 - Bedroom 1 - East - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
121-Floor Tile 331815365-0062	3334 Idaho - Level 1 - Bedroom 2 - Central - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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			% Fibrous	% Non-Fibrous	% Type
121-Mastic 1 331815365-0062A	3334 Idaho - Level 1 - Bedroom 2- Central - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
121-Vapor Barrier Paper 331815365-0062B	3334 Idaho - Level 1 - Bedroom 2- Central - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
121-Mastic 2 331815365-0062C	3334 Idaho - Level 1 - Bedroom 2- Central - 12" Floor tile w/ black mastic & vapor barrier paper (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
122-Mastic 1 331815365-0063	3334 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
122-Sheet Flooring 331815365-0063A	3334 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Beige Fibrous Heterogeneous		65% Non-fibrous (Other)	35% Chrysotile
122-Mastic 2 331815365-0063B	3334 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
123-Mastic 1 331815365-0064	3334 Idaho - Level 1 - Kitchen - SE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
123-Sheet Flooring 331815365-0064A	3334 Idaho - Level 1 - Kitchen - SE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
123-Mastic 2 331815365-0064B	3334 Idaho - Level 1 - Kitchen - SE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
124-Mastic 1 331815365-0065	3334 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
124-Sheet Flooring 331815365-0065A	3334 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Gray/Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
124-Mastic 2 331815365-0065B	3334 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
125 331815365-0066	3334 Idaho - Level 1 - Kitchen - NW - Smooth drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
126-Baseboard 331815365-0067	3334 Idaho - Level 1 - Bathroom NE - 4" black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
126-Mastic 331815365-0067A	3334 Idaho - Level 1 - Bathroom NE - 4" black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
127-Baseboard 331815365-0068	3334 Idaho - Level 1 - Bathroom - E - 4" black baseboard w/ beige mastic <i>Mastic not preset in sample.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
128-Mastic 331815365-0069	3334 Idaho - Level 1 - Bathroom - SE - 4" black baseboard w/ beige mastic <i>Baseboard not found in sample. Sample contained mastic only.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
129 331815365-0070	3370 Idaho - Level 1 - Exterior SW - Stucco Skim Coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
130 331815365-0071	3370 Idaho - Level 1 - Exterior SE - Stucco Skim Coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
131 331815365-0072	3370 Idaho - Level 1 - Exterior West - Stucco Skim Coat <i>Inseparable paint / coating layer included in analysis</i>	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
132-Sheet Flooring 331815365-0073	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	Gray Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
132-Mastic 331815365-0073A	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
133-Sheet Flooring 331815365-0074	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	Gray Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
133-Mastic 331815365-0074A	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
134-Sheet Flooring 331815365-0075	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	Gray/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
134-Mastic 331815365-0075A	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ square & triangle pattern w/ yellow mastic (1st layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
135-Mastic 1 331815365-0076	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
135-Sheet Flooring 331815365-0076A	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	Gray/Orange Fibrous Heterogeneous	30% Cellulose 10% Synthetic	60% Non-fibrous (Other)	None Detected
135-Mastic 2 331815365-0076B	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
136-Mastic 1 331815365-0077	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
136-Sheet Flooring 331815365-0077A	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	Gray/Orange Fibrous Heterogeneous	25% Cellulose 10% Synthetic	65% Non-fibrous (Other)	None Detected
136-Mastic 2 331815365-0077B	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
137-Sheet Flooring 331815365-0078	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	Gray/Yellow Fibrous Heterogeneous	20% Cellulose 10% Synthetic	70% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
137-Mastic 331815365-0078A	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown specs w/ white mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
138-Mastic 1 331815365-0079	3370 Idaho - Level 1 - Kitchen - NE - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
138-Sheet Flooring 331815365-0079A	3370 Idaho - Level 1 - Kitchen - NE - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Gray/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
138-Mastic 2 331815365-0079B	3370 Idaho - Level 1 - Kitchen - NE - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
139-Mastic 1 331815365-0080	3370 Idaho - Level 1 - Kitchen - East - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
139-Sheet Flooring 331815365-0080A	3370 Idaho - Level 1 - Kitchen - East - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Gray/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
139-Mastic 2 331815365-0080B	3370 Idaho - Level 1 - Kitchen - East - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
140-Sheet Flooring 331815365-0081	3370 Idaho - Level 1 - Kitchen - SW - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Gray/Yellow Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
140-Mastic 331815365-0081A	3370 Idaho - Level 1 - Kitchen - SW - Pebble pattern sheet flooring w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
141-Sheet Flooring 331815365-0082	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
141-Mastic 1 331815365-0082A	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
141-Vapor Barrier Paper 331815365-0082B	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
141-Mastic 2 331815365-0082C	3370 Idaho - Level 1 - Kitchen - NE - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
142-Sheet Flooring 331815365-0083	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
142-Mastic 1 331815365-0083A	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
142-Vapor Barrier Paper 331815365-0083B	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
142-Mastic 2 331815365-0083C	3370 Idaho - Level 1 - Kitchen - East - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
143-Sheet Flooring 331815365-0084	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Tan/Yellow Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
143-Mastic 1 331815365-0084A	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
143-Vapor Barrier Paper 331815365-0084B	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
143-Mastic 2 331815365-0084C	3370 Idaho - Level 1 - Kitchen - SW - Sheet flooring w/ brown flower pattern w/ black mastic + Vapor barrier paper ( 4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
144-Plaster 331815365-0085	3370 Idaho - Level 1 - Living room - SW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
144-Drywall 331815365-0085A	3370 Idaho - Level 1 - Living room - SW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
145-Plaster 331815365-0086	3370 Idaho - Level 1 - Bedroom 1 - South - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
145-Drywall 331815365-0086A	3370 Idaho - Level 1 - Bedroom 1 - South - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
146-Plaster 331815365-0087	3370 Idaho - Level 1 - Bedroom 2- North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
146-Drywall 331815365-0087A	3370 Idaho - Level 1 - Bedroom 2- North - Plaster	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
147-Plaster 331815365-0088	3370 Idaho - Level 1 - Bathroom SW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
147-Drywall 331815365-0088A	3370 Idaho - Level 1 - Bathroom SW - Plaster	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
148-Plaster 331815365-0089	3370 Idaho - Level 1 - Kitchen - North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
148-Drywall 331815365-0089A	3370 Idaho - Level 1 - Kitchen - North - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
149-Floor Tile 331815365-0090	3370 Idaho - Level 1 - Living room - NE - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
149-Mastic 331815365-0090A	3370 Idaho - Level 1 - Living room - NE - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
150-Floor Tile 331815365-0091	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
150-Mastic 331815365-0091A	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
151-Floor Tile 331815365-0092	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
151-Mastic 331815365-0092A	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ white & brn streaks w/ yellow mastic (Top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
152-Mastic 1 331815365-0093	3370 Idaho - Level 1 - Living room NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
152-Floor Tile 331815365-0093A	3370 Idaho - Level 1 - Living room NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
152-Mastic 2 331815365-0093B	3370 Idaho - Level 1 - Living room NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
152-Vapor Barrier Paper 331815365-0093C	3370 Idaho - Level 1 - Living room NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
153-Mastic 1 331815365-0094	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
153-Floor Tile 331815365-0094A	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
153-Mastic 2 331815365-0094B	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
153-Vapor Barrier Paper 331815365-0094C	3370 Idaho - Level 1 - Bedroom 1 - NE - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
154-Floor Tile 331815365-0095	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
154-Mastic 1 331815365-0095A	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
154-Vapor Barrier Paper 331815365-0095B	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
154-Mastic 2 331815365-0095C	3370 Idaho - Level 1 - Bedroom 2- NW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
155-Sheet Flooring 331815365-0096	3370 Idaho - Level 1 - Bathroom NW - Sheet Flooring w/ 6" Squares w/ yellow mastic	Gray Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
155-Mastic 331815365-0096A	3370 Idaho - Level 1 - Bathroom NW - Sheet Flooring w/ 6" Squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
156-Sheet Flooring 331815365-0097	3370 Idaho - Level 1 - Bathroom NE - Sheet Flooring w/ 6" Squares w/ yellow mastic	Gray Fibrous Homogeneous	18% Cellulose	82% Non-fibrous (Other)	None Detected
156-Mastic 331815365-0097A	3370 Idaho - Level 1 - Bathroom NE - Sheet Flooring w/ 6" Squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
157-Sheet Flooring 331815365-0098	3370 Idaho - Level 1 - Bathroom East - Sheet Flooring w/ 6" Squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
157-Mastic 331815365-0098A	3370 Idaho - Level 1 - Bathroom East - Sheet Flooring w/ 6" Squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
158-Mastic 331815365-0099	3370 Idaho - Level 1 - Kitchen - SW - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
159-Mastic 331815365-0100	3370 Idaho - Level 1 - Kitchen - North - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
160-Mastic 331815365-0101	3370 Idaho - Level 1 - Kitchen - East - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>baseboard not present</i>					

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
161-Roof Shingle <i>331815365-0102</i>	3370 Idaho - Roof - SE - Roof shingle & vapor barrier	Gray/Black Fibrous Heterogeneous	8% Glass	92% Non-fibrous (Other)	None Detected
161-Vapor Barrier Paper <i>331815365-0102A</i>	3370 Idaho - Roof - SE - Roof shingle & vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
162-Roof Shingle <i>331815365-0103</i>	3370 Idaho - Roof - East - Roof shingle & vapor barrier	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
162-Vapor Barrier Paper <i>331815365-0103A</i>	3370 Idaho - Roof - East - Roof shingle & vapor barrier	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
163-Shingle <i>331815365-0104</i>	3370 Idaho - Roof - NE - Roof shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
163-Vapor Barrier Paper <i>331815365-0104A</i>	3370 Idaho - Roof - NE - Roof shingle & vapor barrier	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
164 <i>331815365-0105</i>	3370 Idaho - Roof - East - Roof penetration mastic	Gray/Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
165 <i>331815365-0106</i>	3370 Idaho - Roof - East - Roof penetration mastic	Gray/Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
166 <i>331815365-0107</i>	3370 Idaho - Roof - East - Roof penetration mastic	Gray/Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
167-Skim Coat <i>331815365-0108</i>	3429 Florida - Level 1 - Exterior East - Stucco Skim coat	Brown/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
167-Stucco <i>331815365-0108A</i>	3429 Florida - Level 1 - Exterior East - Stucco Skim coat <i>Inseparable paint / coating layer included in analysis</i>	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
168-Skim Coat <i>331815365-0109</i>	3429 Florida - Level 1 - Exterior North - Stucco Skim coat	Brown/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
168-Stucco <i>331815365-0109A</i>	3429 Florida - Level 1 - Exterior North - Stucco Skim coat <i>Inseparable paint / coating layer included in analysis</i>	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
169 <i>331815365-0110</i>	3429 Florida - Level 1 - Exterior West - Stucco Skim coat <i>Inseparable paint / coating layer included in analysis</i>	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
170-Shingle 1 <i>331815365-0111</i>	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Red/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
170-Shingle 2 <i>331815365-0111A</i>	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
170-Vapor Barrier <i>331815365-0111B</i>	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
171-Shingle 1 <i>331815365-0112</i>	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Red/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected

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# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
171-Shingle 2 331815365-0112A	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
171-Vapor Barrier 331815365-0112B	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
172-Shingle 1 331815365-0113	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Red/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
172-Shingle 2 331815365-0113A	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
172-Vapor Barrier 331815365-0113B	3429 Florida - Roof - SE - Roofing shingle & vapor barrier	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
173-Skim Coat 331815365-0114	3429 Florida - Level 1- Bedroom 2 - North - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
173-Plaster 331815365-0114A	3429 Florida - Level 1- Bedroom 2 - North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
173-Drywall 331815365-0114B	3429 Florida - Level 1- Bedroom 2 - North - Plaster	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
174-Skim Coat 331815365-0115	3429 Florida - Level 1- Bedroom 1- East - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
174-Plaster 331815365-0115A	3429 Florida - Level 1- Bedroom 1- East - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
174-Drywall 331815365-0115B	3429 Florida - Level 1- Bedroom 1- East - Plaster	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
175-Skim Coat 331815365-0116	3429 Florida - Level 1- Living room - NE - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
175-Plaster 331815365-0116A	3429 Florida - Level 1- Living room - NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
175-Drywall 331815365-0116B	3429 Florida - Level 1- Living room - NE - Plaster	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
176-Skim Coat 331815365-0117	3429 Florida - Level 1- Hall - SE - Plaster	Tan/Blue/Green Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
176-Plaster 331815365-0117A	3429 Florida - Level 1- Hall - SE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
176-Drywall 331815365-0117B	3429 Florida - Level 1- Hall - SE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
177-Skim Coat 331815365-0118	3429 Florida - Level 1- Kitchen- South - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
177-Plaster 331815365-0118A	3429 Florida - Level 1- Kitchen- South - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
177-Drywall 331815365-0118B	3429 Florida - Level 1- Kitchen- South - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
178-Baseboard 331815365-0119	3429 Florida - Level 1- South - 4' Black baseboard w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
178-Mastic 331815365-0119A	3429 Florida - Level 1- South - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
179-Baseboard 331815365-0120	3429 Florida - Level 1- West - 4' Black baseboard w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
179-Mastic 331815365-0120A	3429 Florida - Level 1- West - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
180-Baseboard 331815365-0121	3429 Florida - Level 1- NW - 4' Black baseboard w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
180-Mastic 331815365-0121A	3429 Florida - Level 1- NW - 4' Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
181-Floor Tile 331815365-0122	3429 Florida - Level 1- Living room - SW - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
181-Mastic 331815365-0122A	3429 Florida - Level 1- Living room - SW - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
182-Floor Tile 331815365-0123	3429 Florida - Level 1- Bedroom 1- West - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
182-Mastic 331815365-0123A	3429 Florida - Level 1- Bedroom 1- West - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
183-Floor Tile 331815365-0124	3429 Florida - Level 1- Bedroom 2 - East - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
183-Mastic 331815365-0124A	3429 Florida - Level 1- Bedroom 2 - East - 12' flooring tile w/ mastic & brn streak w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
184-Floor Tile 331815365-0125	3429 Florida - Level 1- Living room - SW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
184-Mastic 1 331815365-0125A	3429 Florida - Level 1- Living room - SW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
184-Vapor Barrier Paper 331815365-0125B	3429 Florida - Level 1- Living room - SW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
184-Mastic 2 331815365-0125C	3429 Florida - Level 1- Living room - SW - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
185-Floor Tile 331815365-0126	3429 Florida - Level 1- Bedroom 1- West - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
185-Mastic 1 331815365-0126A	3429 Florida - Level 1- Bedroom 1- West - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
185-Vapor Barrier Paper 331815365-0126B	3429 Florida - Level 1- Bedroom 1- West - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
185-Mastic 2 331815365-0126C	3429 Florida - Level 1- Bedroom 1- West - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
186-Floor Tile 331815365-0127	3429 Florida - Level 1- Bedroom 2- East - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
186-Mastic 1 331815365-0127A	3429 Florida - Level 1- Bedroom 2- East - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
186-Vapor Barrier Paper 331815365-0127B	3429 Florida - Level 1- Bedroom 2- East - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
186-Mastic 2 331815365-0127C	3429 Florida - Level 1- Bedroom 2- East - 12' Floor tile w/ brown streak w/ black mastic + vapor barrier paper ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
187-Mastic 331815365-0128	3429 Florida - Level 1 - Kitchen SW - Sheet flooring w. brown specs w/ white mastic ( second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
187-Sheet Flooring 331815365-0128A	3429 Florida - Level 1 - Kitchen SW - Sheet flooring w. brown specs w/ white mastic ( second layer)	Gray/Orange Fibrous Heterogeneous	30% Cellulose 5% Glass	65% Non-fibrous (Other)	None Detected
188-Mastic 331815365-0129	3429 Florida - Level 1 - Kitchen West - Sheet flooring w. brown specs w/ white mastic ( second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
188-Sheet Flooring 331815365-0129A	3429 Florida - Level 1 - Kitchen West - Sheet flooring w. brown specs w/ white mastic ( second layer)	Gray/Orange Fibrous Heterogeneous	25% Cellulose 10% Glass	65% Non-fibrous (Other)	None Detected
189-Mastic 331815365-0130	3429 Florida - Level 1 - Kitchen NE - Sheet flooring w. brown specs w/ white mastic ( second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
189-Sheet Flooring 331815365-0130A	3429 Florida - Level 1 - Kitchen NE - Sheet flooring w. brown specs w/ white mastic ( second layer)	Gray/Beige Fibrous Heterogeneous	25% Cellulose 10% Glass	65% Non-fibrous (Other)	None Detected
190-Mastic 1 331815365-0131	3429 Florida - Level 1 - Kitchen SW - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190-Sheet Flooring 331815365-0131A	3429 Florida - Level 1 - Kitchen SW - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Gray/Beige Fibrous Heterogeneous		60% Non-fibrous (Other)	40% Chrysotile

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LA Testing Order: 331815365

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190-Mastic 2 331815365-0131B	3429 Florida - Level 1 - Kitchen SW - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
191-Mastic 1 331815365-0132	3429 Florida - Level 1 - Kitchen West - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
191-Sheet Flooring 331815365-0132A	3429 Florida - Level 1 - Kitchen West - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Gray/Beige Fibrous Heterogeneous		65% Non-fibrous (Other)	35% Chrysotile
191-Mastic 2 331815365-0132B	3429 Florida - Level 1 - Kitchen West - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
192-Sheet Flooring 331815365-0133	3429 Florida - Level 1 - Kitchen NE - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Brown/Gray/Yellow Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
<i>Vapor Barrier not found in sample</i>					
192-Mastic 331815365-0133A	3429 Florida - Level 1 - Kitchen NE - Sheet floor w/ brown flower pattern w. blk mastic + vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
193-Mastic 1 331815365-0134	3429 Florida - Level 1 - Bath room - West - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
193-Sheet Flooring 331815365-0134A	3429 Florida - Level 1 - Bath room - West - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Gray/White/Various Fibrous Heterogeneous		65% Non-fibrous (Other)	35% Chrysotile
193-Mastic 2 331815365-0134B	3429 Florida - Level 1 - Bath room - West - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
194-Mastic 1 331815365-0135	3429 Florida - Level 1 - Bath room - NW - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815365

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
194-Sheet Flooring 331815365-0135A	3429 Florida - Level 1 - Bath room - NW - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Gray/White/Various Fibrous Heterogeneous		60% Non-fibrous (Other)	40% Chrysotile
194-Mastic 2 331815365-0135B	3429 Florida - Level 1 - Bath room - NW - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
195-Sheet Flooring 331815365-0136	3429 Florida - Level 1 - Bath room - East - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
195-Mastic 331815365-0136A	3429 Florida - Level 1 - Bath room - East - Pebble pattern sheet flooring w/ yellow mastic (Second layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Christopher Miranda (98)

David Garcia (93)

Elizabeth Herrera (56)

Sophia Nguyen (23)

Sotheary Son (40)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/07/2018 8:00 AM

**Analysis Date:** 08/07/2018 - 08/13/2018

**Collected Date:** 07/27/2018

**Project:** 7076.1017.0/ Canyon Crest Family Housing Survey (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
196-Skim Coat 331815863-0001	Unit 3367 Utah - Level 1 - Living room - North - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
196-Plaster 331815863-0001A	Unit 3367 Utah - Level 1 - Living room - North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
197-Skim Coat 331815863-0002	Unit 3367 Utah - Level 1 - Kitchen - East - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
197-Plaster 331815863-0002A	Unit 3367 Utah - Level 1 - Kitchen - East - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
197-Drywall 331815863-0002B	Unit 3367 Utah - Level 1 - Kitchen - East - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
198-Skim Coat 331815863-0003A	Unit 3367 Utah - Level 1 - Hallway - NE - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
198-Plaster 331815863-0003B	Unit 3367 Utah - Level 1 - Hallway - NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
198-Drywall 331815863-0003C	Unit 3367 Utah - Level 1 - Hallway - NE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
199-Skim Coat 331815863-0004	Unit 3367 Utah - Level 1 - Bedroom 2 - North - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
199-Plaster 331815863-0004A	Unit 3367 Utah - Level 1 - Bedroom 2 - North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
199-Drywall 331815863-0004B	Unit 3367 Utah - Level 1 - Bedroom 2 - North - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
200-Skim Coat 331815863-0005	Unit 3367 Utah - Level 1 - Bedroom 1 - West - Plaster ceiling	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
200-Plaster 331815863-0005A	Unit 3367 Utah - Level 1 - Bedroom 1 - West - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
200-Drywall 331815863-0005B	Unit 3367 Utah - Level 1 - Bedroom 1 - West - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
201-Skim Coat 331815863-0006	Unit 3367 Utah - Level 1 - Exterior - NE - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Stucco not found in sample.

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
202-Skim Coat 331815863-0007	Unit 3367 Utah - Level 1 - Exterior - West - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Stucco not found in sample.</i>					
203-Skim Coat 331815863-0008	Unit 3367 Utah - Level 1 - Exterior - SW - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
203-Stucco 331815863-0008A	Unit 3367 Utah - Level 1 - Exterior - SW - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
204-Baseboard 331815863-0009	Unit 3367 Utah - Level 1 - Bathroom - South - 4" Black baseboard w/ yellow mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
204-Mastic 331815863-0009A	Unit 3367 Utah - Level 1 - Bathroom - South - 4" Black baseboard w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205-Mastic 331815863-0010	Unit 3367 Utah - Level 1 - Kitchen - South - 4" Black baseboard w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found in sample.</i>					
206-Mastic 331815863-0011	Unit 3367 Utah - Level 1 - Kitchen - SW - 4" Black baseboard w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
207-Sheet Flooring 331815863-0012	Unit 3367 Utah - Level 1 - Bathroom - East - Sheet flooring 6" squares w/ white mastic	Gray/Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
207-Mastic 331815863-0012A	Unit 3367 Utah - Level 1 - Bathroom - East - Sheet flooring 6" squares w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
208-Sheet Flooring 331815863-0013	Unit 3367 Utah - Level 1 - Bathroom - NW - Sheet flooring 6" squares w/ white mastic	Gray/Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
208-Mastic 331815863-0013A	Unit 3367 Utah - Level 1 - Bathroom - NW - Sheet flooring 6" squares w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
209-Sheet Flooring 331815863-0014	Unit 3367 Utah - Level 1 - Bathroom - West - Sheet flooring 6" squares w/ white mastic	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
209-Mastic 331815863-0014A	Unit 3367 Utah - Level 1 - Bathroom - West - Sheet flooring 6" squares w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210-Floor Tile 331815863-0015	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210-Mastic 331815863-0015A	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
211-Floor Tile 331815863-0016	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
211-Mastic 331815863-0016A	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
212-Floor Tile 331815863-0017	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
212-Mastic 331815863-0017A	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
213-Mastic 1 331815863-0018	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
213-Floor Tile 331815863-0018A	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Beige Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
213-Mastic 2 331815863-0018B	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
213-Vapor Barrier 331815863-0018C	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
213-Mastic 3 331815863-0018D	Unit 3367 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
214-Mastic 1 331815863-0019	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
214-Floor Tile 331815863-0019A	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
214-Mastic 2 331815863-0019B	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
214-Vapor Barrier 331815863-0019C	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
214-Mastic 3 331815863-0019D	Unit 3367 Utah - Level 1 - Bedroom 1 - NW - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
215-Mastic 1 331815863-0020	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
215-Floor Tile 331815863-0020A	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
215-Mastic 2 331815863-0020B	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Tan/Black Non-Fibrous Heterogeneous		98% Non-fibrous (Other)	2% Chrysotile

Result includes a small amount of inseparable attached floor tile material.

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
215-Vapor Barrier 331815863-0020C	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
215-Mastic 3 331815863-0020D	Unit 3367 Utah - Level 1 - Bedroom 2 - NE - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
216-Sheet Flooring 331815863-0021	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	Gray/Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
216-Mastic 331815863-0021A	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
217-Sheet Flooring 331815863-0022	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	Gray/Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
217-Mastic 331815863-0022A	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
217-Floor Tile 331815863-0022B	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	Gray/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
218-Sheet Flooring 331815863-0023	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
218-Mastic 331815863-0023A	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring mixed square/ triangle pattern w/ wht mastic (1st layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
219-Mastic 331815863-0024	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
219-Sheet Flooring 331815863-0024A	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Gray/Orange Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
220-Mastic 331815863-0025	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
220-Sheet Flooring 331815863-0025A	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Gray/Orange Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
221-Mastic 1 331815863-0026	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
221-Sheet Flooring 331815863-0026A	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	Beige Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
221-Mastic 2 331815863-0026B	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ brown spec w/ black mastic (3rd mastic)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
222-Mastic 1 331815863-0027	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
222-Sheet Flooring 331815863-0027A	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Gray/Variou/Pink Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
222-Vapor Barrier 331815863-0027B	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown/Black/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
222-Mastic 2 331815863-0027C	Unit 3367 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
223-Sheet Flooring 331815863-0028	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Gray/Various/Pink Non-Fibrous Homogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
223-Vapor Barrier 331815863-0028A	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown/Black/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
223-Mastic 331815863-0028B	Unit 3367 Utah - Level 1 - Kitchen - SE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
224-Sheet Flooring 331815863-0029	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Various/Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
224-Vapor Barrier 331815863-0029A	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown/Green Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
224-Mastic 331815863-0029B	Unit 3367 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (4th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
225-Roof Shingle 1 331815863-0030	Unit 3367 Utah - Roof - Roof - NW - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
225-Roof Shingle 2 331815863-0030A	Unit 3367 Utah - Roof - Roof - NW - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
225-Vapor Barrier 331815863-0030B	Unit 3367 Utah - Roof - Roof - NW - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
226-Roof Shingle 1 331815863-0031	Unit 3367 Utah - Roof - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
226-Roof Shingle 2 331815863-0031A	Unit 3367 Utah - Roof - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
226-Vapor Barrier 331815863-0031B	Unit 3367 Utah - Roof - Roof - West - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
227-Roof Shingle 1 331815863-0032	Unit 3367 Utah - Roof - Roof - SW - Roofing shingles & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
227-Roof Shingle 2 331815863-0032A	Unit 3367 Utah - Roof - Roof - SW - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
227-Vapor Barrier 331815863-0032B	Unit 3367 Utah - Roof - Roof - SW - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
228 331815863-0033	Unit 3367 Utah - Roof - Roof - West - Roof penetration mastic	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
229 331815863-0034	Unit 3367 Utah - Roof - Roof - West - Roof penetration mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
230 331815863-0035	Unit 3367 Utah - Roof - Roof - West - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
231-Joint Compound 331815863-0036	Unit 3367 Utah - Level 1 - Kitchen - SW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
231-Drywall 331815863-0036A	Unit 3367 Utah - Level 1 - Kitchen - SW - Smooth drywall	Brown/White Fibrous Heterogeneous	8% Cellulose	70% Gypsum 22% Non-fibrous (Other)	None Detected
232-Skim Coat 331815863-0037	Unit 3341 Utah - Level 1 - Living room - North - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
232-Plaster 331815863-0037A	Unit 3341 Utah - Level 1 - Living room - North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
232-Drywall 331815863-0037B	Unit 3341 Utah - Level 1 - Living room - North - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
233-Skim Coat 331815863-0038	Unit 3341 Utah - Level 1 - Kitchen - SE - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
233-Plaster 331815863-0038A	Unit 3341 Utah - Level 1 - Kitchen - SE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
233-Drywall 331815863-0038B	Unit 3341 Utah - Level 1 - Kitchen - SE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
234-Skim Coat 331815863-0039	Unit 3341 Utah - Level 1 - Bedroom 1 - South - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
234-Plaster 331815863-0039A	Unit 3341 Utah - Level 1 - Bedroom 1 - South - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
234-Drywall 331815863-0039B	Unit 3341 Utah - Level 1 - Bedroom 1 - South - Plaster	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
235-Skim Coat 331815863-0040	Unit 3341 Utah - Level 1 - Hallway - NE - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
235-Plaster 331815863-0040A	Unit 3341 Utah - Level 1 - Hallway - NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
235-Drywall 331815863-0040B	Unit 3341 Utah - Level 1 - Hallway - NE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
236-Skim Coat 331815863-0041	Unit 3341 Utah - Level 1 - Bedroom 2 - West - Plaster ceiling	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
236-Plaster 331815863-0041A	Unit 3341 Utah - Level 1 - Bedroom 2 - West - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
236-Drywall 331815863-0041B	Unit 3341 Utah - Level 1 - Bedroom 2 - West - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
237-Joint Compound 331815863-0042	Unit 3341 Utah - Level 1 - Kitchen - SW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
237-Drywall 331815863-0042A	Unit 3341 Utah - Level 1 - Kitchen - SW - Smooth drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
238-Sheet Flooring 331815863-0043	Unit 3341 Utah - Level 1 - Bathroom - East - Sheet flooring 6" squares w/ beige mastic	Gray/White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
238-Mastic 1 331815863-0043A	Unit 3341 Utah - Level 1 - Bathroom - East - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
238-Mastic 2 331815863-0043B	Unit 3341 Utah - Level 1 - Bathroom - East - Sheet flooring 6" squares w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
239-Sheet Flooring 331815863-0044	Unit 3341 Utah - Level 1 - Bathroom - SE - Sheet flooring 6" squares w/ beige mastic	Gray/White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
239-Mastic 331815863-0044A	Unit 3341 Utah - Level 1 - Bathroom - SE - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
240-Sheet Flooring 331815863-0045	Unit 3341 Utah - Level 1 - Bathroom - West - Sheet flooring 6" squares w/ beige mastic	Gray/White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
240-Mastic 331815863-0045A	Unit 3341 Utah - Level 1 - Bathroom - West - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
241-Vinyl Floor Tile 331815863-0046	Unit 3341 Utah - Level 1 - Kitchen - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241-Mastic 331815863-0046A	Unit 3341 Utah - Level 1 - Kitchen - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
242-Vinyl Floor Tile 331815863-0047	Unit 3341 Utah - Level 1 - Kitchen - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
242-Mastic 331815863-0047A	Unit 3341 Utah - Level 1 - Kitchen - NW - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
243-Vinyl Floor Tile 331815863-0048	Unit 3341 Utah - Level 1 - Kitchen - West - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
243-Mastic 331815863-0048A	Unit 3341 Utah - Level 1 - Kitchen - West - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
244-Vinyl Floor Tile 331815863-0049	Unit 3341 Utah - Level 1 - Kitchen - East - Sheet flooring w/ brown specs w/ beige mastic (2nd layer) <i>Mastic not found in sample</i>	Orange Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
245-Vinyl Floor Tile 331815863-0050	Unit 3341 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ brown specs w/ beige mastic (2nd layer) <i>Mastic not found in sample.</i>	Orange Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
246-Sheet Flooring 331815863-0051	Unit 3341 Utah - Level 1 - Kitchen - West - Sheet flooring w/ brown specs w/ beige mastic (2nd layer) <i>Mastic not found.</i>	Beige Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
247-Mastic 1 331815863-0052	Unit 3341 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
247-Vinyl Floor Tile 331815863-0052A	Unit 3341 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Gray/Various/Pink Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
247-Vapor Barrier 331815863-0052B	Unit 3341 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown/Black/Green Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
247-Mastic 2 331815863-0052C	Unit 3341 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
248-Vinyl Floor Tile 331815863-0053	Unit 3341 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Gray/Various/Pink Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Mastic not found in sample.</i>					
248-Vapor Barrier 331815863-0053A	Unit 3341 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown/Black/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
249-Sheet Flooring 331815863-0054	Unit 3341 Utah - Level 1 - Kitchen - West - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown/Beige Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
<i>Black mastic and vapor barrier not found.</i>					
250-Mastic 1 331815863-0055	Unit 3341 Utah - Level 1 - Living room - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
250-Vinyl Floor Tile 331815863-0055A	Unit 3341 Utah - Level 1 - Living room - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
250-Mastic 2 331815863-0055B	Unit 3341 Utah - Level 1 - Living room - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
250-Vapor Barrier 331815863-0055C	Unit 3341 Utah - Level 1 - Living room - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
250-Mastic 3 331815863-0055D	Unit 3341 Utah - Level 1 - Living room - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
251-Mastic 1 331815863-0056	Unit 3341 Utah - Level 1 - Bedroom 2 - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
251-Vinyl Floor Tile 331815863-0056A	Unit 3341 Utah - Level 1 - Bedroom 2 - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
251-Mastic 2 331815863-0056B	Unit 3341 Utah - Level 1 - Bedroom 2 - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
251-Vapor Barrier 331815863-0056C	Unit 3341 Utah - Level 1 - Bedroom 2 - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
251-Mastic 3 331815863-0056D	Unit 3341 Utah - Level 1 - Bedroom 2 - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
252-Mastic 1 331815863-0057	Unit 3341 Utah - Level 1 - Bedroom 1 - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
252-Floor Tile 331815863-0057A	Unit 3341 Utah - Level 1 - Bedroom 1 - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
252-Mastic 2 331815863-0057B	Unit 3341 Utah - Level 1 - Bedroom 1 - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Tan/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
252-Vapor Barrier 331815863-0057C	Unit 3341 Utah - Level 1 - Bedroom 1 - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
252-Mastic 3 331815863-0057D	Unit 3341 Utah - Level 1 - Bedroom 1 - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (2nd layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
253-Roof Shingle 1 331815863-0058	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
253-Roof Shingle 2 331815863-0058A	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
253-Roof Shingle 3 331815863-0058B	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
253-Vapor Barrier 331815863-0058C	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
254-Roof Shingle 1 331815863-0059	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
254-Roof Shingle 2 331815863-0059A	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	30% Glass	70% Non-fibrous (Other)	None Detected
254-Roof Shingle 3 331815863-0059B	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
254-Vapor Barrier 331815863-0059C	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
255-Shingle 331815863-0060	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Gray/Black/Orange Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
255-Vapor Barrier 331815863-0060A	Unit 3341 Utah - Roof - West - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
256 331815863-0061	Unit 3341 Utah - Roof - West - Roof penetration mastic	Gray/Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
257 331815863-0062	Unit 3341 Utah - Roof - West - Roof penetration mastic	Gray/Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
258 331815863-0063	Unit 3341 Utah - Roof - West - Roof penetration mastic	Gray/Black Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
259-Skim Coat 331815863-0064	Unit 3341 Utah - Level 1 - Exterior NE - Stucco- Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
259-Stucco 331815863-0064A	Unit 3341 Utah - Level 1 - Exterior NE - Stucco- Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
260-Skim Coat 331815863-0065	Unit 3341 Utah - Level 1 - Exterior NW - Stucco- Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
260-Stucco 331815863-0065A	Unit 3341 Utah - Level 1 - Exterior NW - Stucco- Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
261-Skim Coat 331815863-0066	Unit 3341 Utah - Level 1 - Exterior SW - Stucco- Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
261-Stucco 331815863-0066A	Unit 3341 Utah - Level 1 - Exterior SW - Stucco- Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
262-Skim Coat 331815863-0067	Unit 3308 Utah - Level 1 - Exterior West - Stucco- Skim coat	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
262-Stucco 331815863-0067A	Unit 3308 Utah - Level 1 - Exterior West - Stucco- Skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
262-Plaster 331815863-0067B	Unit 3308 Utah - Level 1 - Exterior West - Stucco- Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
263-Skim Coat 331815863-0068	Unit 3308 Utah - Level 1 - Exterior SW - Stucco- Skim coat	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
263-Stucco 331815863-0068A	Unit 3308 Utah - Level 1 - Exterior SW - Stucco- Skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
263-Plaster 331815863-0068B	Unit 3308 Utah - Level 1 - Exterior SW - Stucco- Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
264 331815863-0069	Unit 3308 Utah - Level 1 - Exterior SE - Stucco- Skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
265-Joint Compound 331815863-0070	Unit 3308 Utah - Level 1 - Kitchen SW - Drywall smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
265-Skim Coat 331815863-0070A	Unit 3308 Utah - Level 1 - Kitchen SW - Drywall smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
265-Drywall 331815863-0070B	Unit 3308 Utah - Level 1 - Kitchen SW - Drywall smooth	Brown/White Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
266 331815863-0071	Unit 3308 Utah - Level 1 - Kitchen South - Under sink mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
267 331815863-0072	Unit 3308 Utah - Level 1 - Kitchen South - Under sink mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
268 331815863-0073	Unit 3308 Utah - Level 1 - Kitchen South - Under sink mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
269-Skim Coat 331815863-0074	Unit 3308 Utah - Level 1 - Livig room - South - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
269-Plaster 331815863-0074A	Unit 3308 Utah - Level 1 - Livig room - South - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
269-Drywall 331815863-0074B	Unit 3308 Utah - Level 1 - Livig room - South - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
270-Skim Coat 331815863-0075	Unit 3308 Utah - Level 1 - Kitchen North - Plaster	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
270-Plaster 331815863-0075A	Unit 3308 Utah - Level 1 - Kitchen North - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
270-Drywall 331815863-0075B	Unit 3308 Utah - Level 1 - Kitchen North - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
271-Skim Coat 331815863-0076	Unit 3308 Utah - Level 1 - Hall - NW - Plaster	Tan/Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
271-Plaster 331815863-0076A	Unit 3308 Utah - Level 1 - Hall - NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
271-Drywall 331815863-0076B	Unit 3308 Utah - Level 1 - Hall - NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
272-Skim Coat 331815863-0077	Unit 3308 Utah - Level 1 - Bath - South - Plaster ceiling	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
272-Plaster 331815863-0077A	Unit 3308 Utah - Level 1 - Bath - South - Plaster ceiling	Gray Non-Fibrous Homogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
272-Drywall 331815863-0077B	Unit 3308 Utah - Level 1 - Bath - South - Plaster ceiling	Brown/White Non-Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
273-Skim Coat 331815863-0078	Unit 3308 Utah - Level 1 - Bedroom 2 - South - Plaster	Gray/White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
273-Plaster 331815863-0078A	Unit 3308 Utah - Level 1 - Bedroom 2 - South - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
273-Drywall 331815863-0078B	Unit 3308 Utah - Level 1 - Bedroom 2 - South - Plaster	Brown/White Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
274-Mastic 331815863-0079	Unit 3308 Utah - Level 1 - Kitchen - SW - 4" Black baseboard w/ beige mastic  <i>Baseboard not found in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
275-Mastic 331815863-0080	Unit 3308 Utah - Level 1 - Kitchen - South - 4" Black baseboard w/ beige mastic  <i>Baseboard not found in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
276-Mastic 331815863-0081	Unit 3308 Utah - Level 1 - Bathroom - South - 4" Black baseboard w/ beige mastic  <i>Sample did not contain baseboard.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
277-Sheet Flooring 331815863-0082	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
277-Mastic 331815863-0082A	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
278-Sheet Flooring 331815863-0083	Unit 3308 Utah - Level 1 - Kitchen - North East - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
278-Mastic 331815863-0083A	Unit 3308 Utah - Level 1 - Kitchen - North East - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
279-Sheet Flooring 331815863-0084	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Gray/White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
279-Mastic 331815863-0084A	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring mixed square/triangle pattern w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
280-Mastic 1 331815863-0085	Unit 3308 Utah - Level 1 - Kitchen - West - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
280-Floor Tile 331815863-0085A	Unit 3308 Utah - Level 1 - Kitchen - West - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
280-Mastic 2 331815863-0085B	Unit 3308 Utah - Level 1 - Kitchen - West - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
281-Mastic 1 331815863-0086	Unit 3308 Utah - Level 1 - Kitchen - NE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
281-Floor Tile 331815863-0086A	Unit 3308 Utah - Level 1 - Kitchen - NE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
281-Mastic 2 331815863-0086B	Unit 3308 Utah - Level 1 - Kitchen - NE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
282-Floor Tile 331815863-0087	Unit 3308 Utah - Level 1 - Kitchen - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
282-Mastic 331815863-0087A	Unit 3308 Utah - Level 1 - Kitchen - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
283-Mastic 331815863-0088	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring squares w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
283-Sheet Flooring 331815863-0088A	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring squares w/ yellow mastic (3rd layer)	Gray/Tan/Green Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
284-Mastic 331815863-0089	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring squares w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
284-Sheet Flooring 331815863-0089A	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring squares w/ yellow mastic (3rd layer)	Gray/Tan/Green Non-Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
285-Sheet Flooring 331815863-0090	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring squares w/ yellow mastic (3rd layer)	Yellow/Green Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
285-Mastic 331815863-0090A	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring squares w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached sheet flooring material</i>					
286-Mastic 331815863-0091	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
286-Sheet Flooring 331815863-0091A	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Tan/Pink/Green Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
286-Vapor Barrier 331815863-0091B	Unit 3308 Utah - Level 1 - Kitchen - West - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	40% Cellulose 15% Synthetic	45% Non-fibrous (Other)	None Detected
287-Mastic 1 331815863-0092	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
<i>Result includes a small amount of inseparable attached sheet flooring material.</i>					

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# LA Testing

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
287-Sheet Flooring 331815863-0092A	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Tan/Pink/Green Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
287-Vapor Barrier 331815863-0092B	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	40% Cellulose 15% Synthetic	45% Non-fibrous (Other)	None Detected
287-Mastic 2 331815863-0092C	Unit 3308 Utah - Level 1 - Kitchen - NE - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
288-Mastic 1 331815863-0093	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
288-Sheet Flooring 331815863-0093A	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Beige Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
288-Vapor Barrier 331815863-0093B	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
288-Mastic 2 331815863-0093C	Unit 3308 Utah - Level 1 - Kitchen - East - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
289-Mastic 1 331815863-0094	Unit 3308 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
289-Floor Tile 331815863-0094A	Unit 3308 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
289-Mastic 2 331815863-0094B	Unit 3308 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
289-Vapor Barrier 331815863-0094C	Unit 3308 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
289-Mastic 3 331815863-0094D	Unit 3308 Utah - Level 1 - Living room - NW - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
290-Mastic 1 331815863-0095	Unit 3308 Utah - Level 1 - Hall - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
290-Floor Tile 331815863-0095A	Unit 3308 Utah - Level 1 - Hall - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
290-Mastic 2 331815863-0095B	Unit 3308 Utah - Level 1 - Hall - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
290-Vapor Barrier 331815863-0095C	Unit 3308 Utah - Level 1 - Hall - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
290-Mastic 3 331815863-0095D	Unit 3308 Utah - Level 1 - Hall - North - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
291-Mastic 1 331815863-0096	Unit 3308 Utah - Level 1 - Bedroom - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
291-Floor Tile 331815863-0096A	Unit 3308 Utah - Level 1 - Bedroom - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
291-Mastic 2 331815863-0096B	Unit 3308 Utah - Level 1 - Bedroom - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
291-Vapor Barrier 331815863-0096C	Unit 3308 Utah - Level 1 - Bedroom - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
291-Mastic 3 331815863-0096D	Unit 3308 Utah - Level 1 - Bedroom - West - 12" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
292-Shingle 1 331815863-0097	Unit 3308 Utah - Roof - North East - Roofing shingles & vapor barrier	Brown/Black/Orange Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
292-Shingle 2 331815863-0097A	Unit 3308 Utah - Roof - North East - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	8% Glass	92% Non-fibrous (Other)	None Detected
292-Vapor Barrier 331815863-0097B	Unit 3308 Utah - Roof - North East - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
293-Shingle 1 331815863-0098	Unit 3308 Utah - Roof - East - Roofing shingles & vapor barrier	Brown/Black/Orange Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
293-Shingle 2 331815863-0098A	Unit 3308 Utah - Roof - East - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
293-Vapor Barrier 331815863-0098B	Unit 3308 Utah - Roof - East - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
294-Shingle 331815863-0099	Unit 3308 Utah - Roof - East - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
<i>Sample did not contain vapor barrier.</i>					
294-Roofing 331815863-0099A	Unit 3308 Utah - Roof - East - Roofing shingles & vapor barrier	Black Fibrous Heterogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
295 331815863-0100	Unit 3308 Utah - Roof - East - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
296 331815863-0101	Unit 3308 Utah - Roof - East - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
297 331815863-0102	Unit 3308 Utah - Roof - East - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
298-Joint Compound 331815863-0103 <i>Plaster not present in sample</i>	Unit 3384 Utah - Level 1 - Living room - East - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
298-Drywall 331815863-0103A	Unit 3384 Utah - Level 1 - Living room - East - Plaster	Brown/White Fibrous Heterogeneous	8% Cellulose 2% Glass	70% Gypsum 20% Non-fibrous (Other)	None Detected
299-Skim Coat 331815863-0104	Unit 3384 Utah - Level 1 - Kitchen NW - Plaster	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
299-Plaster 331815863-0104A	Unit 3384 Utah - Level 1 - Kitchen NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
299-Drywall 331815863-0104B	Unit 3384 Utah - Level 1 - Kitchen NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
300-Skim Coat 331815863-0105	Unit 3384 Utah - Level 1 - Hall NE - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
300-Plaster 331815863-0105A	Unit 3384 Utah - Level 1 - Hall NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
300-Drywall 331815863-0105B	Unit 3384 Utah - Level 1 - Hall NE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
301-Skim Coat 331815863-0106	Unit 3384 Utah - Level 1 - Bedroom 1 - East - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
301-Plaster 331815863-0106A	Unit 3384 Utah - Level 1 - Bedroom 1 - East - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
301-Drywall 331815863-0106B	Unit 3384 Utah - Level 1 - Bedroom 1 - East - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
302-Skim Coat 331815863-0107	Unit 3384 Utah - Level 1 - Bedroom 2 - SE - Plaster ceiling	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
302-Plaster 331815863-0107A	Unit 3384 Utah - Level 1 - Bedroom 2 - SE - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
302-Drywall 331815863-0107B	Unit 3384 Utah - Level 1 - Bedroom 2 - SE - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
303-Skim Coat 331815863-0108	Unit 3384 Utah - Level 1 - NE - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
303-Stucco 331815863-0108A	Unit 3384 Utah - Level 1 - NE - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
304-Skim Coat 331815863-0109	Unit 3384 Utah - Level 1 - SE - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
304-Stucco 331815863-0109A	Unit 3384 Utah - Level 1 - SE - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
305-Skim Coat 331815863-0110	Unit 3384 Utah - Level 1 - SW - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
305-Stucco 331815863-0110A	Unit 3384 Utah - Level 1 - SW - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
306 331815863-0111	Unit 3384 Utah - Level 1 - Kitchen - NW - 4" Black baseboard white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
307 331815863-0112	Unit 3384 Utah - Level 1 - Kitchen - West - 4" Black baseboard white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
308 331815863-0113	Unit 3384 Utah - Level 1 - Bathroom SW - 4" Black baseboard white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
309-Shingle 1 331815863-0114	Unit 3384 Utah - Roof - SE - Roofing shingles & vapor barrier	Black/Orange Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
309-Shingle 2 331815863-0114A	Unit 3384 Utah - Roof - SE - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
309-Shingle 3 331815863-0114B	Unit 3384 Utah - Roof - SE - Roofing shingles & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
309-Vapor Barrier 331815863-0114C	Unit 3384 Utah - Roof - SE - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
310-Shingle 1 331815863-0115	Unit 3384 Utah - Roof - South - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
310-Shingle 2 331815863-0115A	Unit 3384 Utah - Roof - South - Roofing shingles & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
310-Vapor Barrier 331815863-0115B	Unit 3384 Utah - Roof - South - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
311-Shingle 1 331815863-0116	Unit 3384 Utah - Roof - SW - Roofing shingles & vapor barrier	Black/Orange Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
311-Shingle 2 331815863-0116A	Unit 3384 Utah - Roof - SW - Roofing shingles & vapor barrier	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
311-Shingle 3 331815863-0116B	Unit 3384 Utah - Roof - SW - Roofing shingles & vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
311-Vapor Barrier 331815863-0116C	Unit 3384 Utah - Roof - SW - Roofing shingles & vapor barrier	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
312 331815863-0117	Unit 3384 Utah - Roof - South - Roof penetration mastic	Gray/Black Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
313 331815863-0118	Unit 3384 Utah - Roof - South - Roof penetration mastic	Gray/Black Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
314 331815863-0119	Unit 3384 Utah - Roof - South - Roof penetration mastic	Gray/Black Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
315-Floor Tile 331815863-0120	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
315-Mastic 331815863-0120A	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
316-Floor Tile 331815863-0121	Unit 3384 Utah - Level 1 - Kitchen - South - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
316-Mastic 331815863-0121A	Unit 3384 Utah - Level 1 - Kitchen - South - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
317-Floor Tile 331815863-0122	Unit 3384 Utah - Level 1 - Bathroom South - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
317-Mastic 331815863-0122A	Unit 3384 Utah - Level 1 - Bathroom South - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
318-Floor Tile 331815863-0123	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
318-Mastic 1 331815863-0123A	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
318-Vapor Barrier 331815863-0123B	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
318-Mastic 2 331815863-0123C	Unit 3384 Utah - Level 1 - Living room - East - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
319-Floor Tile 331815863-0124	Unit 3384 Utah - Level 1 - Bedroom 2 - N - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
319-Mastic 1 331815863-0124A	Unit 3384 Utah - Level 1 - Bedroom 2 - N - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
319-Vapor Barrier 331815863-0124B	Unit 3384 Utah - Level 1 - Bedroom 2 - N - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
319-Mastic 2 331815863-0124C	Unit 3384 Utah - Level 1 - Bedroom 2 - N - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
320-Floor Tile 331815863-0125	Unit 3384 Utah - Level 1 - Bedroom 1 - S - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
<i>Vapor barrier not present in sample</i>					
320-Mastic 331815863-0125A	Unit 3384 Utah - Level 1 - Bedroom 1 - S - 12" Floor tile w/ brn streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
321-Joint Compound 331815863-0126	Unit 3384 Utah - Level 1 - Kitchen - NW - Drywall smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
321-Drywall 331815863-0126A	Unit 3384 Utah - Level 1 - Kitchen - NW - Drywall smooth	Brown/White Fibrous Heterogeneous	8% Cellulose 2% Glass	70% Gypsum 20% Non-fibrous (Other)	None Detected
322-Floor Tile 331815863-0127	Unit 3384 Utah - Level 1 - Kitchen - S - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
322-Mastic 331815863-0127A	Unit 3384 Utah - Level 1 - Kitchen - S - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
323-Floor Tile 331815863-0128	Unit 3384 Utah - Level 1 - Kitchen - SW - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
323-Mastic 331815863-0128A	Unit 3384 Utah - Level 1 - Kitchen - SW - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
324-Floor Tile 331815863-0129	Unit 3384 Utah - Level 1 - Kitchen - NW - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
324-Mastic 331815863-0129A	Unit 3384 Utah - Level 1 - Kitchen - NW - 9" Floor tile w/ black specs w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
325-Sheet Flooring 331815863-0130	Unit 3384 Utah - Level 1 - Kitchen - S - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer) <i>Black mastic not present in sample</i>	Various/Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
325-Vapor Barrier 331815863-0130A	Unit 3384 Utah - Level 1 - Kitchen - S - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown/Green Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
326-Sheet Flooring 331815863-0131	Unit 3384 Utah - Level 1 - Kitchen - SW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer) <i>Black mastic not present in sample</i>	Various/Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
326-Vapor Barrier 331815863-0131A	Unit 3384 Utah - Level 1 - Kitchen - SW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown/Green Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
327-Sheet Flooring 331815863-0132	Unit 3384 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Various/Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
<i>Black mastic not present in sample</i>					
327-Vapor Barrier 331815863-0132A	Unit 3384 Utah - Level 1 - Kitchen - NW - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (bottom layer)	Brown/Green Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
328-Sheet Flooring 331815863-0133	Unit 3384 Utah - Level 1 - Bathroom S - Sheet flooring w/ brown flower pattern (bottom layer)	Brown/Gray/Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
328-Mastic 331815863-0133A	Unit 3384 Utah - Level 1 - Bathroom S - Sheet flooring w/ brown flower pattern (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
329-Sheet Flooring 331815863-0134	Unit 3384 Utah - Level 1 - Bathroom SW - Sheet flooring w/ brown flower pattern (bottom layer)	Brown/Gray/Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
329-Mastic 331815863-0134A	Unit 3384 Utah - Level 1 - Bathroom SW - Sheet flooring w/ brown flower pattern (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
330-Sheet Flooring 331815863-0135	Unit 3384 Utah - Level 1 - Bathroom N - Sheet flooring w/ brown flower pattern (bottom layer)	Brown/Gray/Beige Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
330-Mastic 331815863-0135A	Unit 3384 Utah - Level 1 - Bathroom N - Sheet flooring w/ brown flower pattern (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
331-Skim Coat 331815863-0136	Unit 3350 Utah - Level 1 - Exterior - NW - Stucco - skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
331-Stucco 331815863-0136A	Unit 3350 Utah - Level 1 - Exterior - NW - Stucco - skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
332-Skim Coat 331815863-0137	Unit 3350 Utah - Level 1 - Exterior - N - Stucco - skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
332-Stucco 331815863-0137A	Unit 3350 Utah - Level 1 - Exterior - N - Stucco - skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
333-Skim Coat 331815863-0138	Unit 3350 Utah - Level 1 - Exterior - E - Stucco - skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
333-Stucco 331815863-0138A	Unit 3350 Utah - Level 1 - Exterior - E - Stucco - skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
334-Roof Single 1 331815863-0139	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
334-Roof Shingle 2 331815863-0139A	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
334-Vapor Barrier 331815863-0139B	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
335-Roof Shingle 1 331815863-0140	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
335-Roof Shingle 2 331815863-0140A	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
335-Vapor Barrier 331815863-0140B	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
336-Shingle 1 331815863-0141	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
336-Shingle 2 331815863-0141A	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
336-Vapor Barrier 331815863-0141B	Unit 3350 Utah - Roof - West - Roofing shingles w/ vapor barrier paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
337 331815863-0142	Unit 3350 Utah - Roof - West - Roof penetration mastic	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
338 331815863-0143	Unit 3350 Utah - Roof - West - Roof penetration mastic	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
339 331815863-0144	Unit 3350 Utah - Roof - West - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
340-Skim Coat 331815863-0145	Unit 3350 Utah - Level 1 - Living room - N - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
340-Plaster 331815863-0145A	Unit 3350 Utah - Level 1 - Living room - N - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
340-Drywall 331815863-0145B	Unit 3350 Utah - Level 1 - Living room - N - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
341-Skim Coat 331815863-0146	Unit 3350 Utah - Level 1 - Kitchen SW - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
341-Plaster 331815863-0146A	Unit 3350 Utah - Level 1 - Kitchen SW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
341-Drywall 331815863-0146B	Unit 3350 Utah - Level 1 - Kitchen SW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
342-Skim Coat 331815863-0147	Unit 3350 Utah - Level 1 - Hall - NW - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
342-Plaster 331815863-0147A	Unit 3350 Utah - Level 1 - Hall - NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
342-Drywall 331815863-0147B	Unit 3350 Utah - Level 1 - Hall - NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
343-Skim Coat 331815863-0148	Unit 3350 Utah - Level 1 - Bedroom 2 - SE - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
343-Plaster 331815863-0148A	Unit 3350 Utah - Level 1 - Bedroom 2 - SE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
343-Drywall 331815863-0148B	Unit 3350 Utah - Level 1 - Bedroom 2 - SE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
344-Skim Coat 331815863-0149	Unit 3350 Utah - Level 1 - Bathroom - SE - Plaster Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
344-Plaster 331815863-0149A	Unit 3350 Utah - Level 1 - Bathroom - SE - Plaster Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
344-Drywall 331815863-0149B	Unit 3350 Utah - Level 1 - Bathroom - SE - Plaster Ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
345-Vinyl Floor Tile 331815863-0150	Unit 3350 Utah - Level 1 - Living room - N - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
345-Mastic 331815863-0150A	Unit 3350 Utah - Level 1 - Living room - N - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
346-Vinyl Floor Tile 331815863-0151	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
346-Mastic 331815863-0151A	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
347-Vinyl Floor Tile 331815863-0152	Unit 3350 Utah - Level 1 - Bedroom 2 - W - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
347-Mastic 331815863-0152A	Unit 3350 Utah - Level 1 - Bedroom 2 - W - 12" Floor tile w/ white & brown Streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
348-Mastic 1 331815863-0153	Unit 3350 Utah - Level 1 - Living room - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
348-Vinyl Floor Tile 331815863-0153A	Unit 3350 Utah - Level 1 - Living room - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
348-Mastic 2 331815863-0153B	Unit 3350 Utah - Level 1 - Living room - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
348-Vapor Barrier 331815863-0153C	Unit 3350 Utah - Level 1 - Living room - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
349-Mastic 1 331815863-0154	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
349-Vinyl Floor Tile 331815863-0154A	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815863

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
349-Mastic 2 331815863-0154B	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
349-Vapor Barrier 331815863-0154C	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
349-Mastic 3 331815863-0154D	Unit 3350 Utah - Level 1 - Bedroom 1 - N - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
350-Floor Tile 331815863-0155	Unit 3350 Utah - Level 1 - Kitchen - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
350-Mastic 1 331815863-0155A	Unit 3350 Utah - Level 1 - Kitchen - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
350-Vapor Barrier 331815863-0155B	Unit 3350 Utah - Level 1 - Kitchen - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
350-Mastic 2 331815863-0155C	Unit 3350 Utah - Level 1 - Kitchen - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier ( bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
351-Vinyl Sheet Flooring 331815863-0156	Unit 3350 Utah - Level 1 - Bathroom - E - Sheet flooring 6" squares w/ yellow mastic (top layer)	Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
351-Mastic 331815863-0156A	Unit 3350 Utah - Level 1 - Bathroom - E - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
352-Vinyl Sheet Flooring 331815863-0157	Unit 3350 Utah - Level 1 - Kitchen - NW - Sheet flooring 6" squares w/ yellow mastic (top layer)	Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
352-Mastic 331815863-0157A	Unit 3350 Utah - Level 1 - Kitchen - NW - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
353-Vinyl Sheet Flooring 331815863-0158	Unit 3350 Utah - Level 1 - Kitchen - W - Sheet flooring 6" squares w/ yellow mastic (top layer)	Beige Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
353-Mastic 331815863-0158A	Unit 3350 Utah - Level 1 - Kitchen - W - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
354-Vinyl Sheet Flooring 331815863-0159	Unit 3350 Utah - Level 1 - Kitchen - NW - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
354-Mastic 331815863-0159A	Unit 3350 Utah - Level 1 - Kitchen - NW - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
354-Vinyl Floor Tile 331815863-0159B	Unit 3350 Utah - Level 1 - Kitchen - NW - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
355-Vinyl Sheet Flooring 331815863-0160	Unit 3350 Utah - Level 1 - Kitchen - W - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
355-Mastic 331815863-0160A	Unit 3350 Utah - Level 1 - Kitchen - W - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
356-Vinyl Sheet Flooring 331815863-0161	Unit 3350 Utah - Level 1 - Kitchen - SE - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Beige Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
356-Mastic 331815863-0161A	Unit 3350 Utah - Level 1 - Kitchen - SE - Sheet flooring mixed squares/ triangle pattern w/ yellow Mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
357-Mastic 1 331815863-0162	Unit 3350 Utah - Level 1 - Kitchen - NW - 12" Floor tile w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
357-Vinyl Floor Tile 331815863-0162A	Unit 3350 Utah - Level 1 - Kitchen - NW - 12" Floor tile w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
357-Mastic 2 331815863-0162B	Unit 3350 Utah - Level 1 - Kitchen - NW - 12" Floor tile w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
358-Vinyl Sheet Flooring 331815863-0163	Unit 3350 Utah - Level 1 - Kitchen - SE - 12" Floor tile w/ yellow mastic (3rd layer)	Gray Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
358-Vinyl Floor Tile 331815863-0163A	Unit 3350 Utah - Level 1 - Kitchen - SE - 12" Floor tile w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
358-Mastic 331815863-0163B	Unit 3350 Utah - Level 1 - Kitchen - SE - 12" Floor tile w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
359-Vinyl Floor Tile 331815863-0164	Unit 3350 Utah - Level 1 - Kitchen - W - 12" Floor tile w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
359-Mastic 331815863-0164A	Unit 3350 Utah - Level 1 - Kitchen - W - 12" Floor tile w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
360-Mastic 331815863-0165	Unit 3350 Utah - Level 1 - Kitchen - SW - 4" Black baseboard w/ beige mastic <i>Baseboard not found in sample.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
361-Mastic 331815863-0166	Unit 3350 Utah - Level 1 - Kitchen - SE - 4" Black baseboard w/ beige mastic <i>Baseboard not found in sample.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
362-Mastic 331815863-0167	Unit 3350 Utah - Level 1 - Kitchen - SE - 4" Black baseboard w/ beige mastic <i>Baseboard not found in sample.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
363-Joint Compound 331815863-0168	Unit 3350 Utah - Level 1 - Kitchen - SW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
363-Drywall 331815863-0168A	Unit 3350 Utah - Level 1 - Kitchen - SW - Smooth drywall	Brown/White Fibrous Heterogeneous	7% Cellulose 4% Glass	89% Non-fibrous (Other)	None Detected
364-Vinyl Floor Tile 331815863-0169	Unit 3350 Utah - Level 1 - Living room - NE - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
364-Mastic 331815863-0169A	Unit 3350 Utah - Level 1 - Living room - NE - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
365-Vinyl Floor Tile 331815863-0170	Unit 3350 Utah - Level 1 - Living room - E - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
365-Mastic 331815863-0170A	Unit 3350 Utah - Level 1 - Living room - E - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
366-Vinyl Floor Tile 331815863-0171	Unit 3350 Utah - Level 1 - Living room - NW - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
366-Mastic 331815863-0171A	Unit 3350 Utah - Level 1 - Living room - NW - 12" Floor tile w/ gray streaks & yellow mastic (top layer) patches	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
367-Vinyl Floor Tile 331815863-0172	Unit 3348 Utah - Level 1 - Living room - SE - 12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
367-Mastic 331815863-0172A	Unit 3348 Utah - Level 1 - Living room - SE - 12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
368-Vinyl Floor Tile 331815863-0173	Unit 3348 Utah - Level 1 - Hallway E - 12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
368-Mastic 331815863-0173A	Unit 3348 Utah - Level 1 - Hallway E - 12" Floor tile w/ white & brown streaks w/ yellow mastic ( top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
369-Vinyl Floor Tile 331815863-0174	Unit 3348 Utah - Level 1 - Kitchen - W - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
369-Mastic 331815863-0174A	Unit 3348 Utah - Level 1 - Kitchen - W - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
370-Mastic 1 331815863-0175	Unit 3348 Utah - Level 1 - Living room - SE - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
370-Vinyl Floor Tile 331815863-0175A	Unit 3348 Utah - Level 1 - Living room - SE - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
370-Mastic 2 331815863-0175B	Unit 3348 Utah - Level 1 - Living room - SE - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
370-Vapor Barrier 331815863-0175C	Unit 3348 Utah - Level 1 - Living room - SE - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
370-Mastic 3 331815863-0175D	Unit 3348 Utah - Level 1 - Living room - SE - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
371-Mastic 1 331815863-0176	Unit 3348 Utah - Level 1 - Hallway E - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
371-Vinyl Floor Tile 331815863-0176A	Unit 3348 Utah - Level 1 - Hallway E - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Project ID: JS

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
371-Mastic 2 331815863-0176B	Unit 3348 Utah - Level 1 - Hallway E - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
371-Vapor Barrier 331815863-0176C	Unit 3348 Utah - Level 1 - Hallway E - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
371-Mastic 3 331815863-0176D	Unit 3348 Utah - Level 1 - Hallway E - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
372-Mastic 1 331815863-0177	Unit 3348 Utah - Level 1 - Bedroom 2 - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	White/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Unable to separate leveler and mastic.</i>					
372-Floor Tile 331815863-0177A	Unit 3348 Utah - Level 1 - Bedroom 2 - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
372-Mastic 2 331815863-0177B	Unit 3348 Utah - Level 1 - Bedroom 2 - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
372-Vapor Barrier 331815863-0177C	Unit 3348 Utah - Level 1 - Bedroom 2 - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
372-Mastic 3 331815863-0177D	Unit 3348 Utah - Level 1 - Bedroom 2 - W - 9" Floor tile w/ brn Streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
373-Mastic 1 331815863-0178	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
373-Vinyl Sheet Flooring 331815863-0178A	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Gray Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile

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LA Testing Order: 331815863

Customer ID: 32CITA50D

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Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
373-Mastic 2 331815863-0178B	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
374-Mastic 1 331815863-0179	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
374-Vinyl Sheet Flooring 331815863-0179A	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Gray Fibrous Heterogeneous		72% Non-fibrous (Other)	28% Chrysotile
374-Mastic 2 331815863-0179B	Unit 3348 Utah - Level 1 - Kitchen - W - Pebble pattern w/ yellow mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
375-Sheet Flooring 331815863-0180	Unit 3348 Utah - Level 1 - Kitchen - E - Pebble pattern w/ yellow mastic (3rd layer)	White Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
375-Mastic 331815863-0180A	Unit 3348 Utah - Level 1 - Kitchen - E - Pebble pattern w/ yellow mastic (3rd layer)	Brown/White/Yellow Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached flooring material.</i>					
376-Sheet Flooring 331815863-0181	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Gray Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
376-Vinyl Sheet Flooring 331815863-0181A	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Gray/Beige Non-Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
376-Mastic 331815863-0181B	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
377-Sheet Flooring 331815863-0182	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Gray Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
377-Vinyl Sheet Flooring 331815863-0182A	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Gray/Beige Fibrous Heterogeneous		68% Non-fibrous (Other)	32% Chrysotile
377-Mastic 331815863-0182B	Unit 3348 Utah - Level 1 - Kitchen - W - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
378-Sheet Flooring 331815863-0183	Unit 3348 Utah - Level 1 - Kitchen - E - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Beige Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
378-Mastic 331815863-0183A	Unit 3348 Utah - Level 1 - Kitchen - E - Sheet flooring w/ brown flower pattern w/ yellow mastic (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
379-Vinyl Sheet Flooring 331815863-0184	Unit 3348 Utah - Level 1 - Kitchen - W - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Gray/White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
379-Mastic 331815863-0184A	Unit 3348 Utah - Level 1 - Kitchen - W - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
380-Vinyl Sheet Flooring 331815863-0185	Unit 3348 Utah - Level 1 - Kitchen - E - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Gray/White Fibrous Heterogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
380-Mastic 331815863-0185A	Unit 3348 Utah - Level 1 - Kitchen - E - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
381-Vinyl Sheet Flooring 331815863-0186	Unit 3348 Utah - Level 1 - Bathroom - E - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	White Fibrous Homogeneous	20% Cellulose <1% Glass	80% Non-fibrous (Other)	None Detected
381-Mastic 331815863-0186A	Unit 3348 Utah - Level 1 - Bathroom - E - Sheeting flooring w/ 6" Squares w/ yellow mastic (top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
382-Skim Coat 331815863-0187	Unit 3348 Utah - Level 1 - Living room - NW - Plaster	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
382-Plaster 331815863-0187A	Unit 3348 Utah - Level 1 - Living room - NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
382-Drywall 331815863-0187B	Unit 3348 Utah - Level 1 - Living room - NW - Plaster	White Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
383-Skim Coat 331815863-0188	Unit 3348 Utah - Level 1 - Bedroom 1 - S - Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
383-Plaster 331815863-0188A	Unit 3348 Utah - Level 1 - Bedroom 1 - S - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
383-Drywall 331815863-0188B	Unit 3348 Utah - Level 1 - Bedroom 1 - S - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
384-Skim Coat 331815863-0189	Unit 3348 Utah - Level 1 - Kitchen - S - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
384-Plaster 331815863-0189A	Unit 3348 Utah - Level 1 - Kitchen - S - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
384-Drywall 331815863-0189B	Unit 3348 Utah - Level 1 - Kitchen - S - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
385-Skim Coat 331815863-0190	Unit 3348 Utah - Level 1 - Bathroom - N - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
385-Plaster 331815863-0190A	Unit 3348 Utah - Level 1 - Bathroom - N - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
385-Drywall 331815863-0190B	Unit 3348 Utah - Level 1 - Bathroom - N - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
386-Skim Coat 331815863-0191	Unit 3348 Utah - Level 1 - Bedroom 2 - SE - Plaster Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
386-Plaster 331815863-0191A	Unit 3348 Utah - Level 1 - Bedroom 2 - SE - Plaster Ceiling	Brown/White Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
386-Drywall 331815863-0191B	Unit 3348 Utah - Level 1 - Bedroom 2 - SE - Plaster Ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
387-Joint Compound 331815863-0192	Unit 3348 Utah - Level 1 - Kitchen - NW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
387-Drywall 331815863-0192A	Unit 3348 Utah - Level 1 - Kitchen - NW - Smooth drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
388-Skim Coat 331815863-0193	Unit 3348 Utah - Level 1 - Exterior - SW - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
388-Stucco 331815863-0193A	Unit 3348 Utah - Level 1 - Exterior - SW - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
388-Plaster 331815863-0193B	Unit 3348 Utah - Level 1 - Exterior - SW - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
389-Skim Coat 331815863-0194	Unit 3348 Utah - Level 1 - Exterior - S - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
389-Stucco 331815863-0194A	Unit 3348 Utah - Level 1 - Exterior - S - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
390-Skim Coat 331815863-0195	Unit 3348 Utah - Level 1 - Exterior - E - Stucco - Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
390-Stucco 331815863-0195A	Unit 3348 Utah - Level 1 - Exterior - E - Stucco - Skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
391 331815863-0196	Unit 3348 Utah - Level 1 - Kitchen - NW - 4" Black baseboard w/ beige mastic  <i>Baseboard not present in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
392 331815863-0197	Unit 3348 Utah - Level 1 - Kitchen - N - 4" Black baseboard w/ beige mastic  <i>Baseboard not present in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
393 331815863-0198	Unit 3348 Utah - Level 1 - Kitchen - NE - 4" Black baseboard w/ beige mastic  <i>Baseboard not present in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
394-Tar 331815863-0199	Unit 3348 Utah - Roof - S - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
394-Vapor Barrier 331815863-0199A	Unit 3348 Utah - Roof - S - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Fibrous Homogeneous	45% Glass	55% Non-fibrous (Other)	None Detected
394-Insulation 331815863-0199B	Unit 3348 Utah - Roof - S - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
394-Styrofoam 331815863-0199C	Unit 3348 Utah - Roof - S - Black tar w/ Vapor barrier & Brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
395-Tar 331815863-0200	Unit 3348 Utah - Roof - SE - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
395-Vapor Barrier 331815863-0200A	Unit 3348 Utah - Roof - SE - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Fibrous Homogeneous	45% Glass	55% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
395-Insulation 331815863-0200B	Unit 3348 Utah - Roof - SE - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
395-Styrofoam 331815863-0200C	Unit 3348 Utah - Roof - SE - Black tar w/ Vapor barrier & Brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
396-Tar 331815863-0201	Unit 3348 Utah - Roof - N - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
396-Vapor Barrier 331815863-0201A	Unit 3348 Utah - Roof - N - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Black Fibrous Homogeneous	5% Cellulose 15% Glass	80% Non-fibrous (Other)	None Detected
396-Insulation 331815863-0201B	Unit 3348 Utah - Roof - N - Black tar w/ Vapor barrier & Brown insulation & styrofoam	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
396-Styrofoam 331815863-0201C	Unit 3348 Utah - Roof - N - Black tar w/ Vapor barrier & Brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
397 331815863-0202	Unit 3348 Utah - Roof - N - Roof penetration mastic	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
398 331815863-0203	Unit 3348 Utah - Roof - N - Roof penetration mastic	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
399 331815863-0204	Unit 3348 Utah - Roof - N - Roof penetration mastic	Gray/Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
400-Tar 331815863-0205	Unit 766 Grape - Roof - N - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
400-Vapor Barrier 331815863-0205A	Unit 766 Grape - Roof - N - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Fibrous Homogeneous	40% Glass	60% Non-fibrous (Other)	None Detected
400-Insulation 331815863-0205B	Unit 766 Grape - Roof - N - Black tar w/ vapor barrier & brown insulation & styrofoam	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
400-Styrofoam 331815863-0205C	Unit 766 Grape - Roof - N - Black tar w/ vapor barrier & brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
401-Tar 331815863-0206	Unit 766 Grape - Roof - Central - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
401-Vapor Barrier 331815863-0206A	Unit 766 Grape - Roof - Central - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Fibrous Homogeneous	40% Glass	60% Non-fibrous (Other)	None Detected

Initial report from: 08/13/2018 18:51:23





# LA Testing

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
401-Insulation 331815863-0206B	Unit 766 Grape - Roof - Central - Black tar w/ vapor barrier & brown insulation & styrofoam	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
401-Styrofoam 331815863-0206C	Unit 766 Grape - Roof - Central - Black tar w/ vapor barrier & brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
402-Roofing 1 331815863-0207	Unit 766 Grape - Roof - S - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
402-Roofing 2 331815863-0207A	Unit 766 Grape - Roof - S - Black tar w/ vapor barrier & brown insulation & styrofoam	Black Fibrous Heterogeneous	4% Glass	96% Non-fibrous (Other)	None Detected
402-Insulation 331815863-0207B	Unit 766 Grape - Roof - S - Black tar w/ vapor barrier & brown insulation & styrofoam	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
402-Styrofoam 331815863-0207C	Unit 766 Grape - Roof - S - Black tar w/ vapor barrier & brown insulation & styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
403 331815863-0208	Unit 766 Grape - Roof - Central - Roof penetration mastic	Gray/Black Non-Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
404 331815863-0209	Unit 766 Grape - Roof - S - Roof penetration mastic	Black Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	<1% Chrysotile
405 331815863-0210	Unit 766 Grape - Roof - SW - Roof penetration mastic	Black Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	<1% Chrysotile
406 331815863-0211	Unit 766 Grape - Level 1 - Exterior - NW - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
407 331815863-0212	Unit 766 Grape - Level 1 - Exterior - NE - Stucco - Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
408 331815863-0213	Unit 766 Grape - Level 1 - Exterior - SE - Stucco - Skim coat	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
409-Plaster 331815863-0214	Unit 766 Grape - Level 1 - Living room - E - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
409-Drywall 331815863-0214A	Unit 766 Grape - Level 1 - Living room - E - Plaster	Brown/White Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
410-Plaster 331815863-0215	Unit 766 Grape - Level 1 - Kitchen - W - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
410-Drywall 331815863-0215A	Unit 766 Grape - Level 1 - Kitchen - W - Plaster	Brown/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
411-Plaster 331815863-0216	Unit 766 Grape - Level 1 - Bedroom 2 - E - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
411-Drywall 331815863-0216A	Unit 766 Grape - Level 1 - Bedroom 2 - E - Plaster	Brown/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
412-Plaster 331815863-0217	Unit 766 Grape - Level 1 - Bedroom 1 - S - Plaster	White/Pink Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
412-Drywall 331815863-0217A	Unit 766 Grape - Level 1 - Bedroom 1 - S - Plaster	Brown/White Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
413 331815863-0218	Unit 766 Grape - Level 1 - Bathroom - S - Plaster Ceiling	White/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
414 331815863-0219	Unit 766 Grape - Level 1 - Kitchen - N - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
415 331815863-0220	Unit 766 Grape - Level 1 - Kitchen - E - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
416 331815863-0221	Unit 766 Grape - Level 1 - Kitchen - W - 4" Black baseboard w/ beige mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
417-Floor Tile 331815863-0222	Unit 766 Grape - Level 1 - Bedroom 1 - N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
417-Mastic 331815863-0222A	Unit 766 Grape - Level 1 - Bedroom 1 - N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
418-Floor Tile 331815863-0223	Unit 766 Grape - Level 1 - Bedroom 1 - SE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
418-Mastic 331815863-0223A	Unit 766 Grape - Level 1 - Bedroom 1 - SE - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
419-Floor Tile 1 331815863-0224	Unit 766 Grape - Level 1 - Bedroom 2- N central - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Not enough (black) mastic 2 material for analysis.

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
419-Mastic 1 331815863-0224A	Unit 766 Grape - Level 1 - Bedroom 2-N central - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
419-Floor Tile 2 331815863-0224B	Unit 766 Grape - Level 1 - Bedroom 2-N central - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
420-Floor Tile 331815863-0225	Unit 766 Grape - Level 1 - Bedroom 1 - SE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Tan Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
420-Mastic 331815863-0225A	Unit 766 Grape - Level 1 - Bedroom 1 - SE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
420-Vapor Barrier 331815863-0225B	Unit 766 Grape - Level 1 - Bedroom 1 - SE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
421-Floor Tile 331815863-0226	Unit 766 Grape - Level 1 - Living room - NE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Tan Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
421-Mastic 331815863-0226A	Unit 766 Grape - Level 1 - Living room - NE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
421-Vapor Barrier 331815863-0226B	Unit 766 Grape - Level 1 - Living room - NE - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
422-Floor Tile 331815863-0227	Unit 766 Grape - Level 1 - Kitchen - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Vapor barrier not found in sample.</i>					

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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
422-Mastic 331815863-0227A	Unit 766 Grape - Level 1 - Kitchen - 9" Floor tile w/ brn streaks w/ black mastic & vapor barrier (2nd layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
423-Floor Tile 331815863-0228	Unit 766 Grape - Level 1 - Living room - NE - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
423-Mastic 331815863-0228A	Unit 766 Grape - Level 1 - Living room - NE - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
424-Floor Tile 331815863-0229	Unit 766 Grape - Level 1 - Living room - SW - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
424-Mastic 331815863-0229A	Unit 766 Grape - Level 1 - Living room - SW - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
425-Floor Tile 331815863-0230	Unit 766 Grape - Level 1 - Hallway Center - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
425-Mastic 331815863-0230A	Unit 766 Grape - Level 1 - Hallway Center - 12" Floor tile w/ gray streaks & yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
426- Sheet Flooring 331815863-0231	Unit 766 Grape - Level 1 - Bathroom - S - Sheet flooring mixed squares/triangles pattern w/ yellow mastic <i>Yellow mastic was not found in sample.</i>	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
427- Sheet Flooring 331815863-0232	Unit 766 Grape - Level 1 - Bathroom - NE - Sheet flooring mixed squares/triangles pattern w/ yellow mastic <i>Yellow mastic was not found in sample.</i>	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
428-Sheet Flooring 331815863-0233	Unit 766 Grape - Level 1 - Bathroom - N - Sheet flooring mixed squares/triangles pattern w/ yellow mastic	White/Yellow Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected

Initial report from: 08/13/2018 18:51:23



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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
<i>Sample did not contain mastic.</i>					
429- Sheet Flooring 331815863-0234	Unit 766 Grape - Level 1 - Kitchen - SE - Sheet flooring 6" squares w/ yellow mastic ( top layer)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Yellow mastic was not found in sample.</i>					
430- Sheet Flooring 331815863-0235	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring 6" squares w/ yellow mastic ( top layer)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Yellow mastic was not found in sample.</i>					
431-Sheet Flooring 331815863-0236	Unit 766 Grape - Level 1 - Kitchen - N - Sheet flooring 6" squares w/ yellow mastic ( top layer)	White Fibrous Homogeneous	4% Glass	96% Non-fibrous (Other)	None Detected
<i>Sample did not contain enough mastic material for analysis.</i>					
432- Sheet Flooring 331815863-0237	Unit 766 Grape - Level 1 - Bathroom - N - Sheet flooring flower frame design w/ yellow mastic (2nd layer)	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
<i>Yellow mastic was not found in sample.</i>					
433-Sheet Flooring 331815863-0238	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
433-Mastic 331815863-0238A	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
434-Sheet Flooring 331815863-0239	Unit 766 Grape - Level 1 - Kitchen - N - Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
434-Mastic 331815863-0239A	Unit 766 Grape - Level 1 - Kitchen - N - Sheet flooring flower frame design w/ yellow mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached sheet flooring material</i>					
435-Mastic 331815863-0240	Unit 766 Grape - Level 1 - Kitchen - SE - Sheet flooring w/ brown flower pattern w/ brown mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 08/13/2018 18:51:23



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LA Testing Order: 331815863

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
435-Sheet Flooring 331815863-0240A	Unit 766 Grape - Level 1 - Kitchen - SE - Sheet flooring w/ brown flower pattern w/ brown mastic	Gray Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
436-Mastic 1 331815863-0241	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring w/ brown flower pattern w/ brown mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
436-Sheet Flooring 331815863-0241A	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring w/ brown flower pattern w/ brown mastic	Gray Fibrous Homogeneous		65% Non-fibrous (Other)	35% Chrysotile
436-Mastic 2 331815863-0241B	Unit 766 Grape - Level 1 - Kitchen - E - Sheet flooring w/ brown flower pattern w/ brown mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
437-Sheet Flooring 331815863-0242	Unit 766 Grape - Level 1 - Bathroom - N - Sheet flooring w/ brown flower pattern w/ brown mastic	Beige Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
437-Mastic 331815863-0242A	Unit 766 Grape - Level 1 - Bathroom - N - Sheet flooring w/ brown flower pattern w/ brown mastic	Brown Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
438-Joint Compound 331815863-0243	Unit 766 Grape - Level 1 - Kitchen - NE - Drywall Smooth	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
438-Drywall 331815863-0243A	Unit 766 Grape - Level 1 - Kitchen - NE - Drywall Smooth	White Fibrous Homogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected

Analyst(s)

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Elizabeth Herrera (51)

Mindy Le (93)

Monica Luna (17)

Sophia Nguyen (72)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/13/2018 18:51:23



# LA Testing

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
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**Received Date:** 08/13/2018 2:55 PM

**Analysis Date:** 08/15/2018 - 08/18/2018

**Collected Date:** 08/03/2018

**Project:** 7076.1017.0/ Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
439-Floor Tile 331816310-0001	873 Grape - Level 1 - Living room S - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
439-Mastic 331816310-0001A	873 Grape - Level 1 - Living room S - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
440-Floor Tile 331816310-0002	873 Grape - Level 1 - Bedroom 1 S - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
440-Mastic 331816310-0002A	873 Grape - Level 1 - Bedroom 1 S - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
440-Floor Tile 2 331816310-0002B	873 Grape - Level 1 - Bedroom 1 S - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
441-Floor Tile 331816310-0003	873 Grape - Level 1 - Bedroom 2 - W - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
441-Mastic 331816310-0003A	873 Grape - Level 1 - Bedroom 2 - W - 12' Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
442-Mastic 1 331816310-0004	873 Grape - Level 1 - Living room S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
442-Floor Tile 331816310-0004A	873 Grape - Level 1 - Living room S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
442-Mastic 2 331816310-0004B	873 Grape - Level 1 - Living room S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
442-Vapor Barrier 331816310-0004C	873 Grape - Level 1 - Living room S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
443-Mastic1 331816310-0005	873 Grape - Level 1 - Bedroom 1 S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
443-Floor Tile 331816310-0005A	873 Grape - Level 1 - Bedroom 1 S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
443-Mastic 2 331816310-0005B	873 Grape - Level 1 - Bedroom 1 S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
443-Vapor Barrier 331816310-0005C	873 Grape - Level 1 - Bedroom 1 S - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
444-Floor Tile 331816310-0006	873 Grape - Level 1 - Bedroom 2 W - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
444-Mastic 331816310-0006A	873 Grape - Level 1 - Bedroom 2 W - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
444-Vapor Barrier 331816310-0006B	873 Grape - Level 1 - Bedroom 2 W - 9" Floor w/ brown streaks & black mastic w/ vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
445-Sheet Flooring 331816310-0007	873 Grape - Level 1 - Bathroom S - Sheet flooring w/ rectangle pattern w/ mastic (top layer)	Gray Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
445-Mastic 331816310-0007A	873 Grape - Level 1 - Bathroom S - Sheet flooring w/ rectangle pattern w/ mastic (top layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
445-Backing 331816310-0007B	873 Grape - Level 1 - Bathroom S - Sheet flooring w/ rectangle pattern w/ mastic (top layer)	Tan Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
446- Sheet Flooring 331816310-0008	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ rectangle pattern w/ mastic (top layer)	Gray Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
<i>Mastic was not found in sample.</i>					
447-Sheet Flooring 331816310-0009	873 Grape - Level 1 - Kitchen N - Sheet flooring w/ rectangle pattern w/ mastic (top layer)	Beige Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
<i>Mastic not found.</i>					
448-Mastic 331816310-0010	873 Grape - Level 1 - Kitchen S - Sheet flooring pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
448-Sheet Flooring 331816310-0010A	873 Grape - Level 1 - Kitchen S - Sheet flooring pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Homogeneous	7% Cellulose	73% Non-fibrous (Other)	20% Chrysotile
449-Mastic 331816310-0011	873 Grape - Level 1 - Kitchen S - Sheet flooring pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
449-Sheet Flooring 331816310-0011A	873 Grape - Level 1 - Kitchen S - Sheet flooring pebble pattern w/ mastic (3rd layer)	Yellow Fibrous Homogeneous	7% Cellulose	73% Non-fibrous (Other)	20% Chrysotile
450-Mastic 331816310-0012	873 Grape - Level 1 - Kitchen N - Sheet flooring pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
450-Sheet Flooring 331816310-0012A	873 Grape - Level 1 - Kitchen N - Sheet flooring pebble pattern w/ mastic (3rd layer)	Tan Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
451-Mastic 1 331816310-0013	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Yellow Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
451-Sheet Flooring 331816310-0013A	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
451- Vapor Barrier 331816310-0013B	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
451- Mastic 2 331816310-0013C	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
452- Sheet Flooring 1 331816310-0014	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
452- Mastic 1 331816310-0014A	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
452-- Sheet Flooring 2 331816310-0014B	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
452- Vapor Barrier 331816310-0014C	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Non-Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
452- Mastic 2 331816310-0014D	873 Grape - Level 1 - Kitchen S - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
453-Sheet Flooring 1 331816310-0015	873 Grape - Level 1 - Kitchen N - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Fibrous Homogeneous	5% Cellulose	75% Non-fibrous (Other)	20% Chrysotile
453-Sheet Flooring 2 331816310-0015A	873 Grape - Level 1 - Kitchen N - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Tan Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
453-Mastic 331816310-0015B	873 Grape - Level 1 - Kitchen N - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown/Yellow Fibrous Heterogeneous	5% Cellulose <1% Synthetic	95% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
453-Vapor Barrier 331816310-0015C	873 Grape - Level 1 - Kitchen N - Sheet flooring w/ blue & pink w/ black mastic & vapor (bottom layer)	Brown Fibrous Homogeneous	80% Cellulose 10% Synthetic	10% Non-fibrous (Other)	None Detected
454-Plaster 331816310-0016	873 Grape - Level 1 - Kitchen E - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
454-Drywall 331816310-0016A	873 Grape - Level 1 - Kitchen E - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
455-Plaster 331816310-0017	873 Grape - Level 1 - Bedroom 1 W - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
455-Drywall 331816310-0017A	873 Grape - Level 1 - Bedroom 1 W - Plaster	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
456- Plaster 331816310-0018	873 Grape - Level 1 - Bedroom 2 W - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
457-Plaster 331816310-0019	873 Grape - Level 1 - Living room W - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
457-Drywall 331816310-0019A	873 Grape - Level 1 - Living room W - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
458 331816310-0020	873 Grape - Level 1 - Bathroom S - Plaster Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
459 331816310-0021	873 Grape - Level 1 - Kitchen W - 4" Baseboard & beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
460 331816310-0022	873 Grape - Level 1 - Kitchen NW - 4" Baseboard & beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
461 331816310-0023	873 Grape - Level 1 - Bathroom N - 4" Baseboard & beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
462-Joint Compound 331816310-0024	873 Grape - Level 1 - Kitchen SW - Smooth drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
462-Drywall 331816310-0024A	873 Grape - Level 1 - Kitchen SW - Smooth drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
463 331816310-0025	873 Grape - Level 1 - Exterior SE - Stucco Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
464 331816310-0026	873 Grape - Level 1 - Exterior SW - Stucco Skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
465 331816310-0027	873 Grape - Level 1 - Exterior NW - Stucco Skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
466 331816310-0028	873 Grape - Roof - Exterior S - Roofing shingles	Black/Orange Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
467 331816310-0029	873 Grape - Roof - Exterior S - Roofing shingles	Black/Orange Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
468 331816310-0030	873 Grape - Roof - Exterior S - Roofing shingles	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
469 331816310-0031	786 Blaine - Level 1 - Exterior N - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
470 331816310-0032	786 Blaine - Level 1 - Exterior N - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
471 331816310-0033	786 Blaine - Level 1 - Exterior N - Roof penetration mastic <i>Inseparable paint / coating layer included in analysis</i>	Gray/Red/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
472-Plaster 331816310-0034	786 Blaine - Level 1 - Living room E - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
472-Drywall 331816310-0034A	786 Blaine - Level 1 - Living room E - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
473-Plaster 331816310-0035	786 Blaine - Level 1 - Bedroom 1 E - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
473-Drywall 331816310-0035A	786 Blaine - Level 1 - Bedroom 1 E - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
474-Plaster 331816310-0036	786 Blaine - Level 1 - Bedroom 2 E - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
474-Drywall 331816310-0036A	786 Blaine - Level 1 - Bedroom 2 E - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
475-Drywall 331816310-0037	786 Blaine - Level 1 - Kitchen W - Plaster <i>Plaster not found.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
476 331816310-0038	786 Blaine - Level 1 - Bathroom N - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
477-Floor Tile 331816310-0039	786 Blaine - Level 1 - Living room N - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
477-Mastic 331816310-0039A	786 Blaine - Level 1 - Living room N - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
478-Floor Tile 331816310-0040	786 Blaine - Level 1 - Bedroom 1 N - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
478-Mastic 331816310-0040A	786 Blaine - Level 1 - Bedroom 1 N - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
479-Floor Tile 331816310-0041	786 Blaine - Level 1 - Bedroom 2 E - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
479-Mastic 331816310-0041A	786 Blaine - Level 1 - Bedroom 2 E - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
480-Mastic 1 331816310-0042	786 Blaine - Level 1 - Living room N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
480-Floor Tile 331816310-0042A	786 Blaine - Level 1 - Living room N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
480-Mastic 2 331816310-0042B	786 Blaine - Level 1 - Living room N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
480-Vapor Barrier 331816310-0042C	786 Blaine - Level 1 - Living room N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
481-Mastic 1 331816310-0043	786 Blaine - Level 1 - Bedroom 1 N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
481-Floor Tile 331816310-0043A	786 Blaine - Level 1 - Bedroom 1 N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
481-Mastic 2 331816310-0043B	786 Blaine - Level 1 - Bedroom 1 N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Heterogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
481-Vapor Barrier 331816310-0043C	786 Blaine - Level 1 - Bedroom 1 N - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
482-Floor Tile 331816310-0044	786 Blaine - Level 1 - Bedroom 2 E - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
482-Mastic 331816310-0044A	786 Blaine - Level 1 - Bedroom 2 E - 9" floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
483-Sheet Flooring 331816310-0045	786 Blaine - Level 1 - Kitchen E - Sheet flooring 6" squares w/ yellow mastic (top layer)	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
483-Mastic 331816310-0045A	786 Blaine - Level 1 - Kitchen E - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
483-Backing 331816310-0045B	786 Blaine - Level 1 - Kitchen E - Sheet flooring 6" squares w/ yellow mastic (top layer)	Gray Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
484-Sheet Flooring 331816310-0046	786 Blaine - Level 1 - Kitchen N - Sheet flooring 6" squares w/ yellow mastic (top layer)	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
484-Mastic 331816310-0046A	786 Blaine - Level 1 - Kitchen N - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
484-Backing 331816310-0046B	786 Blaine - Level 1 - Kitchen N - Sheet flooring 6" squares w/ yellow mastic (top layer)	Gray Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
485-Sheet Flooring 331816310-0047	786 Blaine - Level 1 - Bathroom N - Sheet flooring 6" squares w/ yellow mastic (top layer)	Beige Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
485-Mastic 331816310-0047A	786 Blaine - Level 1 - Bathroom N - Sheet flooring 6" squares w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
486-Floor Tile 331816310-0048	786 Blaine - Level 1 - Kitchen E - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
486-Mastic 331816310-0048A	786 Blaine - Level 1 - Kitchen E - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
486-Sheet Flooring 331816310-0048B	786 Blaine - Level 1 - Kitchen E - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Yellow Fibrous Homogeneous	7% Cellulose	73% Non-fibrous (Other)	20% Chrysotile
487-Mastic 331816310-0049	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
487-Sheet Flooring 331816310-0049A	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Yellow Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
488-Sheet Flooring 331816310-0050	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ pebble pattern w/ mastic (3rd layer)	Tan Fibrous Homogeneous	5% Cellulose	65% Non-fibrous (Other)	30% Chrysotile
<i>Mastic not found.</i>					
489- Sheet Flooring 1 331816310-0051	786 Blaine - Level 1 - Kitchen W - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Gray Fibrous Homogeneous	7% Cellulose	73% Non-fibrous (Other)	20% Chrysotile

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
489-Mastic 331816310-0051A	786 Blaine - Level 1 - Kitchen W - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
489-Sheet Flooring 2 331816310-0051B	786 Blaine - Level 1 - Kitchen W - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
489-Vapor Barrier 331816310-0051C	786 Blaine - Level 1 - Kitchen W - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
490- Sheet Flooring 1 331816310-0052	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
490-Mastic 331816310-0052A	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
490-Sheet Flooring 2 331816310-0052B	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
490-Vapor Barrier 331816310-0052C	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
491-Sheet Flooring 1 331816310-0053	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Brown Fibrous Homogeneous	5% Cellulose	60% Non-fibrous (Other)	35% Chrysotile
491-Sheet Flooring 2 331816310-0053A	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
491-Vapor Barrier 331816310-0053B	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Brown Fibrous Homogeneous	80% Cellulose 10% Synthetic	10% Non-fibrous (Other)	None Detected
491-Mastic 331816310-0053C	786 Blaine - Level 1 - Kitchen N - Sheet flooring w/ blue & pink specs w/ blk mastic & vapor barrier (4th layers)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
492 331816310-0054	786 Blaine - Level 1 - Kitchen SE - 4" Baseboard black w/ yellow mastic <i>Baseboard not present in sample.</i>	Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
493 331816310-0055	786 Blaine - Level 1 - Kitchen E - 4" Baseboard black w/ yellow mastic <i>Baseboard not present in sample.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
494 331816310-0056	786 Blaine - Level 1 - Kitchen NE - 4" Baseboard black w/ yellow mastic <i>Baseboard not found.</i>	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
495-Joint Compound 331816310-0057	786 Blaine - Level 1 - Kitchen NE - Drywall smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
495-Drywall 331816310-0057A	786 Blaine - Level 1 - Kitchen NE - Drywall smooth	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
496-Skim Coat 331816310-0058	786 Blaine - Level 1 - Exterior NW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
496-Stucco 331816310-0058A	786 Blaine - Level 1 - Exterior NW - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
497-Skim Coat 331816310-0059	786 Blaine - Level 1 - Exterior SW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
497-Stucco 331816310-0059A	786 Blaine - Level 1 - Exterior SW - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
498 331816310-0060	786 Blaine - Level 1 - Exterior E - Stucco skim coat <i>Inseparable paint / coating layer included in analysis</i>	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
499-Roof Shingle 331816310-0061	786 Blaine - Roof - SE - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
499-Vapor Barrier 331816310-0061A	786 Blaine - Roof - SE - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
500-Roof Shingle 1 331816310-0062	786 Blaine - Roof - S - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
500-Roof Shingle 2 331816310-0062A	786 Blaine - Roof - S - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
500-Vapor Barrier 331816310-0062B	786 Blaine - Roof - S - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
501-Shingle 331816310-0063	786 Blaine - Roof - SW - Roofing shingles w/ vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
501-Vapor Barrier 331816310-0063A	786 Blaine - Roof - SW - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
502 331816310-0064	786 Blaine - Roof - SW - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
503 331816310-0065	786 Blaine - Roof - SW - Roof penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
504 331816310-0066	786 Blaine - Roof - SW - Roof penetration mastic	Gray/Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
505-Skim Coat 331816310-0067	861 Cherry - Level 1 - Living room - W - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
505-Plaster 331816310-0067A	861 Cherry - Level 1 - Living room - W - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
505-Drywall 331816310-0067B	861 Cherry - Level 1 - Living room - W - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
506-Skim Coat 331816310-0068	861 Cherry - Level 1 - Hall SW - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
506-Plaster 331816310-0068A	861 Cherry - Level 1 - Hall SW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
506-Drywall 331816310-0068B	861 Cherry - Level 1 - Hall SW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
507-Skim Coat 331816310-0069	861 Cherry - Level 1 - Bedroom 2 - N - Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
507-Plaster 331816310-0069A	861 Cherry - Level 1 - Bedroom 2 - N - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
507-Drywall 331816310-0069B	861 Cherry - Level 1 - Bedroom 2 - N - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
508-Plaster 331816310-0070	861 Cherry - Level 1 - Bedroom 1 - W - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
508-Drywall 331816310-0070A	861 Cherry - Level 1 - Bedroom 1 - W - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
509-Plaster 331816310-0071	861 Cherry - Level 1 - Bathroom N - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
509-Drywall 331816310-0071A	861 Cherry - Level 1 - Bathroom N - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
510-Floor Tile 331816310-0072	861 Cherry - Level 1 - Living room - NW - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
510-Mastic 331816310-0072A	861 Cherry - Level 1 - Living room - NW - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
510-Floor Tile 331816310-0072B	861 Cherry - Level 1 - Living room - NW - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
511-Floor Tile 331816310-0073	861 Cherry - Level 1 - Bedroom 1 - SW - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
511-Mastic 331816310-0073A	861 Cherry - Level 1 - Bedroom 1 - SW - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
512-Floor Tile 331816310-0074	861 Cherry - Level 1 - Bedroom 2- NE - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
512-Mastic 331816310-0074A	861 Cherry - Level 1 - Bedroom 2- NE - 12" floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Brown/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material.</i>					
513-Mastic 1 331816310-0075	861 Cherry - Level 1 - Living room - NW - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
513-Floor Tile 331816310-0075A	861 Cherry - Level 1 - Living room - NW - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
513-Mastic 2 331816310-0075B	861 Cherry - Level 1 - Living room - NW - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
513-Vapor Barrier 331816310-0075C	861 Cherry - Level 1 - Living room - NW - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
514-Mastic 1 331816310-0076	861 Cherry - Level 1 - Bedroom 1 - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
514-Floor Tile 331816310-0076A	861 Cherry - Level 1 - Bedroom 1 - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
514-Mastic 2 331816310-0076B	861 Cherry - Level 1 - Bedroom 1 - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
514-Vapor Barrier 331816310-0076C	861 Cherry - Level 1 - Bedroom 1 - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
514-Mastic 3 331816310-0076D	861 Cherry - Level 1 - Bedroom 1 - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
515-Floor Tile 331816310-0077	861 Cherry - Level 1 - Bedroom 2 - NE - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
515-Mastic 331816310-0077A	861 Cherry - Level 1 - Bedroom 2 - NE - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
515-Vapor Barrier 331816310-0077B	861 Cherry - Level 1 - Bedroom 2 - NE - 9" Floor tile w/ brown streaks w/ black mastic & vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
516-Sheet Flooring 331816310-0078	861 Cherry - Level 1 - Bathroom - N - Sheet flooring w/ 6" squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
516-Mastic 331816310-0078A	861 Cherry - Level 1 - Bathroom - N - Sheet flooring w/ 6" squares w/ yellow mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
517-Sheet Flooring 331816310-0079	861 Cherry - Level 1 - Bathroom - N - Sheet flooring w/ 6" squares w/ yellow mastic	Gray/White Fibrous Heterogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
517-Mastic 331816310-0079A	861 Cherry - Level 1 - Bathroom - N - Sheet flooring w/ 6" squares w/ yellow mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
518-Sheet Flooring 331816310-0080	861 Cherry - Level 1 - Bathroom - S - Sheet flooring w/ 6" squares w/ yellow mastic	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
518-Mastic 331816310-0080A	861 Cherry - Level 1 - Bathroom - S - Sheet flooring w/ 6" squares w/ yellow mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
519-Mastic 331816310-0081	861 Cherry - Level 1 - Kitchen - NE - 4" black baseboard w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
520-Mastic 331816310-0082	861 Cherry - Level 1 - Kitchen - E - 4" black baseboard w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
521 331816310-0083	861 Cherry - Level 1 - Kitchen - SE - 4" black baseboard w/ white mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
522-Texture 331816310-0084	861 Cherry - Level 1 - Exterior SW - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
522-Skim Coat 331816310-0084A	861 Cherry - Level 1 - Exterior SW - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
522-Stucco 331816310-0084B	861 Cherry - Level 1 - Exterior SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
523-Texture 331816310-0085	861 Cherry - Level 1 - Exterior SE - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
523-Skim Coat <small>331816310-0085A</small>	861 Cherry - Level 1 - Exterior SE - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
523-Stucco <small>331816310-0085B</small>	861 Cherry - Level 1 - Exterior SE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
524-Skim Coat 1 <small>331816310-0086</small>	861 Cherry - Level 1 - Exterior NE - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
524-Skim Coat 2 <small>331816310-0086A</small>	861 Cherry - Level 1 - Exterior NE - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
524-Stucco <small>331816310-0086B</small>	861 Cherry - Level 1 - Exterior NE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
525-Sheet Flooring <small>331816310-0087</small>	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
525-Mastic <small>331816310-0087A</small>	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
526-Sheet Flooring <small>331816310-0088</small>	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	Gray/White Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
526-Mastic <small>331816310-0088A</small>	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
527-Sheet Flooring <small>331816310-0089</small>	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
527-Mastic <small>331816310-0089A</small>	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ mixed square/ triangle pattern w/ white mastic (top layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
528-Floor Tile <small>331816310-0090</small>	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
528-Mastic 331816310-0090A	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Yellow Fibrous Heterogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
528-Sheet Flooring 331816310-0090B	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Gray/Orange Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
529-Floor Tile 331816310-0091	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
529-Mastic 331816310-0091A	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Yellow Fibrous Heterogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
529-Sheet Flooring 331816310-0091B	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Gray/Orange Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
530-Mastic 331816310-0092	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
530-Sheet Flooring 331816310-0092A	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ brown speacs w/ mastic (3rd layer)	Tan Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
531-Sheet Flooring 331816310-0093	861 Cherry - Level 1 - Kitchen NW - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	Gray Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
531-Mastic 331816310-0093A	861 Cherry - Level 1 - Kitchen NW - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
532-Sheet Flooring 331816310-0094	861 Cherry - Level 1 - Kitchen W - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	Gray Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
532-Mastic 331816310-0094A	861 Cherry - Level 1 - Kitchen W - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
533-Sheet Flooring 1 331816310-0095	861 Cherry - Level 1 - Kitchen S - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	White/Yellow Fibrous Homogeneous	20% Cellulose 10% Synthetic	70% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
533-Mastic 331816310-0095A	861 Cherry - Level 1 - Kitchen S - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
533-Sheet Flooring 2 331816310-0095B	861 Cherry - Level 1 - Kitchen S - Sheet floor w/ pebble pattern w/ mastic (4th mastic)	Brown/Beige Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
534-Sheet Flooring 331816310-0096	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Tan Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
534-Floor Tile 331816310-0096A	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Tan/Various/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
534-Vapor Barrier 1 331816310-0096B	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
534-Mastic 1 331816310-0096C	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
534-Vapor Barrier 2 331816310-0096D	861 Cherry - Level 1 - Kitchen NW - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Gray Fibrous Homogeneous	60% Cellulose 15% Synthetic	25% Non-fibrous (Other)	None Detected
535-Sheet Flooring 331816310-0097	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Tan Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
535-Floor Tile 331816310-0097A	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Tan/Various/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
535-Vapor Barrier 1 331816310-0097B	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
535-Mastic 1 331816310-0097C	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
535-Vapor Barrier 2 331816310-0097D	861 Cherry - Level 1 - Kitchen W - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Gray Fibrous Homogeneous	65% Cellulose 10% Synthetic	25% Non-fibrous (Other)	None Detected
536-Sheet Flooring 1 331816310-0098	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Beige Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
536-Sheet Flooring 2 331816310-0098A	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Brown/Tan Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
536-Vapor Barrier 331816310-0098B	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Brown/Black Fibrous Homogeneous	60% Cellulose 10% Synthetic	30% Non-fibrous (Other)	None Detected
536-Mastic 331816310-0098C	861 Cherry - Level 1 - Kitchen S - Sheet flooring w/ flower pattern w/ black mastic & vapor barrier (5th layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
537-Roof Shingle 1 331816310-0099	861 Cherry - Roof - NW - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	10% Cellulose 15% Glass	75% Non-fibrous (Other)	None Detected
537-Roof Shingle 2 331816310-0099A	861 Cherry - Roof - NW - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
537-Vapor Barrier 331816310-0099B	861 Cherry - Roof - NW - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
538-Roof Shingle 1 331816310-0100	861 Cherry - Roof - N - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	10% Cellulose 15% Glass	75% Non-fibrous (Other)	None Detected
538-Roof Shingle 2 331816310-0100A	861 Cherry - Roof - N - Roofing shingles w/ vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
538-Vapor Barrier 331816310-0100B	861 Cherry - Roof - N - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
539-Shingle 331816310-0101	861 Cherry - Roof - NE - Roofing shingles w/ vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
539-Vapor Barrier 331816310-0101A	861 Cherry - Roof - NE - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
540 331816310-0102	861 Cherry - Roof - N - Penetration mastic	Gray/Black/Yellow Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
541 331816310-0103	861 Cherry - Roof - N - Penetration mastic	Gray/Black/Yellow Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
542 331816310-0104	861 Cherry - Roof - N - Penetration mastic	Gray/Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
543 331816310-0105	861 Cherry - Roof -Kitchen SE - Drywall smooth	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
544-Plaster 331816310-0106	3419 Kentucky - Level 1 - Living room - E - Plaster w/ heavy texture <i>Texture not present in sample.</i>	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
544-Drywall 331816310-0106A	3419 Kentucky - Level 1 - Living room - E - Plaster w/ heavy texture	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
545-Plaster 331816310-0107	3419 Kentucky - Level 1 - Hallway NW - Plaster w/ heavy texture <i>Texture not present in sample.</i>	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
545-Drywall 331816310-0107A	3419 Kentucky - Level 1 - Hallway NW - Plaster w/ heavy texture	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
546-Plaster 331816310-0108	3419 Kentucky - Level 1 - Bedroom 1 - E - Plaster w/ heavy texture <i>Texture not present in sample.</i>	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
546-Drywall 331816310-0108A	3419 Kentucky - Level 1 - Bedroom 1 - E - Plaster w/ heavy texture	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
547-Texture 331816310-0109	3419 Kentucky - Level 1 - Bedroom 2 - N - Plaster w/ heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
547-Plaster 331816310-0109A	3419 Kentucky - Level 1 - Bedroom 2 - N - Plaster w/ heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
547-Drywall 331816310-0109B	3419 Kentucky - Level 1 - Bedroom 2 - N - Plaster w/ heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
548-Texture 331816310-0110	3419 Kentucky - Level 1 - Bathroom SW - Plaster w/ heavy texture ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
548-Plaster 331816310-0110A	3419 Kentucky - Level 1 - Bathroom SW - Plaster w/ heavy texture ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
548-Drywall 331816310-0110B	3419 Kentucky - Level 1 - Bathroom SW - Plaster w/ heavy texture ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
549-Skim Coat 331816310-0111	3419 Kentucky - Level 1 - Exterior -NE - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
549- Stucco 331816310-0111A	3419 Kentucky - Level 1 - Exterior -NE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
550-Skim Coat 331816310-0112	3419 Kentucky - Level 1 - Exterior -SW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
550- Stucco 331816310-0112A	3419 Kentucky - Level 1 - Exterior -SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
551-Skim Coat 331816310-0113	3419 Kentucky - Level 1 - Exterior -SE - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
551-Stucco 331816310-0113A	3419 Kentucky - Level 1 - Exterior -SE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
552 331816310-0114 <i>Texture not found.</i>	3419 Kentucky - Level 1 - Kitchen - Drywall w/ heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
553-Floor Tile 1 331816310-0115	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
553-Mastic 1 331816310-0115A	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
553-Floor Tile 2 331816310-0115B	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
553-Mastic 2 331816310-0115C	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile

Result includes a small amount of inseparable attached material

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
553-Vapor Barrier 331816310-0115D	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
553-Mastic 3 331816310-0115E	3419 Kentucky - Level 1 - Living room - S - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
554-Mastic 1 331816310-0116	3419 Kentucky - Level 1 - Bedroom 1 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
554-Floor Tile 331816310-0116A	3419 Kentucky - Level 1 - Bedroom 1 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
554-Mastic 2 331816310-0116B	3419 Kentucky - Level 1 - Bedroom 1 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
554-Vapor Barrier 331816310-0116C	3419 Kentucky - Level 1 - Bedroom 1 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
555-Floor Tile 331816310-0117	3419 Kentucky - Level 1 - Bedroom 2 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
555-Mastic 331816310-0117A	3419 Kentucky - Level 1 - Bedroom 2 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
555-Vapor Barrier 331816310-0117B	3419 Kentucky - Level 1 - Bedroom 2 - E - 9" floor tile w/ brown streaks + black mastic + vapor barrier (bottom layer)	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
556-Sheet Flooring 331816310-0118	3419 Kentucky - Level 1 - Bathroom W - Sheet flooring 6" squares w/ yellow mastic	Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
556-Mastic 331816310-0118A	3419 Kentucky - Level 1 - Bathroom W - Sheet flooring 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
557-Sheet Flooring 331816310-0119	3419 Kentucky - Level 1 - Bathroom W - Sheet flooring 6" squares w/ yellow mastic	Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
557-Mastic 331816310-0119A	3419 Kentucky - Level 1 - Bathroom W - Sheet flooring 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
558-Sheet Flooring 331816310-0120	3419 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
558-Mastic 331816310-0120A	3419 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	Brown/White Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
559-Floor Tile 331816310-0121	3419 Kentucky - Level 1 - Kitchen - W - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
559-Mastic 331816310-0121A	3419 Kentucky - Level 1 - Kitchen - W - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
560-Floor Tile 331816310-0122	3419 Kentucky - Level 1 - Kitchen - S - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
560-Mastic 331816310-0122A	3419 Kentucky - Level 1 - Kitchen - S - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
561-Floor Tile 331816310-0123	3419 Kentucky - Level 1 - Kitchen - E - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
561-Mastic 331816310-0123A	3419 Kentucky - Level 1 - Kitchen - E - 12" Floor tile w/ white & brown streaks w/ yellow mastic (top layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
562-Floor Tile 331816310-0124	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
562-Mastic 1 331816310-0124A	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
562-Sheet Flooring 331816310-0124B	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
562- Mastic 2 331816310-0124C	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
563-Floor Tile 331816310-0125	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
563-Mastic 1 331816310-0125A	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
563-Sheet Flooring 331816310-0125B	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Yellow Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
563- Mastic 2 331816310-0125C	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
564-Mastic 331816310-0126	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
564-Floor Tile 331816310-0126A	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Tan/Black/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
564-Sheet Flooring 331816310-0126B	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	White/Beige/Clear Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached mastic material</i>					
564-Vapor Barrier 331816310-0126C	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring mixed pattern with flowers w/ yellow mastic (2nd layer)	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
565-Sheet Flooring 331816310-0127	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Beige Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
565-Vapor Barrier 331816310-0127A	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
566-Mastic 331816310-0128	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
566-Sheet Flooring 331816310-0128A	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Beige Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
566-Vapor Barrier 331816310-0128B	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown Non-Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
567-Mastic 331816310-0129	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
567-Sheet Flooring 331816310-0129A	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
567-Vapor Barrier 331816310-0129B	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ blue & pink specs w/ black mastic & vapor barrier (3rd layer)	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
568-Vapor Barrier 331816310-0130	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ black mastic & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
568-Sheet Flooring 1 331816310-0130A	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ black mastic & vapor barrier	Red Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
568-Sheet Flooring 2 331816310-0130B	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ black mastic & vapor barrier	Beige Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
568-Mastic 331816310-0130C	3419 Kentucky - Level 1 - Kitchen - W - Sheet flooring w/ black mastic & vapor barrier	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
569-Vapor Barrier 331816310-0131	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ black mastic & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
569-Sheet Flooring 331816310-0131A	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ black mastic & vapor barrier	Red Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
569-Mastic 331816310-0131B	3419 Kentucky - Level 1 - Kitchen - S - Sheet flooring w/ black mastic & vapor barrier	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
570-Sheet Flooring 1 331816310-0132	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
570-Vapor Barrier 1 331816310-0132A	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
570-Mastic 1 331816310-0132B	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
570-Sheet Flooring 2 331816310-0132C	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Red Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
570-Vapor Barrier 2 331816310-0132D	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
570-Mastic 2 331816310-0132E	3419 Kentucky - Level 1 - Kitchen - E - Sheet flooring w/ black mastic & vapor barrier	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
571 331816310-0133	3419 Kentucky - Level 1 - Exterior E - Window putty	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
572 331816310-0134	3419 Kentucky - Level 1 - Exterior SE - Window putty	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
573 331816310-0135	3419 Kentucky - Level 1 - Exterior N - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
574-Shingle 331816310-0136	3419 Kentucky - Roof - SE - Roofing shingles w/ vapor paper	Black/Orange Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
574-Vapor Barrier 331816310-0136A	3419 Kentucky - Roof - SE - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
575-Shingle 331816310-0137	3419 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Black/Orange Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
575-Vapor Barrier 331816310-0137A	3419 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
576-Shingle 331816310-0138	3419 Kentucky - Roof - NE - Roofing shingles w/ vapor paper	Black/Orange Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
576-Vapor Barrier 331816310-0138A	3419 Kentucky - Roof - NE - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
577-Roof Shingle 1 331816310-0139	3434 Kentucky - Roof - NE - Roofing shingles w/ vapor paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
577-Roof Shingle 2 331816310-0139A	3434 Kentucky - Roof - NE - Roofing shingles w/ vapor paper	Gray/Black Fibrous Heterogeneous	12% Glass	88% Non-fibrous (Other)	None Detected
577-Vapor Barrier 331816310-0139B	3434 Kentucky - Roof - NE - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
578-Roof Shingle 1 331816310-0140	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
578-Roof Shingle 2 331816310-0140A	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
578-Roof Shingle 3 331816310-0140B	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
578-Vapor Barrier 331816310-0140C	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
579-Shingle 331816310-0141	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Brown/Gray/Black Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
579-Vapor Barrier 331816310-0141A	3434 Kentucky - Roof - E - Roofing shingles w/ vapor paper	Black Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
580 331816310-0142	3434 Kentucky - Roof - E - Penetration mastic	Gray/Black Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
581 331816310-0143	3434 Kentucky - Roof - E - Penetration mastic	Gray/Black Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
582 331816310-0144	3434 Kentucky - Roof - E - Penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
583-Plaster 331816310-0145 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Living room SW - Plaster	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
583-Drywall 331816310-0145A	3434 Kentucky - Level 1 - Living room SW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
584-Plaster 331816310-0146 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Kitchen N - Plaster	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
584-Drywall 331816310-0146A	3434 Kentucky - Level 1 - Kitchen N - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
585-Plaster 331816310-0147 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Hall NW - Plaster	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
585-Drywall 331816310-0147A	3434 Kentucky - Level 1 - Hall NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
586-Plaster 331816310-0148 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Bedroom 2 E - Plaster	Gray/Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
586-Drywall 331816310-0148A	3434 Kentucky - Level 1 - Bedroom 2 E - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
587-Plaster 331816310-0149 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Bathroom SE - Plaster ceiling	Gray/White/Green Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
587-Drywall 331816310-0149A	3434 Kentucky - Level 1 - Bathroom SE - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
588 331816310-0150 <i>Inseparable paint / coating layer included in analysis</i>	3434 Kentucky - Level 1 - Kitchen SW - Drywall smooth	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
589-Skim Coat 331816310-0151	3434 Kentucky - Level 1 - Exterior NW - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
589-Stucco 331816310-0151A	3434 Kentucky - Level 1 - Exterior NW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
590-Skim Coat 331816310-0152	3434 Kentucky - Level 1 - Exterior NE - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
590-Stucco 331816310-0152A	3434 Kentucky - Level 1 - Exterior NE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
591-Skim Coat 331816310-0153	3434 Kentucky - Level 1 - Exterior SE - Stucco skim coat	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
591-Stucco 331816310-0153A	3434 Kentucky - Level 1 - Exterior SE - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
592 331816310-0154	3434 Kentucky - Level 1 - Kitchen SW - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
593 331816310-0155	3434 Kentucky - Level 1 - Kitchen S - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
594 331816310-0156	3434 Kentucky - Level 1 - Kitchen SE - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
595-Sheet Flooring 331816310-0157	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
595-Mastic 331816310-0157A	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
596-Sheet Flooring 331816310-0158	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
596-Mastic 331816310-0158A	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
597-Sheet Flooring 331816310-0159	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
597-Mastic 331816310-0159A	3434 Kentucky - Level 1 - Bathroom E - Sheet flooring 6" squares w/ yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
598-Texture 331816310-0160	890 Blaine - Level 1 - Living room N - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
598-Plaster 331816310-0160A	890 Blaine - Level 1 - Living room N - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
598-Drywall 331816310-0160B	890 Blaine - Level 1 - Living room N - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
599-Texture 331816310-0161	890 Blaine - Level 1 - Bedroom 1 W - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
599-Plaster 331816310-0161A	890 Blaine - Level 1 - Bedroom 1 W - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
599-Drywall 331816310-0161B	890 Blaine - Level 1 - Bedroom 1 W - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
600-Texture 331816310-0162	890 Blaine - Level 1 - Bedroom 2 E - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
600-Plaster 331816310-0162A	890 Blaine - Level 1 - Bedroom 2 E - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
600-Drywall 331816310-0162B	890 Blaine - Level 1 - Bedroom 2 E - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
601-Texture 331816310-0163	890 Blaine - Level 1 - Hallway NW - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
601-Plaster 331816310-0163A	890 Blaine - Level 1 - Hallway NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
601-Drywall 331816310-0163B	890 Blaine - Level 1 - Hallway NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
602-Texture 331816310-0164	890 Blaine - Level 1 - Bathroom SE - Plaster ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
602-Plaster 331816310-0164A	890 Blaine - Level 1 - Bathroom SE - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
602-Drywall 331816310-0164B	890 Blaine - Level 1 - Bathroom SE - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
603 331816310-0165	890 Blaine - Level 1 - N - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
604 331816310-0166	890 Blaine - Level 1 - W - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
605 331816310-0167	890 Blaine - Level 1 - SW - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
606 331816310-0168	890 Blaine - Level 1 - Exterior NW - Stucco skim coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected

Inseparable paint / coating layer included in analysis

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
607 <small>331816310-0169</small> <i>Inseparable paint / coating layer included in analysis</i>	890 Blaine - Level 1 - Exterior SW - Stucco skim coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
608 <small>331816310-0170</small> <i>Inseparable paint / coating layer included in analysis</i>	890 Blaine - Level 1 - Exterior S - Stucco skim coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
609-Sheet Flooring <small>331816310-0171</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
609-Mastic <small>331816310-0171A</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
610-Sheet Flooring <small>331816310-0172</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
610-Mastic <small>331816310-0172A</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
611-Sheet Flooring <small>331816310-0173</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
611-Mastic <small>331816310-0173A</small>	890 Blaine - Level 1 - Bathroom central - Sheet flooring 6" squares w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
612-Tar <small>331816310-0174</small>	890 Blaine - Roof - SE - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
612-Vapor Barrier <small>331816310-0174A</small>	890 Blaine - Roof - SE - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
612-Felt <small>331816310-0174B</small>	890 Blaine - Roof - SE - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
612-Insulation <small>331816310-0174C</small>	890 Blaine - Roof - SE - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
612-Styrofoam 331816310-0174D	890 Blaine - Roof - SE - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
613-Tar 331816310-0175	890 Blaine - Roof - S - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
613-Vapor Barrier 331816310-0175A	890 Blaine - Roof - S - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
613-Felt 331816310-0175B	890 Blaine - Roof - S - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
613-Insulation 331816310-0175C	890 Blaine - Roof - S - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
613-Styrofoam 331816310-0175D	890 Blaine - Roof - S - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
614-Tar 331816310-0176	890 Blaine - Roof - SW - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
614-Vapor Barrier 331816310-0176A	890 Blaine - Roof - SW - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Black Fibrous Heterogeneous	5% Cellulose 10% Glass	85% Non-fibrous (Other)	None Detected
614-Insulation 331816310-0176B	890 Blaine - Roof - SW - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
614-Styrofoam 331816310-0176C	890 Blaine - Roof - SW - Roofing: black tar w/ vapor barrier & brown insulation styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
615 331816310-0177	3446 Avocado - Level 1 - Exterior NW - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
616 331816310-0178	3446 Avocado - Level 1 - Exterior W - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
617 331816310-0179	3446 Avocado - Level 1 - Exterior SE - Window putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
618-Baseboard 331816310-0180	3446 Avocado - Level 1 - Kitchen W - 4" Black baseboard w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
618-Mastic 331816310-0180A	3446 Avocado - Level 1 - Kitchen W - 4" Black baseboard w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
619-Mastic 331816310-0181	3446 Avocado - Level 1 - Kitchen SE - 4" Black baseboard w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found in sample.</i>					
620 331816310-0182	3446 Avocado - Level 1 - Bathroom NE - 4" Black baseboard w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
621-Skim Coat 331816310-0183	3446 Avocado - Level 1 - Exterior SW - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
621-Stucco 331816310-0183A	3446 Avocado - Level 1 - Exterior SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
622-Skim Coat 331816310-0184	3446 Avocado - Level 1 - Exterior NW - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
622-Stucco 331816310-0184A	3446 Avocado - Level 1 - Exterior NW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
623-Skim Coat 1 331816310-0185	3446 Avocado - Level 1 - Exterior SE - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
623-Skim Coat 2 331816310-0185A	3446 Avocado - Level 1 - Exterior SE - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
624-Texture 331816310-0186	3446 Avocado - Level 1 - Living room - S - Plaster heavy texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
624-Plaster 331816310-0186A	3446 Avocado - Level 1 - Living room - S - Plaster heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
624-Drywall 331816310-0186B	3446 Avocado - Level 1 - Living room - S - Plaster heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
625-Texture 331816310-0187	3446 Avocado - Level 1 - Kitchen SE - Plaster heavy texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
625-Plaster 331816310-0187A	3446 Avocado - Level 1 - Kitchen SE - Plaster heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
626-Texture 331816310-0188	3446 Avocado - Level 1 - Hall W - Plaster heavy texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
626-Plaster 331816310-0188A	3446 Avocado - Level 1 - Hall W - Plaster heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
626-Drywall 331816310-0188B	3446 Avocado - Level 1 - Hall W - Plaster heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
627-Texture 331816310-0189	3446 Avocado - Level 1 - Bedroom E - Plaster heavy texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
627-Plaster 331816310-0189A	3446 Avocado - Level 1 - Bedroom E - Plaster heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
627-Drywall 331816310-0189B	3446 Avocado - Level 1 - Bedroom E - Plaster heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
628-Texture 331816310-0190	3446 Avocado - Level 1 - Bathroom NW - Plaster heavy texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
628-Plaster 331816310-0190A	3446 Avocado - Level 1 - Bathroom NW - Plaster heavy texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
628-Drywall 331816310-0190B	3446 Avocado - Level 1 - Bathroom NW - Plaster heavy texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
629-Shingle 331816310-0191	3446 Avocado - Roof - SE - Roofing shingles w/ vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
629-Vapor Barrier 331816310-0191A	3446 Avocado - Roof - SE - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
630-Shingle 331816310-0192	3446 Avocado - Roof - NW - Roofing shingles w/ vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
630-Vapor Barrier 331816310-0192A	3446 Avocado - Roof - NW - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
631-Shingle 331816310-0193	3446 Avocado - Roof - N - Roofing shingles w/ vapor barrier	Brown/Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
631-Vapor Barrier 331816310-0193A	3446 Avocado - Roof - N - Roofing shingles w/ vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
632 331816310-0194	3446 Avocado - Roof - N - Penetration mastic	White/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
633 331816310-0195	3446 Avocado - Roof - N - Penetration mastic	White/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
634 331816310-0196	3446 Avocado - Roof - N - Penetration mastic	Gray/White/Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
635-Sheet Flooring 331816310-0197	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
635-Mastic 331816310-0197A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
636-Sheet Flooring 331816310-0198	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
636-Mastic 331816310-0198A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
637-Sheet Flooring 331816310-0199	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Tan Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
637-Mastic 331816310-0199A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring - mixed squares/ triangles pattern w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
638-Floor Tile 331816310-0200	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
638-Mastic 331816310-0200A	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
639-Floor Tile 331816310-0201	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
639-Mastic 331816310-0201A	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
640-Floor Tile 331816310-0202	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
640-Mastic 331816310-0202A	3446 Avocado - Level 1 - Bathroom N - 12" Floor tile w/ white & brown streaks w/ yellow mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
641-Sheet Flooring 331816310-0203	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Brown/Gray Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
641-Mastic 331816310-0203A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
642-Sheet Flooring 331816310-0204	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Brown/Gray Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
642-Mastic 331816310-0204A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
643-Sheet Flooring 331816310-0205	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Beige Fibrous Homogeneous	5% Cellulose	65% Non-fibrous (Other)	30% Chrysotile
643-Mastic 331816310-0205A	3446 Avocado - Level 1 - Bathroom N - Sheet flooring brown flower pattern w/ black mastic	Brown Fibrous Heterogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
644-Skim Coat 331816310-0206	3452 Avocado - Level 1 - Living room - E - Plaster	White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
644-Plaster 331816310-0206A	3452 Avocado - Level 1 - Living room - E - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
644-Drywall 331816310-0206B	3452 Avocado - Level 1 - Living room - E - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
645-Skim Coat 331816310-0207	3452 Avocado - Level 1 - Bedroom 1 E - Plaster	Tan/White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
645-Plaster 331816310-0207A	3452 Avocado - Level 1 - Bedroom 1 E - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
645-Drywall 331816310-0207B	3452 Avocado - Level 1 - Bedroom 1 E - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
646-Skim Coat 331816310-0208	3452 Avocado - Level 1 - Hallway NW - Plaster	Tan/White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
646-Plaster 331816310-0208A	3452 Avocado - Level 1 - Hallway NW - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
646-Drywall 331816310-0208B	3452 Avocado - Level 1 - Hallway NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
647-Skim Coat 331816310-0209	3452 Avocado - Level 1 - Kitchen NE - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
647-Plaster 331816310-0209A	3452 Avocado - Level 1 - Kitchen NE - Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
647-Drywall 331816310-0209B	3452 Avocado - Level 1 - Kitchen NE - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
648-Skim Coat 331816310-0210	3452 Avocado - Level 1 - Bathroom S - Plaster ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
648-Plaster 331816310-0210A	3452 Avocado - Level 1 - Bathroom S - Plaster ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
648-Drywall 331816310-0210B	3452 Avocado - Level 1 - Bathroom S - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
649-Tar 331816310-0211	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
649-Vapor Barrier 331816310-0211A	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Brown/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
649-Insulation 331816310-0211B	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Brown Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
649-Styrofoam 331816310-0211C	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
650-Tar 331816310-0212	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
650-Vapor Barrier 331816310-0212A	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Brown/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
650-Insulation 331816310-0212B	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Brown Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
650-Styrofoam 331816310-0212C	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
651-Tar 331816310-0213	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
651-Vapor Barrier 331816310-0213A	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Black Fibrous Heterogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
651-Insulation 331816310-0213B	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
651-Styrofoam 331816310-0213C	3452 Avocado - Roof - W - Black tar w/ vapor barrier + brown insulation + styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
652 331816310-0214	3452 Avocado - Roof - W - Penetration mastic	Gray/Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
653 331816310-0215	3452 Avocado - Roof - W - Penetration mastic	Gray/Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
654 331816310-0216	3452 Avocado - Roof - W - Penetration mastic	Gray/Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
655-Skim Coat 331816310-0217	3452 Avocado - Level 1 - NW - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
655-Stucco 331816310-0217A	3452 Avocado - Level 1 - NW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
656-Skim Coat 331816310-0218	3452 Avocado - Level 1 - SW - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
656-Stucco 331816310-0218A	3452 Avocado - Level 1 - SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
657 331816310-0219	3452 Avocado - Level 1 - S - Stucco skim coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
658-Floor Tile 331816310-0220	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
658-Mastic 331816310-0220A	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
659-Floor Tile 331816310-0221	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
659-Mastic 331816310-0221A	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
660-Floor Tile 331816310-0222	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
660-Mastic 331816310-0222D	3452 Avocado - Level 1 - Bathroom central - 12" floor tile w/ gray streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
661-Mastic 331816310-0223	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
661-Sheet Flooring 1 331816310-0223A	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown/White/Yellow Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
661-Sheet Flooring 2 331816310-0223B	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
661-Vapor Barrier 331816310-0223C	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
662-Mastic 331816310-0224	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
662-Sheet Flooring 1 331816310-0224A	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown/White/Yellow Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
662-Sheet Flooring 2 331816310-0224B	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile

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			% Fibrous	% Non-Fibrous	% Type
662-Vapor Barrier 331816310-0224C	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
663-Sheet Flooring 1 331816310-0225	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Tan Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
663-Mastic 331816310-0225A	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown/Yellow Fibrous Heterogeneous	2% Cellulose <1% Glass	98% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
663-Sheet Flooring 2 331816310-0225B	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
663-Vapor Barrier 331816310-0225C	3452 Avocado - Level 1 - Bathroom central - Sheet flooring w/ brown specs w/ yellow mastic & vapor barrier (2nd layer)	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
664-Floor Tile 331816310-0226	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
664-Mastic 1 331816310-0226A	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
664-Flooring 331816310-0226B	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
664-Vapor Barrier 331816310-0226C	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Fibrous Homogeneous	50% Cellulose 10% Synthetic	40% Non-fibrous (Other)	None Detected
664-Mastic 2 331816310-0226D	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
664-Insulation 331816310-0226E	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
665-Floor Tile 331816310-0227	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
665-Mastic 1 331816310-0227A	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
665-Flooring 331816310-0227B	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
665-Vapor Barrier 331816310-0227C	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Fibrous Homogeneous	50% Cellulose 10% Synthetic	40% Non-fibrous (Other)	None Detected

Initial report from: 08/20/2018 09:12:08



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
665-Mastic 2 331816310-0227D	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
665-Insulation 331816310-0227E	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
666-Floor Tile 331816310-0228	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
666-Mastic 331816310-0228A	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
666-Flooring 331816310-0228B	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Tan Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
666-Vapor Barrier 331816310-0228C	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Fibrous Homogeneous	90% Cellulose 5% Synthetic	5% Non-fibrous (Other)	None Detected
666-Insulation 331816310-0228D	3452 Avocado - Level 1 - Bathroom central - 9" floor tilw w/ small brown spec pattern w/ blk mastic & vapor barrier & brown insulation (bottom layer)	Brown Non-Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
667-Caulk 331816310-0229	3452 Avocado - Level 1 - Kitchen NE - 4" black baseboard w/ beige mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Baseboard not found in sample.

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LA Testing Order: 331816310

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
667-Mastic 331816310-0229A	3452 Avocado - Level 1 - Kitchen NE - 4" black baseboard w/ beige mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
668-Baseboard 331816310-0230	3452 Avocado - Level 1 - Kitchen SE - 4" black baseboard w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
668-Mastic 331816310-0230A	3452 Avocado - Level 1 - Kitchen SE - 4" black baseboard w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
669 331816310-0231	3452 Avocado - Level 1 - Bathroom SE - 4" black baseboard w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
670-Joint Compound 331816310-0232	3452 Avocado - Level 1 - Kitchen NE - Drywall smooth	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
670-Drywall 331816310-0232A	3452 Avocado - Level 1 - Kitchen NE - Drywall smooth	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
671-Floor Tile 331816310-0233	810 Peach - Level 1 - Bathroom central - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
671-Mastic 331816310-0233A	810 Peach - Level 1 - Bathroom central - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
672-Floor Tile 331816310-0234	810 Peach - Level 1 - Bathroom central - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
672-Mastic 331816310-0234A	810 Peach - Level 1 - Bathroom central - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
673-Floor Tile 331816310-0235	810 Peach - Level 1 - Bathroom- SW - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
673-Mastic 331816310-0235A	810 Peach - Level 1 - Bathroom- SW - 12" sheet flooring w/ white & brown streaks w/ yellow mastic (top layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
674-Mastic 331816310-0236	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
674-Sheet Flooring 331816310-0236A	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
674-Vapor Barrier 331816310-0236B	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
675-Mastic 331816310-0237	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
675-Sheet Flooring 331816310-0237A	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
675-Vapor Barrier 331816310-0237B	810 Peach - Level 1 - Bathroom central - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
676-Mastic 1 331816310-0238	810 Peach - Level 1 - Bathroom SW - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
676-Sheet Flooring 1 331816310-0238A	810 Peach - Level 1 - Bathroom SW - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Gray/White/Yellow Fibrous Heterogeneous	10% Cellulose 3% Synthetic 2% Glass	85% Non-fibrous (Other)	None Detected
676-Mastic 2 331816310-0238B	810 Peach - Level 1 - Bathroom SW - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
676-Sheet Flooring 2 331816310-0238C	810 Peach - Level 1 - Bathroom SW - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Brown/Tan Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816310

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
676-Vapor Barrier 331816310-0238D	810 Peach - Level 1 - Bathroom SW - Sheet flooring w/ pebble pattern w/ black mastic & vapor barrier	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
677-Plaster 331816310-0239	810 Peach - Level 1 - Kitchen W - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
677-Drywall 331816310-0239A	810 Peach - Level 1 - Kitchen W - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
678-Plaster 331816310-0240	810 Peach - Level 1 - Bathroom 1 NE - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
678-Drywall 331816310-0240A	810 Peach - Level 1 - Bathroom 1 NE - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
679-Plaster 331816310-0241	810 Peach - Level 1 - Bedroom 2 - S - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
679-Drywall 331816310-0241A	810 Peach - Level 1 - Bedroom 2 - S - Plaster	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
680-Plaster 331816310-0242	810 Peach - Level 1 - Hallway NW - Plaster	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
680-Drywall 331816310-0242A	810 Peach - Level 1 - Hallway NW - Plaster	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
681-Plaster 331816310-0243	810 Peach - Level 1 - Bedroom 1 SE - Plaster ceiling	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
681-Drywall 331816310-0243A	810 Peach - Level 1 - Bedroom 1 SE - Plaster ceiling	Brown/White Fibrous Heterogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
682-Skim Coat 331816310-0244	810 Peach - Level 1 - Exterior NW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
682- Stucco 331816310-0244A	810 Peach - Level 1 - Exterior NW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
683-Skim Coat 331816310-0245	810 Peach - Level 1 - Exterior SW - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
683- Stucco 331816310-0245A	810 Peach - Level 1 - Exterior SW - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
684-Skim Coat 331816310-0246	810 Peach - Level 1 - Exterior S - Stucco skim coat	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
684-Stucco 331816310-0246A	810 Peach - Level 1 - Exterior S - Stucco skim coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
685 331816310-0247	810 Peach - Level 1 - Kitchen NE - 4" baseboard black w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Baseboard not present in sample.

Initial report from: 08/20/2018 09:12:08



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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
686 331816310-0248	810 Peach - Level 1 - Kitchen Central - 4" baseboard black w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not present in sample.</i>					
687-Baseboard 331816310-0249	810 Peach - Level 1 - Kitchen SE - 4" baseboard black w/ beige mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
687-Mastic 331816310-0249A	810 Peach - Level 1 - Kitchen SE - 4" baseboard black w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
688-Shingle 1 331816310-0250	810 Peach - Roof - S - Roofing shingles + vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
688-Shingle 2 331816310-0250A	810 Peach - Roof - S - Roofing shingles + vapor barrier	Black/Green/Beige Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
688-Vapor Barrier 331816310-0250B	810 Peach - Roof - S - Roofing shingles + vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
689-Shingle 1 331816310-0251	810 Peach - Roof - S - Roofing shingles + vapor barrier	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
689-Shingle 2 331816310-0251A	810 Peach - Roof - S - Roofing shingles + vapor barrier	Black/Green/Beige Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
689-Shingle 3 331816310-0251B	810 Peach - Roof - S - Roofing shingles + vapor barrier	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
689-Vapor Barrier 331816310-0251C	810 Peach - Roof - S - Roofing shingles + vapor barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
690-Shingle 1 331816310-0252	810 Peach - Roof - SE - Roofing shingles + vapor barrier	Various/Black/Orange Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
690-Shingle 2 331816310-0252A	810 Peach - Roof - SE - Roofing shingles + vapor barrier	Black Fibrous Heterogeneous	8% Glass	92% Non-fibrous (Other)	None Detected
690-Vapor Barrier 331816310-0252B	810 Peach - Roof - SE - Roofing shingles + vapor barrier	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
691 331816310-0253	810 Peach - Roof - S - Penetration mastic	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
692 331816310-0254	810 Peach - Roof - S - Penetration mastic	Gray/Black Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
693 331816310-0255	810 Peach - Roof - S - Penetration mastic	Gray/Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331816310

Customer ID: 32CITA50D

Customer PO:

Project ID:

Analyst(s)

David Garcia (97)

Dennies Ly (208)

Elizabeth Herrera (169)

Mindy Le (21)

Sophia Nguyen (82)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/20/2018 09:12:08



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LA Testing Order: 331816743

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/20/2018 - 08/21/2018

**Collected Date:** 08/15/2018

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
694-Paint/Coating <i>331816743-0001</i>	Unit 860 Grape Level 1 Kitchen West - Plaster Heavy Texture	White/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
694-Plaster <i>331816743-0001A</i>	Unit 860 Grape Level 1 Kitchen West - Plaster Heavy Texture	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
694-Drywall <i>331816743-0001B</i>	Unit 860 Grape Level 1 Kitchen West - Plaster Heavy Texture	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
695-Paint/Coating <i>331816743-0002</i>	Unit 860 Grape Level 1 Bedroom 2 South - Plaster Heavy Texture	White/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
695-Plaster <i>331816743-0002A</i>	Unit 860 Grape Level 1 Bedroom 2 South - Plaster Heavy Texture	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
695-Drywall <i>331816743-0002B</i>	Unit 860 Grape Level 1 Bedroom 2 South - Plaster Heavy Texture	White Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
696-Paint/Coating <i>331816743-0003</i>	Unit 860 Grape Level 1 Bedroom 1 East - Plaster Heavy Texture	White/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
696-Plaster <i>331816743-0003A</i>	Unit 860 Grape Level 1 Bedroom 1 East - Plaster Heavy Texture	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
696-Drywall <i>331816743-0003B</i>	Unit 860 Grape Level 1 Bedroom 1 East - Plaster Heavy Texture	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
697-Paint/Coating <i>331816743-0004</i> <i>Texture not found.</i>	Unit 860 Grape Level 1 Hallway NW - Plaster Heavy Texture	White/Pink Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
697-Plaster <i>331816743-0004A</i>	Unit 860 Grape Level 1 Hallway NW - Plaster Heavy Texture	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
697-Drywall <i>331816743-0004B</i>	Unit 860 Grape Level 1 Hallway NW - Plaster Heavy Texture	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
698-Paint/Coating <i>331816743-0005</i> <i>Texture not found.</i>	Unit 860 Grape Level 1 Bathroom South - Plaster Heavy Texture Ceiling	White/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
698-Plaster <i>331816743-0005A</i>	Unit 860 Grape Level 1 Bathroom South - Plaster Heavy Texture Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816743

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
698-Drywall 331816743-0005B	Unit 860 Grape Level 1 Bathroom South - Plaster Heavy Texture Ceiling	Brown/White Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
699 331816743-0006	Unit 860 Grape Level 1 Exterior NW - Stucco Skim Coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
700-Skim Coat 1 331816743-0007	Unit 860 Grape Level 1 Exterior SW - Stucco Skim Coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
700-Skim Coat 2 331816743-0007A	Unit 860 Grape Level 1 Exterior SW - Stucco Skim Coat	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
700-Stucco 331816743-0007B	Unit 860 Grape Level 1 Exterior SW - Stucco Skim Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
701-Skim Coat 331816743-0008	Unit 860 Grape Level 1 Exterior SE - Stucco Skim Coat	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
701-Stucco 331816743-0008A	Unit 860 Grape Level 1 Exterior SE - Stucco Skim Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
702-Shingle 331816743-0009	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Gray/White/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
702-Vapor Barrier 331816743-0009A	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
703-Shingle 331816743-0010	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Gray/White/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
703-Vapor Barrier 331816743-0010A	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
704-Shingle 331816743-0011	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Gray/White/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
704-Vapor Barrier 331816743-0011A	Unit 860 Grape Roof South - Roofing Shingles + Vapor Barrier	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
705 331816743-0012	Unit 860 Grape Level 1 Kitchen East - 4" Black Baseboard w/ Beige Mastic  <i>Baseboard not found.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
706 331816743-0013	Unit 860 Grape Level 1 SE - 4" Black Baseboard w/ Beige Mastic  <i>Baseboard not found.</i>	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331816743

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
707 331816743-0014	Unit 860 Grape Level 1 Bathroom SE - 4" Black Baseboard w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Baseboard not found.</i>					
708 331816743-0015	Unit 860 Grape Level 1 Exterior NW - Window Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
709 331816743-0016	Unit 860 Grape Level 1 Exterior SW - Window Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
710 331816743-0017	Unit 860 Grape Level 1 Exterior NE - Window Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
711A-Joint Compound 331816743-0018	Unit 860 Grape Level 1 Kitchen - Drywall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
711A-Drywall 331816743-0018A	Unit 860 Grape Level 1 Kitchen - Drywall	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
712A-Sheet Flooring 331816743-0019	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
712A-Mastic 331816743-0019A	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Mixed Squares/Triangle Pattern with White Mastic (Top Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
713A-Sheet Flooring 331816743-0020	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Tan Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
713A-Mastic 331816743-0020A	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Rectangle Pattern w/ Black Mastic (2nd Layer)	Brown/Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
714-Sheet Flooring 331816743-0021	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Brown Pattern Gold Specs w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Brown/Gray/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
714-Mastic 1 331816743-0021A	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Brown Pattern Gold Specs w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material.</i>					
714-Vapor Barrier 331816743-0021B	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Brown Pattern Gold Specs w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	Brown Fibrous Homogeneous	40% Cellulose 10% Synthetic	50% Non-fibrous (Other)	None Detected
714-Mastic 2 331816743-0021C	Unit 3479 Kentucky Level 1 Bathroom East - Sheet Flooring w/ Brown Pattern Gold Specs w/ Blk Mastic + Vapor Barrier Paper (Bottom Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
715-Sheet Flooring 331816743-0022	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Gray/White/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
715-Mastic 331816743-0022A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ 6" Squares w/ Beige Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
716-Sheet Flooring 331816743-0023	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	White Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
716-Mastic 331816743-0023A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
717-Sheet Flooring 331816743-0024	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer)	Brown/Gray/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile

Vapor barrier not present in sample.

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
717-Mastic 331816743-0024A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
718-Sheet Flooring 331816743-0025	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer) <i>Vapor barrier not present in sample.</i>	Brown/Gray/White Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
718-Mastic 331816743-0025A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
719-Sheet Flooring 331816743-0026	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer) <i>Vapor barrier not found.</i>	Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
719-Mastic 331816743-0026A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Brown Pattern w/ Gold Specs + Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
720-Mastic 331816743-0027	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
720-Sheet Flooring 331816743-0027A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Gray/White/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
721-Mastic 331816743-0028	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
721-Sheet Flooring 331816743-0028A	Unit 3400 Kentucky Level 1 Bathroom West - Sheet Flooring w/ Squares & Rectangle Pattern w/ White Mastic (2nd Layer)	Gray/White/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
722-Sheet Flooring 331816743-0029	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
722-Mastic 331816743-0029A	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ 6" Squares w/ White Mastic (Top Layer)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
723-Sheet Flooring 331816743-0030	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Tan Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
723-Mastic 331816743-0030A	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring Rectangle Pattern w/ Yellow Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
724-Floor Tile 331816743-0031	Unit 3415 Florida Level 1 Bathroom East - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
724-Mastic 331816743-0031A	Unit 3415 Florida Level 1 Bathroom East - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
725-Floor Tile 331816743-0032	Unit 3415 Florida Level 1 Bathroom East - 12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
725-Mastic 331816743-0032A	Unit 3415 Florida Level 1 Bathroom East - 12" Floor Tile w/ Gray Streaks + Yellow Mastic (4th Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
726-Floor Tile 331816743-0033	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Specs + Yellow Mastic (5th Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
726-Mastic 331816743-0033A	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Specs + Yellow Mastic (5th Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
726-Sheet Flooring 331816743-0033B	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Specs + Yellow Mastic (5th Layer)	Orange Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
727-Sheet Flooring 331816743-0034	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Beige Fibrous Heterogeneous	10% Cellulose	65% Non-fibrous (Other)	25% Chrysotile
727-Mastic 331816743-0034A	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
727-Vapor Barrier 331816743-0034B	Unit 3415 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Flower Pattern w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
728-Sheet Flooring 331816743-0035	Unit 3403 Florida Level 1 Bathroom East - Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Gray/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
728-Mastic 331816743-0035A	Unit 3403 Florida Level 1 Bathroom East - Sheet Flooring w/ 6" Squares w/ Yellow Mastic (Top Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
729-Floor Tile 331816743-0036	Unit 3403 Florida Level 1 Bathroom East - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
729-Mastic 331816743-0036A	Unit 3403 Florida Level 1 Bathroom East - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (2nd Layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
730-Sheet Flooring 331816743-0037	Unit 3403 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)	Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
730-Mastic 331816743-0037A	Unit 3403 Florida Level 1 Bathroom East - Sheet Flooring w/ Brown Flower Pattern w/ Yellow Mastic (Bottom Layer)	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
731 331816743-0038	Unit 3403 Florida Level 1 Kitchen North - Under Sink Mastic	White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
732 331816743-0039	Unit 3403 Florida Level 1 Kitchen North - Under Sink Mastic	White Fibrous Homogeneous	7% Cellulose	93% Non-fibrous (Other)	None Detected
733 331816743-0040	Unit 3403 Florida Level 1 Kitchen North - Under Sink Mastic	White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
734 331816743-0041	Unit 3330 Idaho Level 1 Kitchen South - Under Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
735 331816743-0042	Unit 3360 Idaho Level 1 Kitchen South - Under Sink Mastic	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
736-Floor Tile 331816743-0043	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
736-Mastic 331816743-0043A	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
737-Floor Tile 331816743-0044	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
737-Mastic 331816743-0044A	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
738-Floor Tile 331816743-0045	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
738-Mastic 331816743-0045A	Unit 3340 Idaho Level 1 Hallway Central - 12" Floor Tile w/ Gray & Brown Streaks w/ Yellow Mastic	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
739-Mastic 1 331816743-0046	Unit 3340 Idaho Level 1 Bathroom West - Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
739-Sheet Flooring 331816743-0046A	Unit 3340 Idaho Level 1 Bathroom West - Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)	Yellow Fibrous Heterogeneous	10% Cellulose	70% Non-fibrous (Other)	20% Chrysotile
739-Mastic 2 331816743-0046B	Unit 3340 Idaho Level 1 Bathroom West - Sheet Flowering Pebble Pattern w/ Black Mastic (Bottom Layer)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
740-Sheet Flooring 331816743-0047	Unit 3374 Idaho Level 1 Bathroom West - Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Gray/Tan/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
740-Mastic 331816743-0047A	Unit 3374 Idaho Level 1 Bathroom West - Sheet Flooring Mixed Square/Triangle Pattern w/ White Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
741-Mastic 331816743-0048	Unit 3374 Idaho Level 1 Bathroom West - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
741-Floor Tile 331816743-0048A	Unit 3374 Idaho Level 1 Bathroom West - 12" Floor Tile w/ White & Brown Streaks w/ Yellow Mastic (3rd Layer)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
742-Mastic 331816743-0049	Unit 3374 Idaho Level 1 Bathroom West - Sheet Floor w/ Brown Specs w/ Yellow Mastic (4th Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
742-Sheet Flooring 331816743-0049A	Unit 3374 Idaho Level 1 Bathroom West - Sheet Floor w/ Brown Specs w/ Yellow Mastic (4th Layer)	Gray/Tan/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
743-Sheet Flooring 331816743-0050	Unit 3374 Idaho Level 1 Bathroom West - Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)	Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile

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			% Fibrous	% Non-Fibrous	% Type
743-Mastic 331816743-0050A	Unit 3374 Idaho Level 1 Bathroom West - Sheet Flooring w/ Brown Flower Pattern w/ Black Mastic (Bottom Layer)	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
744-Sheet Flooring 331816743-0051	Unit 3380 Idaho Level 1 Bathroom West - Sheet Flooring Pebble Patern w/ Blk Mastic (3rd & Bottom Layer)	White/Yellow Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
744-Mastic 331816743-0051A	Unit 3380 Idaho Level 1 Bathroom West - Sheet Flooring Pebble Patern w/ Blk Mastic (3rd & Bottom Layer)	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
745 331816743-0052	Unit 3380 Idaho Level 1 Kitchen South - Under Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
746 331816743-0053	Unit 3380 Idaho Level 1 Kitchen South - Under Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
747 331816743-0054	Unit 3380 Idaho Level 1 Kitchen South - Under Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
748-Sheet Flooring 331816743-0055	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Gray/Tan Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
748-Mastic 331816743-0055A	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
749-Sheet Flooring 331816743-0056	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Gray/Tan Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
749-Mastic 331816743-0056A	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
749-Floor Tile 331816743-0056B	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
750-Sheet Flooring 331816743-0057	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Beige Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
750-Mastic 331816743-0057A	Unit 3318 Utah Level 1 Bathroom West - Sheet Flooring Beige & Brown Pebble Pattern w/ Yellow Mastic (2nd Layer)	Brown/Yellow Fibrous Heterogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached sheet flooring material</i>					
751-Floor Tile 331816743-0058	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
751-Vapor Barrier 331816743-0058A	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Fibrous Homogeneous	40% Cellulose 10% Synthetic	50% Non-fibrous (Other)	None Detected
752-Floor Tile 331816743-0059	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
752-Vapor Barrier 331816743-0059A	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Fibrous Homogeneous	40% Cellulose 10% Synthetic	50% Non-fibrous (Other)	None Detected
753-Sheet Flooring 331816743-0060	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
753-Floor Tile 331816743-0060A	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
753-Mastic 331816743-0060B	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Brown/Yellow Fibrous Heterogeneous	5% Cellulose <1% Synthetic	95% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached vapor barrier material</i>					

Initial report from: 08/21/2018 15:29:30





# LA Testing

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LA Testing Order: 331816743

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
753-Vapor Barrier 331816743-0060C	Unit 3318 Utah Level 1 Bathroom West - 9" Floor Tile w/ Brown Specs w/ Blk Mastic + Vapor Barrier (Bottom Layer)	Brown Fibrous Homogeneous	60% Cellulose 10% Synthetic	30% Non-fibrous (Other)	None Detected
754-Sheet Flooring 1 331816743-0061	Unit 3364 Utah Level 1 Bathroom West - Sheet Flooring w/ Brown Specs & Black Mastic (Bottom Layer)	Orange Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
754-Mastic 331816743-0061A	Unit 3364 Utah Level 1 Bathroom West - Sheet Flooring w/ Brown Specs & Black Mastic (Bottom Layer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
754-Sheet Flooring 2 331816743-0061B	Unit 3364 Utah Level 1 Bathroom West - Sheet Flooring w/ Brown Specs & Black Mastic (Bottom Layer)	Tan Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
755 331816743-0062	Unit 3372 Utah Level 1 Kitchen North - Under Sink Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
711B-Sheet Flooring 331816743-0063		White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
711B-Mastic 331816743-0063A		Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
712B-Sheet Flooring 331816743-0064		White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
712B-Mastic 331816743-0064A		Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
713B-Sheet Flooring 331816743-0065		White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
713B-Mastic 331816743-0065A		Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Dennies Ly (71)

Elizabeth Herrera (20)

Sophia Nguyen (29)

Sotheary Son (9)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/21/2018 15:29:30



# EMSL Analytical, Inc.

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EMSL Order: 511802585

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/04/2018

**Collected Date:**

**Project:** 7076.1017.0, Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
756-Tar <i>511802585-0001</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
756-Vapor Barrier <i>511802585-0001A</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	Black Non-Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
756-Shingle <i>511802585-0001B</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	Gray/Black Non-Fibrous Homogeneous	10% Cellulose	5% Quartz 85% Non-fibrous (Other)	None Detected
756-Insulation <i>511802585-0001C</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	Brown Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
756-Tar <i>511802585-0001D</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
756-Styrofoam <i>511802585-0001E</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, NE	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
757-Tar <i>511802585-0002</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
757-Vapor Barrier <i>511802585-0002A</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	Black Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
757-Shingle <i>511802585-0002B</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	Black Non-Fibrous Homogeneous	10% Cellulose	5% Quartz 85% Non-fibrous (Other)	None Detected
757-Insulation <i>511802585-0002C</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	Brown Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected

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**EMSL Order:** 511802585  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
757-Styrofoam <i>511802585-0002D</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
757-Tar <i>511802585-0002E</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, SE	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
758-Tar <i>511802585-0003</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
758-Vapor Barrier <i>511802585-0003A</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	Black Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
758-Shingle <i>511802585-0003B</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	Gray/Black Non-Fibrous Homogeneous	10% Cellulose	5% Quartz 85% Non-fibrous (Other)	None Detected
758-Insulation <i>511802585-0003C</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
758-Styrofoam <i>511802585-0003D</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
758-Tar <i>511802585-0003E</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3433 Avocado, Roof, South	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
759-Tar <i>511802585-0004</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
759-Vapor Barrier <i>511802585-0004A</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
759-Tar <i>511802585-0004B</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

Initial report from: 09/04/2018 16:06:07



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**EMSL Order:** 511802585  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
759-Insulation 511802585-0004C	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
759-Styrofoam 511802585-0004D	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
760-Tar 511802585-0005	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
760-Vapor Barrier 511802585-0005A	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
760-Insulation 511802585-0005B	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
760-Tar 511802585-0005C	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
760-Styrofoam 511802585-0005D	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
761-Tar 511802585-0006	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
761-Vapor Barrier 511802585-0006A	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
761-Insulation 511802585-0006B	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
761-Tar 511802585-0006C	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
761-Styrofoam 511802585-0006D	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 09/04/2018 16:06:07



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**EMSL Order:** 511802585  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
761-Tar <i>511802585-0006E</i>	Black Tar w/ Roof Sublet Vapor Barrier + Brown Insulation + Styrofoam - 3455 Avocado, Roof, North	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
762 <i>511802585-0007</i>	Blown-In Insulation - 3403 Florida, Attic, South <i>Result includes a small amount of inseparable attached material</i>	White Fibrous Homogeneous	5% Cellulose 85% Glass	10% Non-fibrous (Other)	None Detected
763 <i>511802585-0008</i>	Blown-In Insulation - 3403 Florida, Attic, South <i>Result includes a small amount of inseparable attached material</i>	White Fibrous Homogeneous	5% Cellulose 85% Glass	10% Non-fibrous (Other)	None Detected
764 <i>511802585-0009</i>	Blown-In Insulation - 3403 Florida, Attic, South <i>Result includes a small amount of inseparable attached material</i>	White Fibrous Homogeneous	5% Cellulose 85% Glass	10% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_  
 Ehrin Baul (37)

  
 Lauren Kerber, Laboratory Manager  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/04/2018 16:06:07



# LA Testing

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
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Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/25/2018 8:00 AM

**Analysis Date:** 07/27/2018

**Collected Date:** 07/24/2018

**Project:** 7076.1017.0/ Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1000-Plaster 331815085-0001	Unit 851- Level 1st- N Center living room - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1000-Button Board 331815085-0001A	Unit 851- Level 1st- N Center living room - Plaster w/ button board	White Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1001-Plaster 331815085-0002	Unit 851- Level 1st- NE corner of bedroom 2 - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1001-Button Board 331815085-0002A	Unit 851- Level 1st- NE corner of bedroom 2 - Plaster w/ button board	White Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1002-Plaster 331815085-0003	Unit 851- Level 1st- W ceiling of bedroom 1 - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1002-Button Board 331815085-0003A	Unit 851- Level 1st- W ceiling of bedroom 1 - Plaster w/ button board	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1003-Plaster 331815085-0004	Unit 849- Level 1st- S center - living room - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1003-Button Board 331815085-0004A	Unit 849- Level 1st- S center - living room - Plaster w/ button board	White Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1004-Plaster 331815085-0005	Unit 849- Level 1st- W center - bath room - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1004-Buttonboard 331815085-0005A	Unit 849- Level 1st- W center - bath room - Plaster w/ button board	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
1005-Plaster 331815085-0006	Unit 849- Level 1st- S center - bedroom 2 - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1005-Buttonboard 331815085-0006A	Unit 849- Level 1st- S center - bedroom 2 - Plaster w/ button board	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 14:33:44



# LA Testing

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1006-Plaster 331815085-0007	Unit 851- Level 1st- NE corner of bathroom - Plaster w/ button board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1006-Buttonboard 331815085-0007A	Unit 851- Level 1st- NE corner of bathroom - Plaster w/ button board	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
1007-Joint Compound 331815085-0008	Unit 851- Level 1st- SE corner of kitchen - Smooth drywall w/ joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1007-Drywall 331815085-0008A	Unit 851- Level 1st- SE corner of kitchen - Smooth drywall w/ joint compound	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1008-Joint Compound 331815085-0009	Unit 849- Level 1st- SW corner of kitchen - Smooth drywall w/ joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1008-Drywall 331815085-0009A	Unit 849- Level 1st- SW corner of kitchen - Smooth drywall w/ joint compound	Brown/White Fibrous Heterogeneous	8% Cellulose	70% Gypsum 22% Non-fibrous (Other)	None Detected
1009-Vinyl Floor Tile 331815085-0010	Unit 851- Level 1st- Top layer- Living room - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1009-Mastic 331815085-0010A	Unit 851- Level 1st- Top layer- Living room - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1010-Vinyl Floor Tile 331815085-0011	Unit 851- Level 1st- bottom - Living room - 12" brown tile, black vapor paper,. Black Mastic	Beige Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1010-Mastic 1 331815085-0011A	Unit 851- Level 1st- bottom - Living room - 12" brown tile, black vapor paper,. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1010-Mastic 2 331815085-0011B	Unit 851- Level 1st- bottom - Living room - 12" brown tile, black vapor paper,. Black Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1010-Vapor Paper 331815085-0011C	Unit 851- Level 1st- bottom - Living room - 12" brown tile, black vapor paper,. Black Mastic	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
1011-Vinyl Floor Tile 331815085-0012	Unit 851- Level 1st- Bedroom #2 top - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 07/27/2018 14:33:44



# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@lateesting.com](mailto:gardengrovelab@lateesting.com)

LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1011-Mastic 331815085-0012A	Unit 851- Level 1st-Bedroom #2 top - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1012-Vinyl Floor Tile 331815085-0013	Unit 851- Level 1st-Bedroom #2 bottom - 12" brown tile, black vapor paper,. Black Mastic	Beige Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1012-Mastic 1 331815085-0013A	Unit 851- Level 1st-Bedroom #2 bottom - 12" brown tile, black vapor paper,. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1012-Mastic 2 331815085-0013B	Unit 851- Level 1st-Bedroom #2 bottom - 12" brown tile, black vapor paper,. Black Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1012-Vapor Paper 331815085-0013C	Unit 851- Level 1st-Bedroom #2 bottom - 12" brown tile, black vapor paper,. Black Mastic	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
1013-Vinyl Floor Tile 331815085-0014	Unit 851- Level 1st-Bedroom #1 top - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1013-Mastic 331815085-0014A	Unit 851- Level 1st-Bedroom #1 top - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1014-Vinyl Floor Tile 331815085-0015	Unit 851- Level 1st-Bedroom #1 bottom - 12" brown tile, black vapor paper,. Black Mastic	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1014-Mastic 331815085-0015A	Unit 851- Level 1st-Bedroom #1 bottom - 12" brown tile, black vapor paper,. Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1014-Vapor Paper 331815085-0015C	Unit 851- Level 1st-Bedroom #1 bottom - 12" brown tile, black vapor paper,. Black Mastic	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1015-Vinyl Floor Tile 331815085-0016	Unit 849- Level 1st-Top layer- Living room - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1015-Mastic 331815085-0016A	Unit 849- Level 1st-Top layer- Living room - 12 " Beige w/ specs tile. Beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1016-Vinyl Floor Tile 331815085-0017	Unit 849- Level 1st- Bottom layer- Living room - 12" brown tile, black vapor paper,, Black Mastic	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1016-Mastic 331815085-0017A	Unit 849- Level 1st- Bottom layer- Living room - 12" brown tile, black vapor paper,, Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Vapor paper not present in sample</i>					
1017-Vinyl Floor Tile 331815085-0018	Unit 849- Level 1st- Top layer- Hall - 12 " Beige w/ specs tile. Beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1017-Mastic 331815085-0018A	Unit 849- Level 1st- Top layer- Hall - 12 " Beige w/ specs tile. Beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
1018-Vinyl Floor Tile 331815085-0019	Unit 849- Level 1st- Bottom layer- Hall - 12" brown tile, black vapor paper,, Black Mastic	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1018-Mastic 331815085-0019A	Unit 849- Level 1st- Bottom layer- Hall - 12" brown tile, black vapor paper,, Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1018-Vapor Barrier 331815085-0019B	Unit 849- Level 1st- Bottom layer- Hall - 12" brown tile, black vapor paper,, Black Mastic	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1019-Vinyl Sheet Flooring 331815085-0020	Unit 851- Level 1st- Bathroom - White sheet flooring squares, w/ mastic	White Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1019-Mastic 331815085-0020A	Unit 851- Level 1st- Bathroom - White sheet flooring squares, w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1020-Vinyl Sheet Flooring 331815085-0021	Unit 849- Level 1st- Bathroom - White sheet flooring squares, w/ mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1020-Mastic 331815085-0021A	Unit 849- Level 1st- Bathroom - White sheet flooring squares, w/ mastic	Tan/Yellow Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1021-Vinyl Sheet Flooring 331815085-0022	Unit 849- Level 1st- Kitchen (1) - White sheet flooring squares, w/ mastic	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
1021-Mastic 331815085-0022A	Unit 849- Level 1st- Kitchen (1) - White sheet flooring squares, w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1022-Mastic 1 331815085-0023	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1022-Vinyl Sheet Flooring 331815085-0023A	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
1022-Mastic 2 331815085-0023B	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1023-Vinyl Floor Tile 331815085-0024	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1023-Mastic 331815085-0024C	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1024-Mastic 1 331815085-0025	Unit 849- Level 1st-Kitchen (4) - Marble sheet flooring, w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1024-Vinyl Sheet Flooring 331815085-0025A	Unit 849- Level 1st-Kitchen (4) - Marble sheet flooring, w/ mastic	Beige Fibrous Homogeneous	25% Cellulose 8% Glass	67% Non-fibrous (Other)	None Detected
1024-Mastic 2 331815085-0025B	Unit 849- Level 1st-Kitchen (4) - Marble sheet flooring, w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1025-Mastic 1 331815085-0026	Unit 849- Level 1st-Kitchen (5) - Off white sheet flooring w/ vapor paper	Yellow Fibrous Heterogeneous	6% Synthetic	94% Non-fibrous (Other)	None Detected
1025-Vinyl Sheet Flooring 331815085-0026A	Unit 849- Level 1st-Kitchen (5) - Off white sheet flooring w/ vapor paper	White Fibrous Homogeneous		65% Non-fibrous (Other)	35% Chrysotile
1025-Mastic 2 331815085-0026B	Unit 849- Level 1st-Kitchen (5) - Off white sheet flooring w/ vapor paper	White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1026-Mastic 1 331815085-0027	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1026-Vinyl Sheet Flooring 331815085-0027A	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
1026-Mastic 2 331815085-0027B	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1027-Vinyl Floor Tile 331815085-0028	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1027-Mastic 1 331815085-0028A	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1027-Mastic 2 331815085-0028B	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1028-Mastic 1 331815085-0029	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1028-Vinyl Sheet Flooring 331815085-0029A	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	Tan Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1028-Mastic 2 331815085-0029B	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1029-Mastic 1 331815085-0030	Unit 849- Level 1st-Kitchen (5) - Sheet flooring w/ vapor paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1029-Vinyl Sheet Flooring 331815085-0030A	Unit 849- Level 1st-Kitchen (5) - Sheet flooring w/ vapor paper	White Fibrous Homogeneous		65% Non-fibrous (Other)	35% Chrysotile
1029-Mastic 2 331815085-0030B	Unit 849- Level 1st-Kitchen (5) - Sheet flooring w/ vapor paper	Yellow Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1030-Vinyl Sheet Flooring 331815085-0031	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	Gray/Beige Fibrous Heterogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
1030-Mastic 331815085-0031A	Unit 849- Level 1st-Kitchen (2) - Sheet flooring plain w/ mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1031-Vinyl Floor Tile 331815085-0032	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1031-Mastic 1 331815085-0032A	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1031-Mastic 2 331815085-0032B	Unit 849- Level 1st-Kitchen (3) - 12" beige tile, beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1032-Vinyl Sheet Flooring 331815085-0033	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	Gray/Tan/White Fibrous Heterogeneous	20% Cellulose 5% Synthetic	75% Non-fibrous (Other)	None Detected
1032-Mastic 1 331815085-0033A	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1032-Mastic 2 331815085-0033B	Unit 849- Level 1st-Kitchen (4) - Marbel sheet flooring w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1033-Vinyl Sheet Flooring 331815085-0034	Unit 849- Level 1st-Kitchen (5) - Sheet flooring w/ vapor paper	Gray/Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1033-Vapor Paper 331815085-0034A	Unit 849- Level 1st-Kitchen (5) - Sheet flooring w/ vapor paper	Gray Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1034-Vinyl Sheet Flooring 331815085-0035	Unit 851- Level 1st-Kitchen (1) - Sheet flooring plain w/ mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1034-Mastic 331815085-0035A	Unit 851- Level 1st-Kitchen (1) - Sheet flooring plain w/ mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1035-Vinyl Floor Tile 331815085-0036	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1035-Mastic 1 331815085-0036A	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1035-Mastic 2 331815085-0036B	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1036-Mastic 1 331815085-0037	Unit 851- Level 1st-Kitchen (3) - Marbel sheet flooring w/ mastic	White/Clear Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1036-Vinyl Sheet Flooring 331815085-0037A	Unit 851- Level 1st-Kitchen (3) - Marbel sheet flooring w/ mastic	Beige Fibrous Homogeneous	10% Cellulose	50% Non-fibrous (Other)	40% Chrysotile
1036-Mastic 2 331815085-0037B	Unit 851- Level 1st-Kitchen (3) - Marbel sheet flooring w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1037-Vinyl Sheet Flooring 331815085-0038	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Tan/Various/Black Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1037-Mastic 331815085-0038A	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1037-Vapor Paper 331815085-0038B	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1037-Backing 331815085-0038C	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Gray Fibrous Homogeneous		65% Non-fibrous (Other)	35% Chrysotile
1038-Vinyl Sheet Flooring 331815085-0039	Unit 851- Level 1st-Kitchen (1) - Sheet flooring brown w/ mastic	Beige Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected
1038-Mastic 331815085-0039A	Unit 851- Level 1st-Kitchen (1) - Sheet flooring brown w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1039-Mastic 1 331815085-0040	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1039-Vinyl Floor Tile 331815085-0040A	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1039-Mastic 2 331815085-0040B	Unit 851- Level 1st-Kitchen (2) - 12" beige tile, beige mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1040-Mastic 331815085-0041	Unit 851- Level 1st-Kitchen (3) - Marbel sheet flooring w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1040-Vinyl Sheet Flooring 331815085-0041A	Unit 851- Level 1st-Kitchen (3) - Marbel sheet flooring w/ mastic	Beige Fibrous Homogeneous	10% Cellulose	50% Non-fibrous (Other)	40% Chrysotile
1041-Sheet Flooring 331815085-0042	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Tan/Various/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1041-Mastic 331815085-0042A	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1041-Vapor Paper 331815085-0042B	Unit 851- Level 1st-Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Fibrous Homogeneous	70% Cellulose 15% Synthetic	15% Non-fibrous (Other)	None Detected
1042-Vinyl Sheet Flooring 331815085-0043	Unit 851- Level 1st-Kitchen (1) - Sheet flooring brown, w/ mastic	Beige Fibrous Homogeneous	25% Cellulose 5% Glass	70% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1042-Mastic 331815085-0043A	Unit 851- Level 1st- Kitchen (1) - Sheet flooring brown, w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1043-Mastic 1 331815085-0044	Unit 851- Level 1st- Kitchen (2) - 12" beige tile, beige mastic	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1043-Vinyl Floor Tile 331815085-0044A	Unit 851- Level 1st- Kitchen (2) - 12" beige tile, beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1043-Mastic 2 331815085-0044B	Unit 851- Level 1st- Kitchen (2) - 12" beige tile, beige mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1044-Mastic 331815085-0045	Unit 851- Level 1st- Kitchen (3) - Marble sheet flooring w/ mastic	Yellow/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1044-Vinyl Sheet Flooring 331815085-0045A	Unit 851- Level 1st- Kitchen (3) - Marble sheet flooring w/ mastic	Beige Fibrous Homogeneous	10% Cellulose	50% Non-fibrous (Other)	40% Chrysotile
1045-Sheet Flooring 331815085-0046	Unit 851- Level 1st- Kitchen (4) - Red/blue tile, vapor paper, black mastic	Tan/Various/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1045-Mastic 331815085-0046A	Unit 851- Level 1st- Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1045-Vapor Paper 331815085-0046B	Unit 851- Level 1st- Kitchen (4) - Red/blue tile, vapor paper, black mastic	Brown Fibrous Homogeneous	70% Cellulose 15% Synthetic	15% Non-fibrous (Other)	None Detected
1046 331815085-0047	Unit 851- Level 1st- Exterior SW - Exterior stucco	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1047 331815085-0048	Unit 849- Level 1st- NE - Exterior stucco	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1048 331815085-0049	Unit 849- Level 1st- N center - Exterior stucco	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1049 331815085-0050	Unit 849- Level 1st- S center - Exterior stucco <i>Inseparable paint / coating layer included in analysis</i>	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1050 331815085-0051	Unit 851- Level 1st- NW - Exterior stucco <i>Inseparable paint / coating layer included in analysis</i>	Gray/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1051 331815085-0052	Unit 849- Level 1st- SE - Roof shingles	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815085

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1052 331815085-0053	Unit 849- Level 1st- SE - Roof shingles	Gray/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
1053 331815085-0054	Unit 849- Level 1st- SE - Roof shingles	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Analyst(s)

David Garcia (31)

Dennies Ly (34)

Mindy Le (42)

Sophia Nguyen (16)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

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# LA Testing

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Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / [gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 331815325

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

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**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 07/31/2018 - 08/04/2018

**Collected Date:** 07/25/2018

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1054-Skim Coat <small>331815325-0001</small>	Unit 850 1st Level Living Room - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1054-Plaster <small>331815325-0001A</small>	Unit 850 1st Level Living Room - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1054-Button Board <small>331815325-0001B</small>	Unit 850 1st Level Living Room - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1055-Skim Coat <small>331815325-0002</small>	Unit 850 1st Level Kitchen - White Plaster w/ Button	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1055-Plaster <small>331815325-0002A</small>	Unit 850 1st Level Kitchen - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1055-Button Board <small>331815325-0002B</small>	Unit 850 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1056-Skim Coat <small>331815325-0003</small>	Unit 850 1st Level Bedroom 2 - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1056-Plaster <small>331815325-0003A</small>	Unit 850 1st Level Bedroom 2 - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1056-Button Board <small>331815325-0003B</small>	Unit 850 1st Level Bedroom 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1057-Skim Coat <small>331815325-0004</small>	Unit 850 1st Level Bedroom 1 - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1057-Plaster <small>331815325-0004A</small>	Unit 850 1st Level Bedroom 1 - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1057-Button Board <small>331815325-0004B</small>	Unit 850 1st Level Bedroom 1 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1058-Plaster <small>331815325-0005</small>	Unit 848 1st Level Kitchen - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1058-Button Board <small>331815325-0005A</small>	Unit 848 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1059-Plaster <small>331815325-0006</small>	Unit 848 1st Level Living Room - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1059-Button Board <small>331815325-0006A</small>	Unit 848 1st Level Living Room - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1060-Plaster 331815325-0007	Unit 848 1st Level Bedroom 2 - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1060-Button Board 331815325-0007A	Unit 848 1st Level Bedroom 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1061-Joint Compound 331815325-0008	Unit 850 1st Level Kitchen - White Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1061-Drywall 331815325-0008A	Unit 850 1st Level Kitchen - White Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1062-Drywall 331815325-0009 <i>Joint compound not found in sample</i>	Unit 848 1st Level Kitchen - White Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	7% Cellulose	93% Non-fibrous (Other)	None Detected
1063-Floor Tile 331815325-0010	Unit 850 1st Level Living Room - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1063-Mastic 331815325-0010A	Unit 850 1st Level Living Room - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1064-Floor Tile 331815325-0011	Unit 850 1st Level Bedroom 2 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1064-Mastic 331815325-0011A	Unit 850 1st Level Bedroom 2 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1065-Floor Tile 331815325-0012	Unit 850 1st Level Bedroom 1 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1065-Mastic 331815325-0012A	Unit 850 1st Level Bedroom 1 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1066-Floor Tile 331815325-0013	Unit 848 1st Level Living Room - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1066-Mastic 331815325-0013A	Unit 848 1st Level Living Room - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1067-Floor Tile 331815325-0014	Unit 848 1st Level Bedroom 2 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1067-Mastic 331815325-0014A	Unit 848 1st Level Bedroom 2 - Beige Top Layer: 12" Beige Floor Tile w/ Specs & Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1068-Floor Tile 331815325-0015	Unit 850 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1068-Mastic 1 331815325-0015A	Unit 850 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1068-Vapor Barrier 331815325-0015B	Unit 850 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1068-Mastic 2 331815325-0015C	Unit 850 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1069-Floor Tile 331815325-0016	Unit 850 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1069-Mastic 1 331815325-0016A	Unit 850 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1069-Vapor Barrier 331815325-0016B	Unit 850 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1069-Mastic 2 331815325-0016C	Unit 850 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1070-Floor Tile 331815325-0017	Unit 850 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1070-Mastic 1 331815325-0017A	Unit 850 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1070-Vapor Barrier 331815325-0017B	Unit 850 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1070-Mastic 2 331815325-0017C	Unit 850 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1071-Floor Tile 331815325-0018	Unit 848 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1071-Mastic 1 331815325-0018A	Unit 848 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1071-Vapor Barrier 331815325-0018B	Unit 848 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1071-Mastic 2 331815325-0018C	Unit 848 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1072-Floor Tile 331815325-0019	Unit 848 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1072-Mastic 1 331815325-0019A	Unit 848 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1072-Vapor Barrier 331815325-0019B	Unit 848 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1072-Mastic 2 331815325-0019C	Unit 848 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1073-Mastic 331815325-0020	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1073-Sheet Flooring 331815325-0020A	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile

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LA Testing Order: 331815325

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1074-Mastic 331815325-0021	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1074-Sheet Flooring 331815325-0021A	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1075-Mastic 331815325-0022	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1075-Sheet Flooring 331815325-0022A	Unit 850 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous	3% Cellulose	77% Non-fibrous (Other)	20% Chrysotile
1076-Floor Tile 331815325-0023	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Black mastic not found in sample.</i>					
1076-Mastic 1 331815325-0023A	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Yellow Fibrous Heterogeneous		95% Non-fibrous (Other)	5% Chrysotile
<i>Result includes a small amount of inseparable attached material.</i>					
1076-Vapor 331815325-0023B	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous	50% Cellulose 20% Synthetic	30% Non-fibrous (Other)	None Detected
1076-Mastic 2 331815325-0023C	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1077-Mastic 1 331815325-0024	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Heterogeneous		95% Non-fibrous (Other)	5% Chrysotile
<i>Result includes a small amount of inseparable attached material.</i>					
1077-Floor Tile 331815325-0024A	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1077-Vapor 331815325-0024B	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous	50% Cellulose 20% Synthetic	30% Non-fibrous (Other)	None Detected
1077-Mastic 2 331815325-0024C	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1078-Floor Tile 331815325-0025	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Beige Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
1078-Mastic 1 331815325-0025A	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	White/Yellow Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
1078-Vapor 331815325-0025B	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous	40% Cellulose 15% Synthetic	45% Non-fibrous (Other)	None Detected
1078-Mastic 2 331815325-0025C	Unit 850 1st Level Kitchen - Beige Bottom Layer: 12" Beige Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1079-Sheet Flooring 331815325-0026	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1079-Mastic 331815325-0026A	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1080-Sheet Flooring 331815325-0027	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1080-Mastic 331815325-0027A	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1081-Sheet Flooring 331815325-0028	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Gray/Beige Fibrous Heterogeneous	25% Cellulose 2% Glass	73% Non-fibrous (Other)	None Detected
1081-Mastic 331815325-0028A	Unit 850 1st Level Bathroom - Beige Square Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1082-Sheet Flooring 331815325-0029	Unit 848 1st Level Bathroom - White Triangle Sheet Floor & Mastic	White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1082-Mastic 331815325-0029A	Unit 848 1st Level Bathroom - White Triangle Sheet Floor & Mastic	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1083-Sheet Flooring 331815325-0030	Unit 848 1st Level Bathroom - White Triangle Sheet Floor & Mastic	White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected

Mastic not found in sample.

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LA Testing Order: 331815325

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1084-Sheet Flooring 331815325-0031	Unit 848 1st Level Bathroom - White Triangle Sheet Floor & Mastic	Gray/White Fibrous Heterogeneous	25% Cellulose 2% Glass	73% Non-fibrous (Other)	None Detected
1084-Mastic 331815325-0031A	Unit 848 1st Level Bathroom - White Triangle Sheet Floor & Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1085-Mastic 331815325-0032	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1085-Sheet Flooring 331815325-0032A	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Gray/Yellow Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
<i>Inseparable attached white mastic included in analysis</i>					
1086-Mastic 331815325-0033	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1086-Sheet Flooring 331815325-0033A	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Gray/Yellow Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
<i>Inseparable attached white mastic included in analysis</i>					
1087-Mastic 331815325-0034	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1087-Sheet Flooring 331815325-0034A	Unit 848 1st Level Middle Layer Kitchen - Yellow Middle Layer Flower Sheet Floor w/ Mastic	Gray/Yellow Fibrous Heterogeneous		70% Non-fibrous (Other)	30% Chrysotile
<i>Inseparable attached white mastic included in analysis</i>					
1088-Sheet Flooring 331815325-0035	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Gray/Tan/Various Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
<i>Inseparable attached mastic included in analysis</i>					
1088-Vapor Paper 331815325-0035C	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1088-Mastic 331815325-0035D	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1089-Sheet Flooring 331815325-0036	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Gray/Tan/Various Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
<i>Inseparable attached mastic included in analysis</i>					
1089-Vapor Paper 331815325-0036C	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1089-Mastic 331815325-0036D	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1090-Sheet Flooring 331815325-0037	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Gray/Tan/Various Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
<i>Inseparable attached mastic included in analysis</i>					
1090-Vapor Paper 331815325-0037A	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown/Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1090-Mastic 331815325-0037B	Unit 848 1st Level Bottom Layer Kitchen - Tan Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1091 331815325-0038	Exterior N.W. - White Exterior Stucco	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1092 331815325-0039	Exterior N. Center - White Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1093 331815325-0040	Exterior N.E. - White Exterior Stucco	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1094 331815325-0041	Exterior S. Center - White Exterior Stucco	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1095 331815325-0042	Exterior S.W. - White Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1096-Shingle 1 331815325-0043	Roof N.E. - Red Roof Shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1096-Shingle 2 331815325-0043A	Roof N.E. - Red Roof Shingles	Black/Beige Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815325

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1097-Shingle 1 <small>331815325-0044</small>	Roof N. Center - Red Roof Shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1097-Shingle 2 <small>331815325-0044A</small>	Roof N. Center - Red Roof Shingles	Black/Beige Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1098-Shingle 1 <small>331815325-0045</small>	Roof N.W. - Red Roof Shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1098-Shingle 2 <small>331815325-0045A</small>	Roof N.W. - Red Roof Shingles	Black/Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Analyst(s)

- Carolynn Tom (30)
- David Garcia (13)
- Mindy Le (13)
- Monica Luna (13)
- Sophia Nguyen (37)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 07/31/2018

**Collected Date:** 07/25/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1099-Plaster <i>331815350-0001</i>	Unit 821 Level 1st - Living Room - Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1099-Button Board <i>331815350-0001A</i>	Unit 821 Level 1st - Living Room - Plaster w/Button	Brown/White Fibrous Heterogeneous	7% Cellulose	93% Non-fibrous (Other)	None Detected
1100-Plaster <i>331815350-0002</i>	Unit 821 Level 1st - Bedroom 1 - Plaster w/Button	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1100-Button Board <i>331815350-0002A</i>	Unit 821 Level 1st - Bedroom 1 - Plaster w/Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1101-Plaster <i>331815350-0003</i>	Unit 821 Level 1st - Bedroom 2 - Plaster w/Button	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1101-Button Board <i>331815350-0003A</i>	Unit 821 Level 1st - Bedroom 2 - Plaster w/Button	Brown/White Fibrous Heterogeneous	7% Cellulose	93% Non-fibrous (Other)	None Detected
1102-Plaster <i>331815350-0004</i>	Unit 821 Level 1st - Kitchen - Plaster w/Button	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1102-Button Board <i>331815350-0004A</i>	Unit 821 Level 1st - Kitchen - Plaster w/Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1103-Plaster <i>331815350-0005</i>	Unit 823 Level 1st - Living Room - Plaster w/Button	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1103-Button Board <i>331815350-0005A</i>	Unit 823 Level 1st - Living Room - Plaster w/Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1104-Plaster <i>331815350-0006</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 823 Level 1st - Hall - Plaster w/Button	Gray/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1104-Buttonboard <i>331815350-0006A</i>	Unit 823 Level 1st - Hall - Plaster w/Button	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1105-Plaster <i>331815350-0007</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 823 Level 1st - Bedroom 1 - Plaster w/Button	Gray/Green/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1105-Buttonboard <i>331815350-0007A</i>	Unit 823 Level 1st - Bedroom 1 - Plaster w/Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1106-Joint Compound <i>331815350-0008</i>	Unit 821 Level 1st - Kitchen - Drywall w/ J.C	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1106-Drywall 331815350-0008A	Unit 821 Level 1st - Kitchen - Drywall w/ J.C	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1107-Joint Compound 331815350-0009	Unit 823 Level 1st - Kitchen - Drywall w/ J.C	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1107-Drywall 331815350-0009A	Unit 823 Level 1st - Kitchen - Drywall w/ J.C	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1108-Floor Tile 331815350-0010	Unit 821 Level 1st - Living Room - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1108-Mastic 331815350-0010A	Unit 821 Level 1st - Living Room - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1109-Floor Tile 331815350-0011	Unit 821 Level 1st - Hall - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1109-Mastic 331815350-0011A	Unit 821 Level 1st - Hall - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1110-Floor Tile 331815350-0012	Unit 821 Level 1st - Bedroom 2 - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1110-Mastic 331815350-0012A	Unit 821 Level 1st - Bedroom 2 - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1111-Floor Tile 331815350-0013	Unit 823 Level 1st - Living Room - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1111-Mastic 331815350-0013A	Unit 823 Level 1st - Living Room - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1112-Floor Tile 331815350-0014	Unit 823 Level 1st - Bedroom 1 - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1112-Mastic 331815350-0014A	Unit 823 Level 1st - Bedroom 1 - Top Layer: 12" Beige w. Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1113-Floor Tile 331815350-0015	Unit 821 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1113-Mastic 1 331815350-0015A	Unit 821 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1113-Vapor 331815350-0015B	Unit 821 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1113-Mastic 2 331815350-0015C	Unit 821 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1114-Floor Tile 331815350-0016	Unit 821 Level 1st - Hall - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1114-Mastic 331815350-0016A	Unit 821 Level 1st - Hall - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1114-Vapor 331815350-0016B	Unit 821 Level 1st - Hall - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<i>Insufficient brown mastic for analysis</i>					
1115-Floor Tile 331815350-0017	Unit 821 Level 1st - Bedroom 2 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1115-Mastic 1 331815350-0017A	Unit 821 Level 1st - Bedroom 2 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1115-Vapor 331815350-0017B	Unit 821 Level 1st - Bedroom 2 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1115-Mastic 2 331815350-0017C	Unit 821 Level 1st - Bedroom 2 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1116-Floor Tile 331815350-0018	Unit 823 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1116-Mastic 1 331815350-0018A	Unit 823 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1116-Vapor 331815350-0018B	Unit 823 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1116-Mastic 2 331815350-0018C	Unit 823 Level 1st - Living Room - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1117-Floor Tile 331815350-0019	Unit 823 Level 1st - Bedrm. 1 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1117-Mastic 1 331815350-0019A	Unit 823 Level 1st - Bedrm. 1 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1117-Vapor 331815350-0019B	Unit 823 Level 1st - Bedrm. 1 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1117-Mastic 2 331815350-0019C	Unit 823 Level 1st - Bedrm. 1 - Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1118-Sheet Flooring 331815350-0020	Unit 821 Level 1st - Kitchen - Top Layer: "6 Square Floor Sheet w/ Mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1118-Mastic 331815350-0020A	Unit 821 Level 1st - Kitchen - Top Layer: "6 Square Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1119-Sheet Flooring 331815350-0021	Unit 821 Level 1st - Kitchen - Top Layer: "6 Square Floor Sheet w/ Mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1119-Mastic 331815350-0021A	Unit 821 Level 1st - Kitchen - Top Layer: "6 Square Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1120-Sheet Flooring 331815350-0022	Unit 821 Level 1st - Bathroom - Single Layer: "6 Square Floor Sheet w/ Mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1120-Mastic 331815350-0022A	Unit 821 Level 1st - Bathroom - Single Layer: "6 Square Floor Sheet w/ Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1121-Sheet Flooring 331815350-0023	Unit 821 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Gray/Yellow/Beige Fibrous Heterogeneous	3% Cellulose	77% Non-fibrous (Other)	20% Chrysotile
1121-Mastic 331815350-0023A	Unit 821 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1122-Sheet Flooring 331815350-0024	Unit 821 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Gray/Yellow/Beige Fibrous Heterogeneous	3% Cellulose	77% Non-fibrous (Other)	20% Chrysotile
1122-Mastic 331815350-0024A	Unit 821 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1123-Sheet Flooring 331815350-0025	Unit 823 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Fibrous Heterogeneous	3% Cellulose	77% Non-fibrous (Other)	20% Chrysotile
1123-Mastic 331815350-0025A	Unit 823 Level 1st - Kitchen - Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1124-Sheet Flooring 331815350-0026	Unit 821 Level 1st - Kitchen - Bottom Middle Layer: Flower Sheet Floor w/ Mastic	Brown/Gray/Beige Fibrous Heterogeneous	2% Cellulose	68% Non-fibrous (Other)	30% Chrysotile
1124-Mastic 331815350-0026A	Unit 821 Level 1st - Kitchen - Bottom Middle Layer: Flower Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1124-Backing Paper 331815350-0026B	Unit 821 Level 1st - Kitchen - Bottom Middle Layer: Flower Sheet Floor w/ Mastic	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1125-Sheet Flooring 331815350-0027	Unit 823 Level 1st - Kitchen - Bottom Middle Layer: Flower Sheet Floor w/ Mastic	Brown/Gray/Beige Fibrous Heterogeneous	2% Cellulose	68% Non-fibrous (Other)	30% Chrysotile
<i>Mastic not found in sample. Separate backing paper not found in sample.</i>					
1126-Sheet Flooring 331815350-0028	Unit 823 Level 1st - Kitchen - Bottom Middle Layer: Flower Sheet Floor w/ Mastic	Beige Fibrous Heterogeneous	2% Cellulose	73% Non-fibrous (Other)	25% Chrysotile
<i>insufficient amount of mastic material for analysis</i>					
1127-Mastic 1 331815350-0029	Unit 821 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1127-Floor Tile 331815350-0029A	Unit 821 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Tan Non-Fibrous Homogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815350

Customer ID: 32CITA50D

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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1127-Mastic 2 331815350-0029B	Unit 821 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1127-Vapor 331815350-0029C	Unit 821 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1127-Mastic 3 331815350-0029D	Unit 821 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1128-Sheet Flooring Backing 331815350-0030	Unit 823 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Gray Fibrous Homogeneous		30% Non-fibrous (Other)	70% Chrysotile
1128-Vapor 331815350-0030A	Unit 823 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<i>Tile and black mastic not found in sample.</i>					
1129-Sheet Flooring 331815350-0031	Unit 823 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Yellow Fibrous Heterogeneous	25% Cellulose 10% Synthetic	65% Non-fibrous (Other)	None Detected
1129-Mastic 331815350-0031A	Unit 823 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1129-Vapor Paper 331815350-0031B	Unit 823 Level 1st - Kitchen - Bottom Layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose 3% Synthetic	37% Non-fibrous (Other)	None Detected
1130-Vinyl Sheet Flooring 331815350-0032	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Gray/Tan/Yellow Fibrous Heterogeneous	10% Cellulose 4% Glass	86% Non-fibrous (Other)	None Detected
1130-Mastic 331815350-0032A	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1130-Vapor Paper 331815350-0032B	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Brown/Black Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1131-Vinyl Sheet Flooring 331815350-0033	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Gray/Tan/Yellow Fibrous Heterogeneous	10% Cellulose 4% Glass	86% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815350

Customer ID: 32CITA50D

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1131-Mastic 331815350-0033A	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1131-Vapor Paper 331815350-0033B	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Brown Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1132-Vinyl Sheet Flooring 1 331815350-0034	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Gray/Tan/Yellow Fibrous Heterogeneous	10% Cellulose 4% Glass	86% Non-fibrous (Other)	None Detected
1132-Mastic 331815350-0034A	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1132-Vinyl Sheet Flooring 2 331815350-0034B	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Gray/Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1132-Vapor Paper 331815350-0034C	Unit 823 Level 1st - Bathroom - Bottom Layer: Beige Sheet Floor w/ Vapor Paper	Brown Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1133 331815350-0035	Unit Exterior Level 1st - S.E. - Exterior Stucco	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1134 331815350-0036	Unit Exterior Level 1st - S. Center - Exterior Stucco	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1135 331815350-0037	Unit Exterior Level 1st - S.W. - Exterior Stucco	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1136 331815350-0038	Unit Exterior Level 1st - N. Center - Exterior Stucco	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1137 331815350-0039	Unit Exterior Level 1st - N.E. - Exterior Stucco	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1138-Shingle 1 331815350-0040	Unit Roof - Level Roof - S.E. - Roof Shingles	Red/Black Fibrous Heterogeneous	7% Glass	93% Non-fibrous (Other)	None Detected
1138-Shingle 2 331815350-0040A	Unit Roof - Level Roof - S.E. - Roof Shingles	Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
1139-Shingle 1 331815350-0041	Unit Roof - Level Roof - S. Center - Roof Shingles	Red/Black Fibrous Heterogeneous	7% Glass	93% Non-fibrous (Other)	None Detected
1139-Shingle 2 331815350-0041A	Unit Roof - Level Roof - S. Center - Roof Shingles	Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
1140-Shingle 1 331815350-0042	Unit Roof - Level Roof - S.W. - Roof Shingles	Red/Black Fibrous Heterogeneous	7% Glass	93% Non-fibrous (Other)	None Detected
1140-Shingle 2 331815350-0042A	Unit Roof - Level Roof - S.W. - Roof Shingles	Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331815350

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1141 331815350-0043	Unit 821 Level 1st - Kitchen - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1142 331815350-0044	Unit 821 Level 1st - Kitchen - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1143 331815350-0045	Unit 823 Level 1st - Kitchen - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Christopher Miranda (40)

Elizabeth Herrera (18)

Monica Luna (24)

Sotheary Son (16)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Phone:** (562) 599-9918

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**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 07/31/2018

**Collected Date:** 07/26/2018

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1144-Skim Coat <i>331815332-0001</i>	Unit 801 1st Level Living Room - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1144-Plaster <i>331815332-0001A</i>	Unit 801 1st Level Living Room - White Plaster w/ Button	Gray/Tan Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1144-Buttonboard <i>331815332-0001B</i>	Unit 801 1st Level Living Room - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1145-Skim Coat <i>331815332-0002</i>	Unit 801 1st Level Bedroom 1 - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1145-Plaster <i>331815332-0002A</i>	Unit 801 1st Level Bedroom 1 - White Plaster w/ Button	Gray/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1145-Buttonboard <i>331815332-0002B</i>	Unit 801 1st Level Bedroom 1 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1146-Plaster <i>331815332-0003</i> <i>Skim coat not found in sample.</i>	Unit 801 1st Level Bedroom 2 - White Plaster w/ Button	Gray/Tan Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1146-Buttonboard <i>331815332-0003A</i>	Unit 801 1st Level Bedroom 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1147-Skim Coat <i>331815332-0004</i>	Unit 801 1st Level Kitchen - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1147-Plaster <i>331815332-0004A</i>	Unit 801 1st Level Kitchen - White Plaster w/ Button	Gray/Tan Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1147-Buttonboard <i>331815332-0004B</i>	Unit 801 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1148-Plaster <i>331815332-0005</i> <i>Skim coat not found in sample</i>	Unit 803 1st Level Kitchen - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1148-Buttonboard <i>331815332-0005A</i>	Unit 803 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1149-Plaster <i>331815332-0006</i> <i>Skim coat not found in sample</i>	Unit 803 1st Level Bedroom 2 - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1149-Buttonboard <i>331815332-0006A</i>	Unit 803 1st Level Bedroom 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1150-Skim Coat 331815332-0007	Unit 803 1st Level Living Room - White Plaster w/ Button	Tan/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1150-Plaster 331815332-0007A	Unit 803 1st Level Living Room - White Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1150-Buttonboard 331815332-0007B	Unit 803 1st Level Living Room - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1151-Floor Tile 331815332-0008	Unit 801 1st Level Living Room - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1151-Mastic 331815332-0008A	Unit 801 1st Level Living Room - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1152-Floor Tile 331815332-0009	Unit 801 1st Level Bedroom 3 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1152-Mastic 331815332-0009A	Unit 801 1st Level Bedroom 3 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1153-Floor Tile 1 331815332-0010	Unit 801 1st Level Bedroom 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1153-Mastic 331815332-0010A	Unit 801 1st Level Bedroom 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1153-Floor Tile 2 331815332-0010B	Unit 801 1st Level Bedroom 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1154-Floor Tile 331815332-0011	Unit 803 1st Level Bedroom 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1154-Mastic 331815332-0011A	Unit 803 1st Level Bedroom 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1155-Floor Tile 331815332-0012	Unit 803 1st Level Living Room - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1155-Mastic 331815332-0012A	Unit 803 1st Level Living Room - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1156-Mastic 1 331815332-0013	Unit 801 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1156-Floor Tile 331815332-0013A	Unit 801 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1156-Mastic 2 331815332-0013B	Unit 801 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material.</i>					
1156-Vapor 331815332-0013C	Unit 801 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1156-Mastic 3 331815332-0013D	Unit 801 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1157-Mastic 1 331815332-0014	Unit 801 1st Level Bedroom 3 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1157-Floor Tile 331815332-0014A	Unit 801 1st Level Bedroom 3 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1157-Mastic 2 331815332-0014B	Unit 801 1st Level Bedroom 3 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material.</i>					
1157-Vapor 331815332-0014C	Unit 801 1st Level Bedroom 3 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1157-Mastic 3 331815332-0014D	Unit 801 1st Level Bedroom 3 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1158-Mastic 1 331815332-0015	Unit 801 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1158-Floor Tile 331815332-0015A	Unit 801 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1158-Mastic 2 331815332-0015B	Unit 801 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material.</i>					
1158-Vapor 331815332-0015C	Unit 801 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1158-Mastic 3 331815332-0015D	Unit 801 1st Level Bedroom 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1159-Mastic 1 331815332-0016	Unit 803 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1159-Floor Tile 331815332-0016A	Unit 803 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1159-Mastic 2 331815332-0016B	Unit 803 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1159-Vapor 331815332-0016C	Unit 803 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1159-Mastic 3 331815332-0016D	Unit 803 1st Level Bedroom 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1160-Mastic 1 331815332-0017	Unit 803 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1160-Floor Tile 331815332-0017A	Unit 803 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1160-Mastic 2 331815332-0017B	Unit 803 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1160-Vapor 331815332-0017C	Unit 803 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1160-Mastic 3 331815332-0017D	Unit 803 1st Level Living Room - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic, Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1161-Sheet Flooring 331815332-0018	Unit 801 1st Level Kitchen - White 6" Square Sheet Floor & Mastic	White/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1161-Mastic 331815332-0018A	Unit 801 1st Level Kitchen - White 6" Square Sheet Floor & Mastic	Tan Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material.</i>					
1162-Sheet Flooring 331815332-0019	Unit 801 1st Level Bathroom - White 6" Square Sheet Floor & Mastic	White/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
<i>Mastic not found in sample.</i>					
1163-Sheet Flooring 331815332-0020	Unit 803 1st Level Kitchen - White 6" Square Sheet Floor & Mastic	Gray/White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1163-Mastic 331815332-0020A	Unit 803 1st Level Kitchen - White 6" Square Sheet Floor & Mastic	Yellow Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material.</i>					
1164-Floor Tile 331815332-0021	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1164-Mastic 331815332-0021A	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1165-Floor Tile 331815332-0022	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1165-Mastic 331815332-0022A	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1166-Floor Tile 331815332-0023	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1166-Mastic 331815332-0023A	Unit 803 1st Level Hall - Light Beige Top Layer: 12" Light Beige Tile w/ Tan Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1167 331815332-0024	Unit 801 1st Level Kitchen Sink - Grey Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1168 331815332-0025	Unit 801 1st Level Kitchen Sink - Grey Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1169 331815332-0026	Unit 803 1st Level Kitchen Sink - Grey Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1170 331815332-0027 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level S.E. - White Exterior Stucco	Brown/Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1171 331815332-0028 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level S. Center - White Exterior Stucco	Brown/Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1172-Skim Coat 331815332-0029	Exterior 1st Level S.W. - White Exterior Stucco	Brown/Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1172-Stucco 331815332-0029A	Exterior 1st Level S.W. - White Exterior Stucco	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1173 331815332-0030 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level N.W. - White Exterior Stucco	Gray/Pink/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1174 331815332-0031 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level N.E. - White Exterior Stucco	Gray/Pink/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1175 331815332-0032	Roof S.E. - Red Roof Shingles	Brown/Red/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
1176 331815332-0033	Roof S. Center - Red Roof Shingles	Brown/Red/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
1177 331815332-0034	Roof S.W. - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
1178-Joint Compound 331815332-0035	Unit 801 1st Level Kitchen - White Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1178-Drywall 331815332-0035A	Unit 801 1st Level Kitchen - White Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1179-Joint Compound 331815332-0036	Unit 803 1st Level Kitchen - White Drywall w/ J.C.	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 08/01/2018 09:35:28



# LA Testing

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LA Testing Order: 331815332

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1179-Drywall	Unit 803 1st Level Kitchen - White	Brown/White Fibrous	8% Cellulose	92% Non-fibrous (Other)	None Detected
331815332-0036A	Drywall w/ J.C.	Heterogeneous			

Analyst(s)

Christopher Miranda (31)

Sophia Nguyen (50)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/01/2018 09:35:28



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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 07/30/2018 - 07/31/2018

**Collected Date:**

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1180-Plaster 331815346-0001	Unit 3416 1st Level Living Rm - White Plaster w/ Button	Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1180-Button Board 331815346-0001A	Unit 3416 1st Level Living Rm - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1181-Plaster 331815346-0002	Unit 3416 1st Level Bedrm 2 - White Plaster w/ Button	Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1181-Button Board 331815346-0002A	Unit 3416 1st Level Bedrm 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1182-Plaster 331815346-0003	Unit 3416 1st Level Ceiling: Bathroom - White Plaster w/ Button	Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1182-Button Board 331815346-0003A	Unit 3416 1st Level Ceiling: Bathroom - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1183-Plaster 331815346-0004	Unit 3416 1st Level Bedrm 1 - White Plaster w/ Button	White/Beige Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
1183-Button Board 331815346-0004A	Unit 3416 1st Level Bedrm 1 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1184-Plaster 331815346-0005	Unit 3408 1st Level Living Rm - White Plaster w/ Button	White/Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1184-Button Board 331815346-0005A	Unit 3408 1st Level Living Rm - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1185-Plaster 331815346-0006	Unit 3408 1st Level Kitchen - White Plaster w/ Button	Beige Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1185-Button Board 331815346-0006A	Unit 3408 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1186-Plaster 331815346-0007	Unit 3408 1st Level Bedrm 2 - White Plaster w/ Button	Beige Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
1186-Button Board 331815346-0007A	Unit 3408 1st Level Bedrm 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1187-Joint Compound 331815346-0008	Unit 3416 1st Level Kitchen - White Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1187-Drywall 331815346-0008A	Unit 3416 1st Level Kitchen - White Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
1188-Joint Compound 331815346-0009	Unit 3408 1st Level Kitchen - White Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1188-Drywall 331815346-0009A	Unit 3408 1st Level Kitchen - White Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1189-Floor Tile 331815346-0010	Unit 3416 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1189-Mastic 331815346-0010A	Unit 3416 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1190-Floor Tile 331815346-0011	Unit 3416 1st Level Bedrm 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1190-Mastic 331815346-0011A	Unit 3416 1st Level Bedrm 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1191-Floor Tile 331815346-0012	Unit 3416 1st Level Bedrm 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1191-Mastic 331815346-0012A	Unit 3416 1st Level Bedrm 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1192-Floor Tile 331815346-0013	Unit 3408 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1192-Mastic 331815346-0013A	Unit 3408 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1193-Floor Tile 331815346-0014	Unit 3408 1st Level Bedrm 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1193-Mastic 331815346-0014A	Unit 3408 1st Level Bedrm 2 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1194-Floor Tile 331815346-0015	Unit 3416 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1194-Mastic 1 331815346-0015A	Unit 3416 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
1194-Vapor Barrier 331815346-0015B	Unit 3416 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1194-Mastic 2 331815346-0015C	Unit 3416 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1195-Floor Tile 331815346-0016	Unit 3416 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1195-Mastic 1 331815346-0016A	Unit 3416 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
1195-Vapor Barrier 331815346-0016B	Unit 3416 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1195-Mastic 2 331815346-0016C	Unit 3416 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1196-Floor Tile 331815346-0017	Unit 3416 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1196-Mastic 1 331815346-0017A	Unit 3416 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
<i>Result includes a small amount of inseparable attached floor tile material</i>					
1196-Vapor Barrier 331815346-0017B	Unit 3416 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1196-Mastic 2 331815346-0017C	Unit 3416 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1197-Floor Tile 331815346-0018	Unit 3408 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1197-Mastic 331815346-0018A	Unit 3408 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1197-Vapor Barrier 331815346-0018B	Unit 3408 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1198-Floor Tile 331815346-0019	Unit 3408 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1198-Mastic 1 331815346-0019A	Unit 3408 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1198-Vapor Barrier 331815346-0019B	Unit 3408 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1198-Mastic 2 331815346-0019C	Unit 3408 1st Level Bedrm 2 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1199-Vinyl Sheet Flooring 331815346-0020	Unit 3416 1st Level Bathroom - White Small Rectangles Sheet Fl. w/ Mastic	White Fibrous Homogeneous	30% Cellulose 5% Glass	65% Non-fibrous (Other)	None Detected
1199-Mastic 331815346-0020A	Unit 3416 1st Level Bathroom - White Small Rectangles Sheet Fl. w/ Mastic	Brown/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1200-Vinyl Sheet Flooring 331815346-0021 <i>Insufficient mastic material for analysis</i>	Unit 3416 1st Level Bathroom - White Small Rectangles Sheet Fl. w/ Mastic	White Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
1201-Vinyl Sheet Flooring 331815346-0022 <i>Insufficient mastic material for analysis</i>	Unit 3408 1st Level Bathroom - White Small Rectangles Sheet Fl. w/ Mastic	Tan/White Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected

Initial report from: 07/31/2018 20:17:52



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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1202-Vinyl Sheet Flooring 331815346-0023	Unit 3416 1st Level Kitchen - White Top Layer: Small Triangles Sheet Fl. w/ Mastic <i>Insufficient mastic material for analysis</i>	Gray/White Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
1203-Vinyl Sheet Flooring 331815346-0024	Unit 3416 1st Level Kitchen - White Top Layer: Small Triangles Sheet Fl. w/ Mastic	Gray/White Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
1203-Mastic 331815346-0024A	Unit 3416 1st Level Kitchen - White Top Layer: Small Triangles Sheet Fl. w/ Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1204-Vinyl Sheet Flooring 331815346-0025	Unit 3408 1st Level Kitchen - White Top Layer: Small Triangles Sheet Fl. w/ Mastic	Gray/White Fibrous Heterogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
1204-Mastic 331815346-0025A	Unit 3408 1st Level Kitchen - White Top Layer: Small Triangles Sheet Fl. w/ Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1205-Vinyl Sheet Flooring 331815346-0026	Unit 3416 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor w/ Mastic	Gray/Tan/Beige Fibrous Heterogeneous	3% Cellulose	84% Non-fibrous (Other)	13% Chrysotile
1205-Mastic 331815346-0026A	Unit 3416 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1206-Vinyl Sheet Flooring 331815346-0027 <i>Mastic not found in sample</i>	Unit 3416 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor w/ Mastic	Gray/Tan/Beige Fibrous Heterogeneous	3% Cellulose	84% Non-fibrous (Other)	13% Chrysotile
1207-Vinyl Sheet Flooring 331815346-0028	Unit 3408 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor w/ Mastic	Gray/Tan Fibrous Heterogeneous	3% Cellulose	82% Non-fibrous (Other)	15% Chrysotile
1207-Mastic 331815346-0028A	Unit 3408 1st Level Kitchen - Beige Middle Layer: Marble Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1208-Vinyl Sheet Flooring 331815346-0029 <i>Insufficient mastic material for analysis</i>	Unit 3416 1st Level Kitchen - Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	Gray/Variou s/Beige Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
1208-Vapor Paper 331815346-0029A	Unit 3416 1st Level Kitchen - Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected

Initial report from: 07/31/2018 20:17:52



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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1209-Vinyl Sheet Flooring 331815346-0030	Unit 3416 1st Level Kitchen - Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor <i>Insufficient mastic material for analysis</i>	Gray/Various/Beige Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
1209-Vapor Paper 331815346-0030A	Unit 3416 1st Level Kitchen - Tan Bottom Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1210-Vinyl Sheet Flooring 331815346-0031	Unit 3408 1st Level Kitchen - Tan Bottom Middle Layer: Red/Blue Specs Sheet Floor w/ Mastic, Vapor <i>Mastic not found in sample</i>	Gray/Black/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1211-Mastic 331815346-0032	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1211-Floor Tile 331815346-0032A	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Red Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1211-Vapor Paper 331815346-0032B	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1212-Mastic 331815346-0033	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1212-Floor Tile 331815346-0033A	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Red Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1212-Vapor Paper 331815346-0033B	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1213-Mastic 331815346-0034	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1213-Floor Tile 331815346-0034A	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Red Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected

Initial report from: 07/31/2018 20:17:52



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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1213-Vapor Paper 331815346-0034B	Unit 3408 1st Level Kitchen - Red Bottom Layer: 9" Red Tile w/ Black Mastic, Vapor Paper	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1214 331815346-0035	Unit 3416 1st Level Kitchen - Black Sink Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1215 331815346-0036	Unit 3416 1st Level Kitchen - Black Sink Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1216 331815346-0037	Unit 3416 1st Level Kitchen - Black Sink Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1217 331815346-0038	Unit 3408 1st Level Kitchen - White Sink Mastic	White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1218 331815346-0039	Unit 3408 1st Level Kitchen - White Sink Mastic	White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1219 331815346-0040	Unit 3408 1st Level Kitchen - White Sink Mastic	White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1220 331815346-0041 <i>Inseparable paint / coating layer included in analysis</i>	Ext 1st Level S.W. - Orange Exterior Stucco	White/Orange Non-Fibrous Heterogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
1221 331815346-0042 <i>Inseparable paint / coating layer included in analysis</i>	Ext 1st Level W. Center - Orange Exterior Stucco	White/Orange Non-Fibrous Heterogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
1222 331815346-0043 <i>Inseparable paint / coating layer included in analysis</i>	Ext 1st Level N.W. - Orange Exterior Stucco	White/Orange Non-Fibrous Heterogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
1223 331815346-0044 <i>Inseparable paint / coating layer included in analysis</i>	Ext 1st Level N.E. - Orange Exterior Stucco	White/Orange Non-Fibrous Heterogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
1224 331815346-0045 <i>Inseparable paint / coating layer included in analysis</i>	Ext 1st Level S.E. - Orange Exterior Stucco	White/Orange Non-Fibrous Heterogeneous		4% Quartz 96% Non-fibrous (Other)	None Detected
1225 331815346-0046	Roof S.W. - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1226-Shingle 1 331815346-0047	Roof W. Center - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1226-Shingle 2 331815346-0047A	Roof W. Center - Red Roof Shingles	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1227-Shingle 1 331815346-0048	Roof N.W. - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1227-Shingle 2 331815346-0048A	Roof N.W. - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected

Initial report from: 07/31/2018 20:17:52



# LA Testing

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LA Testing Order: 331815346

Customer ID: 32CITA50D

Customer PO:

Project ID:

Analyst(s)

Carolynn Tom (22)

Dennies Ly (15)

Monica Luna (26)

Sotheary Son (28)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

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# LA Testing

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
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Suite F-4  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 07/31/2018 - 08/01/2018

**Collected Date:**

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1228-Plaster 331815336-0001	Unit 3475 1st Level Living Rm - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1228-Button Board 331815336-0001A	Unit 3475 1st Level Living Rm - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1229-Plaster 331815336-0002	Unit 3475 1st Level Kitchen - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1229-Button Board 331815336-0002A	Unit 3475 1st Level Kitchen - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1230-Plaster 331815336-0003	Unit 3475 1st Level Bathroom - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1230-Button Board 331815336-0003A	Unit 3475 1st Level Bathroom - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
1231-Plaster 331815336-0004	Unit 3475 1st Level Ceiling: Bedrm 1 - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1231-Button Board 331815336-0004A	Unit 3475 1st Level Ceiling: Bedrm 1 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	9% Cellulose	91% Non-fibrous (Other)	None Detected
1232-Plaster 331815336-0005	Unit 3479 1st Level Living Rm - White Plaster w/ Button	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1232-Button Board 331815336-0005A	Unit 3479 1st Level Living Rm - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1233-Plaster 331815336-0006	Unit 3479 1st Level Bedrm 2 - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1233-Button Board 331815336-0006A	Unit 3479 1st Level Bedrm 2 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1234-Plaster 331815336-0007	Unit 3479 1st Level Bedrm 1 - White Plaster w/ Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1234-Button Board 331815336-0007A	Unit 3479 1st Level Bedrm 1 - White Plaster w/ Button	Brown/White Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1235-Floor Tile 331815336-0008	Unit 3475 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# LA Testing

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1235-Mastic 331815336-0008A	Unit 3475 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1236-Floor Tile 331815336-0009	Unit 3475 1st Level Hall - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1236-Mastic 331815336-0009A	Unit 3475 1st Level Hall - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1237-Floor Tile 331815336-0010	Unit 3475 1st Level Bedrm 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1237-Mastic 331815336-0010A	Unit 3475 1st Level Bedrm 1 - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1238-Floor Tile 331815336-0011	Unit 3479 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1238-Mastic 331815336-0011A	Unit 3479 1st Level Living Rm - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1239-Floor Tile 331815336-0012	Unit 3479 1st Level Hall - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1239-Mastic 331815336-0012A	Unit 3479 1st Level Hall - Beige Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1240-Sheet Flooring 331815336-0013	Unit 3475 1st Level Bathrm - White 6" Square Sheet Floor w/ Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1240-Mastic 331815336-0013A	Unit 3475 1st Level Bathrm - White 6" Square Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1241-Sheet Flooring 331815336-0014	Unit 3479 1st Level Bathrm - White 6" Square Sheet Floor w/ Mastic	White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected

Mastic not present in sample.

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# LA Testing

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1242-Sheet Flooring 331815336-0015	Unit 3479 1st Level Bathrm - White 6" Square Sheet Floor w/ Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1242-Mastic 331815336-0015A	Unit 3479 1st Level Bathrm - White 6" Square Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1243-Sheet Flooring 331815336-0016	Unit 3475 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1243-Mastic 331815336-0016A	Unit 3475 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1244-Sheet Flooring 331815336-0017	Unit 3479 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	Brown/Yellow Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
1244-Mastic 331815336-0017A	Unit 3479 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic  <i>Sample contains small amount of inseparable material.</i>	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
1245-Mastic 331815336-0018	Unit 3479 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1245-Sheet Flooring 331815336-0018A	Unit 3479 1st Level Middle Layer: Kitchen - Beige Yellow Tint/Brown Design Floor Sheet w/ Mastic	Gray Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
1246-Sheet Flooring 331815336-0019	Unit 3475 1st Level Bottom Middle Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic	Yellow/Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
1246-Mastic 331815336-0019A	Unit 3475 1st Level Bottom Middle Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1247-Sheet Flooring 331815336-0020	Unit 3479 1st Level Bottom Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic	Yellow/Beige Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
1247-Mastic 331815336-0020A	Unit 3479 1st Level Bottom Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic  <i>Unable to separate mastic from positive sheet flooring for analysis</i>				Not Analyzed

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1248-Sheet Flooring 331815336-0021	Unit 3479 1st Level Bottom Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic	Beige Fibrous Homogeneous		75% Non-fibrous (Other)	25% Chrysotile
1248-Mastic 331815336-0021A	Unit 3479 1st Level Bottom Layer: Kitchen - Yellow Flower Floor Sheeting w/ Mastic	Brown/Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1249-Mastic 331815336-0022	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1249-Floor Tile 331815336-0022A	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1249-Vapor Paper 331815336-0022B	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1250-Mastic 331815336-0023	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1250-Floor Tile 331815336-0023A	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1250-Vapor Paper 331815336-0023B	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1251-Floor Tile 331815336-0024	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Brown/Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1251-Vapor Paper 331815336-0024A	Unit 3475 1st Level Bottom Layer: Kitchen - Grey 12" Grey Floor Tile w/ Black Mastic & Vapor Paper	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
1252-Drywall 331815336-0025	Unit 3475 1st Level Kitchen - White Drywall w/ J.C <i>Joint Compound not present in sample.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1253-Joint Compound 331815336-0026	Unit 3479 1st Level Kitchen - White Drywall w/ J.C	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1253-Drywall 331815336-0026A	Unit 3479 1st Level Kitchen - White Drywall w/ J.C	Brown/White Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1254 331815336-0027 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level N.E. - White Exterior Stucco	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1255 331815336-0028 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level E. Center - White Exterior Stucco	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1256 331815336-0029 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level S.E. - White Exterior Stucco	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1257 331815336-0030 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level S.W. - White Exterior Stucco	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1258 331815336-0031 <i>Inseparable paint / coating layer included in analysis</i>	Exterior 1st Level N.W. - White Exterior Stucco	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1259 331815336-0032	Roof N.W. - Red Roof Shingles	Gray/Black Fibrous Heterogeneous	12% Glass	88% Non-fibrous (Other)	None Detected
1260 331815336-0033	Roof W. Center - Red Roof Shingles	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1261 331815336-0034	Roof S.W. - Red Roof Shingles	Brown/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1262-Mastic 1 331815336-0035	Unit 3475 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1262-Floor Tile 331815336-0035A	Unit 3475 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1262-Mastic 2 331815336-0035B	Unit 3475 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1262-Vapor Paper 331815336-0035C	Unit 3475 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1262-Mastic 3 331815336-0035D	Unit 3475 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1263-Mastic 1 331815336-0036	Unit 3475 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1263-Floor Tile 331815336-0036A	Unit 3475 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1263-Mastic 2 331815336-0036B	Unit 3475 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1263-Vapor Paper 331815336-0036C	Unit 3475 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1263-Mastic 3 331815336-0036D	Unit 3475 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1264-Mastic 1 331815336-0037	Unit 3475 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1264-Floor Tile 331815336-0037A	Unit 3475 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1264-Mastic 2 331815336-0037B	Unit 3475 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1264-Vapor Paper 331815336-0037C	Unit 3475 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1264-Mastic 3 331815336-0037D	Unit 3475 1st Level Bedrm 1 - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1265-Floor Tile 331815336-0038	Unit 3479 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1265-Mastic 331815336-0038A	Unit 3479 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Black mastic and brown mastic not present in sample

Initial report from: 08/01/2018 10:34:43



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LA Testing Order: 331815336

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1265-Vapor Paper 331815336-0038B	Unit 3479 1st Level Living Rm - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1266-Floor Tile 331815336-0039	Unit 3479 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1266-Mastic 1 331815336-0039A	Unit 3479 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1266-Mastic 2 331815336-0039B	Unit 3479 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1266-Mastic 3 331815336-0039C	Unit 3479 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1266-Vapor Paper 331815336-0039D	Unit 3479 1st Level Hall - Brown Bottom Layer: 12" Brown Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected

Analyst(s)

Carolynn Tom (18)

David Garcia (51)

Mindy Le (13)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/01/2018 10:34:43



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LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 07/30/2018 1:20 PM

**Analysis Date:** 08/01/2018 - 08/03/2018

**Collected Date:**

**Project:** 7076.1017.0/Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1267-Plaster <small>331815341-0001</small> <i>Skim coat not found in sample.</i>	Unit 3488 1st Level Living Rm - White plaster w/buttonboard	Gray Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (Other)	None Detected
1267-Buttonboard <small>331815341-0001A</small>	Unit 3488 1st Level Living Rm - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1268-Skim Coat <small>331815341-0002</small>	Unit 3488 1st Level Kitchen - White plaster w/buttonboard	Tan/White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1268-Plaster <small>331815341-0002A</small>	Unit 3488 1st Level Kitchen - White plaster w/buttonboard	Gray Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (Other)	None Detected
1268-Buttonboard <small>331815341-0002B</small>	Unit 3488 1st Level Kitchen - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1269-Skim Coat <small>331815341-0003</small>	Unit 3488 1st Level Bedrm 1 - White plaster w/buttonboard	Tan/White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1269-Plaster <small>331815341-0003A</small>	Unit 3488 1st Level Bedrm 1 - White plaster w/buttonboard	Gray Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (Other)	None Detected
1269-Buttonboard <small>331815341-0003B</small>	Unit 3488 1st Level Bedrm 1 - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1270-Skim Coat <small>331815341-0004</small>	Unit 3488 1st Level Bedrm 2 - White plaster w/buttonboard	Tan/White/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1270-Plaster <small>331815341-0004A</small>	Unit 3488 1st Level Bedrm 2 - White plaster w/buttonboard	Gray Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (Other)	None Detected
1270-Buttonboard <small>331815341-0004B</small>	Unit 3488 1st Level Bedrm 2 - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1271-Plaster <small>331815341-0005</small>	Unit 3480 1st Level Living Rm - White plaster w/buttonboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1271-Buttonboard <small>331815341-0005A</small>	Unit 3480 1st Level Living Rm - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1272-Skim Coat <small>331815341-0006</small>	Unit 3480 1st Level Bathroom - White plaster w/buttonboard	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1272-Plaster <small>331815341-0006A</small>	Unit 3480 1st Level Bathroom - White plaster w/buttonboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1272-Buttonboard <small>331815341-0006B</small>	Unit 3480 1st Level Bathroom - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2018 20:36:41



# LA Testing

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<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1273-Plaster 331815341-0007	Unit 3480 1st Level Bedrm 1, Ceiling - White plaster w/buttonboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1273-Buttonboard 331815341-0007A	Unit 3480 1st Level Bedrm 1, Ceiling - White plaster w/buttonboard	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1274-Joint Compound 1 331815341-0008	Unit 3488 1st Level Kitchen - White drywall w/JC	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1274-Joint Compound 2 331815341-0008A	Unit 3488 1st Level Kitchen - White drywall w/JC	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1274-Drywall 331815341-0008B	Unit 3488 1st Level Kitchen - White drywall w/JC	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1275 331815341-0009 Sample not found in the bag	Unit 3480 1st Level Kitchen - White drywall w/JC				Not Analyzed
1276-Floor Tile 331815341-0010	Unit 3488 1st Level Living Rm - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1276-Mastic 331815341-0010A	Unit 3488 1st Level Living Rm - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1277-Mastic 1 331815341-0011	Unit 3488 1st Level Hall - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1277-Floor Tile 331815341-0011A	Unit 3488 1st Level Hall - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1277-Mastic 2 331815341-0011B	Unit 3488 1st Level Hall - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1278-Floor Tile 331815341-0012	Unit 3488 1st Level Bedrm 2 - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1278-Mastic 331815341-0012A	Unit 3488 1st Level Bedrm 2 - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1279-Floor Tile 331815341-0013	Unit 3480 1st Level Living Rm - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1279-Mastic 331815341-0013A	Unit 3480 1st Level Living Rm - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1280-Floor Tile 331815341-0014	Unit 3480 1st Level Hall - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1280-Mastic 331815341-0014A	Unit 3480 1st Level Hall - Beige Top layer: 12" beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1281-Mastic 1 331815341-0015	Unit 3488 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1281-Floor Tile 331815341-0015A	Unit 3488 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1281-Mastic 2 331815341-0015B	Unit 3488 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1281-Vapor 331815341-0015C	Unit 3488 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1281-Mastic 3 331815341-0015D	Unit 3488 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1282-Floor Tile 331815341-0016	Unit 3488 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
1282-Mastic 331815341-0016B	Unit 3488 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1282-Vapor 331815341-0016C	Unit 3488 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown/Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1283-Mastic 1 331815341-0017	Unit 3488 1st Level Bedrm 2 - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1283-Floor Tile 331815341-0017A	Unit 3488 1st Level Bedrm 2 - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

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LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1283-Mastic 2 331815341-0017B	Unit 3488 1st Level Bedrm 2 - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1283-Vapor 331815341-0017C	Unit 3488 1st Level Bedrm 2 - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
1283-Mastic 3 331815341-0017D	Unit 3488 1st Level Bedrm 2 - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1284-Floor Tile 331815341-0018	Unit 3480 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1284-Mastic 331815341-0018A	Unit 3480 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Black mastic not present in sample</i>					
1284-Vapor Paper 331815341-0018B	Unit 3480 1st Level Living Rm - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1285-Vinyl Floor Tile 331815341-0019	Unit 3480 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1285-Mastic 331815341-0019A	Unit 3480 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1285-Vapor Paper 331815341-0019B	Unit 3480 1st Level Hall - Brown Bottom layer: 12" brown tile w/ black mastic; vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1286-Sheet Flooring 331815341-0020	Unit 3488 1st Level Kitchen - White 1st layer: 6" square sheet floor w/ mastic	White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1286-Mastic 331815341-0020A	Unit 3488 1st Level Kitchen - White 1st layer: 6" square sheet floor w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1287-Sheet Flooring 331815341-0021	Unit 3488 1st Level Kitchen - White 1st layer: 6" square sheet floor w/ mastic	White Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1287-Mastic 331815341-0021A	Unit 3488 1st Level Kitchen - White 1st layer: 6" square sheet floor w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2018 20:36:41



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LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1288-Vinyl Sheet Flooring 331815341-0022	Unit 3488 1st Level Bathroom - White 1st layer: 6" square sheet floor w/ mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1288-Mastic 331815341-0022A	Unit 3488 1st Level Bathroom - White 1st layer: 6" square sheet floor w/ mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1288-Leveler 331815341-0022B	Unit 3488 1st Level Bathroom - White 1st layer: 6" square sheet floor w/ mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1289-Sheet Flooring 331815341-0023	Unit 3488 1st Level Kitchen - White small triangles white; beige w/ white mastic	White/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1289-Mastic 331815341-0023A	Unit 3488 1st Level Kitchen - White small triangles white; beige w/ white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1290-Sheet Flooring 331815341-0024	Unit 3488 1st Level Kitchen - White small triangles white; beige w/ white mastic	White/Beige Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1290-Mastic 331815341-0024A	Unit 3488 1st Level Kitchen - White small triangles white; beige w/ white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1291-Sheet Flooring 331815341-0025	Unit 3480 1st Level Bathroom - White small triangles white; beige w/ white mastic	Gray/Beige Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1291-Mastic 331815341-0025A	Unit 3480 1st Level Bathroom - White small triangles white; beige w/ white mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1292-Sheet Flooring 331815341-0026	Unit 3488 1st Level Kitchen - White flower pattern yellow w/ beige mastic <i>Mastic not found in sample.</i>	Brown/Gray/Yellow Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1292-Leveler 331815341-0026A	Unit 3488 1st Level Kitchen - White flower pattern yellow w/ beige mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1293-Sheet Flooring 331815341-0027	Unit 3488 1st Level Kitchen - White flower pattern yellow w/ beige mastic <i>Mastic not found in sample.</i>	Brown/Gray/Yellow Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1293-Leveler 331815341-0027A	Unit 3488 1st Level Kitchen - White flower pattern yellow w/ beige mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1294-Sheet Flooring 331815341-0028	Unit 3480 1st Level Kitchen - White flower pattern yellow w/ beige mastic <i>Mastic not found in sample.</i>	Gray/Tan/Yellow Fibrous Heterogeneous		80% Non-fibrous (Other)	20% Chrysotile

Initial report from: 08/03/2018 20:36:41



# LA Testing

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LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1294-Leveler 331815341-0028A	Unit 3480 1st Level Kitchen - White flower pattern yellow w/ beige mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1295-Sheet Flooring 331815341-0029	Unit 3488 1st Level Kitchen - Beige (Marble) pattern-yellow mastic	Gray/Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1295-Mastic 331815341-0029A	Unit 3488 1st Level Kitchen - Beige (Marble) pattern-yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1296-Sheet Flooring 331815341-0030	Unit 3488 1st Level Kitchen - Beige (Marble) pattern-yellow mastic	Gray/Beige Fibrous Heterogeneous		75% Non-fibrous (Other)	25% Chrysotile
1296-Mastic 331815341-0030A	Unit 3488 1st Level Kitchen - Beige (Marble) pattern-yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1297-Sheet Flooring 331815341-0031	Unit 3480 1st Level Bathroom - Beige (Marble) pattern-yellow mastic	Gray/Tan/Beige Fibrous Heterogeneous		80% Non-fibrous (Other)	20% Chrysotile
1297-Mastic 331815341-0031A	Unit 3480 1st Level Bathroom - Beige (Marble) pattern-yellow mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1298-Mastic 331815341-0032	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1298-Sheet Flooring 331815341-0032A	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Brown/White/Yellow Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1299-Mastic 331815341-0033	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1299-Sheet Flooring 331815341-0033A	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Brown/White/Yellow Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
1300-Mastic 1 331815341-0034	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1300-Sheet Flooring 331815341-0034A	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Gray/Tan/Yellow Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1300-Mastic 2 331815341-0034B	Unit 3480 Kitchen - Yellow a/w compact wood board; vapor paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1301 331815341-0035	Exterior S.E. - White exterior stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2018 20:36:41



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LA Testing Order: 331815341

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
<i>Inseparable paint / coating layer included in analysis</i>					
1302 331815341-0036	Exterior S.W. - White exterior stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1303 331815341-0037	Exterior N.W. - White exterior stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1304 331815341-0038	Exterior N.W. - White exterior stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1305 331815341-0039	Exterior W. Center - White exterior stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1306 331815341-0040	Roof N.W. - Red roof shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1307 331815341-0041	Roof W. Center - Red roof shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1308-Shingle 1 331815341-0042	Roof S.W. - Red roof shingles	Red/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1308-Shingle 2 331815341-0042A	Roof S.W. - Red roof shingles	Black Fibrous Heterogeneous	8% Glass	92% Non-fibrous (Other)	None Detected

Analyst(s)

Mindy Le (14)

Monica Luna (19)

Sophia Nguyen (59)

Michael DeCavallas, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Initial report from: 08/03/2018 20:36:41



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EMSL Order: 391808804

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
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**Phone:** (562) 599-9918

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**Received Date:** 08/16/2018 9:10 AM

**Analysis Date:** 08/18/2018

**Collected Date:**

**Project:** Canyon Crest Family Housing Survey 7076.1017.0 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1309-Plaster <small>391808804-0001</small>	Unit 3407 Living Rm.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1309-Plaster <small>391808804-0001A</small>	Unit 3407 Living Rm.	Various Non-Fibrous Homogeneous		26% Quartz 74% Non-fibrous (Other)	None Detected
1309-Button <small>391808804-0001B</small>	Unit 3407 Living Rm.	Various Non-Fibrous Heterogeneous	19% Cellulose	81% Non-fibrous (Other)	None Detected
1310-Plaster <small>391808804-0002</small>	Unit 3407 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1310-Plaster <small>391808804-0002A</small>	Unit 3407 Kitchen	Various Non-Fibrous Homogeneous		27% Quartz 73% Non-fibrous (Other)	None Detected
1310-Button <small>391808804-0002B</small>	Unit 3407 Kitchen	Various Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1311-Plaster <small>391808804-0003</small>	Unit 3407 Bed Rm 2	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1311-Plaster <small>391808804-0003A</small>	Unit 3407 Bed Rm 2	Various Non-Fibrous Homogeneous		28% Quartz 72% Non-fibrous (Other)	None Detected
1311-Button <small>391808804-0003B</small>	Unit 3407 Bed Rm 2	Various Non-Fibrous Heterogeneous	21% Cellulose	79% Non-fibrous (Other)	None Detected
1312-Plaster <small>391808804-0004</small>	Unit 3407 Bed Rm 1	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1312-Plaster <small>391808804-0004A</small>	Unit 3407 Bed Rm 1	Various Non-Fibrous Homogeneous		29% Quartz 71% Non-fibrous (Other)	None Detected
1312-Button <small>391808804-0004B</small>	Unit 3407 Bed Rm 1	Various Non-Fibrous Heterogeneous	22% Cellulose	78% Non-fibrous (Other)	None Detected
1313-Plaster <small>391808804-0005</small>	Unit 3401 Living Rm	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1313-Plaster <small>391808804-0005A</small>	Unit 3401 Living Rm	Various Non-Fibrous Homogeneous		26% Quartz 74% Non-fibrous (Other)	None Detected
1313-Button <small>391808804-0005B</small>	Unit 3401 Living Rm	Various Non-Fibrous Heterogeneous	19% Cellulose	81% Non-fibrous (Other)	None Detected
1314-Plaster <small>391808804-0006</small>	Unit 3401 Kitchen (Ceiling)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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# EMSL Analytical, Inc.

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**EMSL Order:** 391808804  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1314-Plaster <i>391808804-0006A</i>	Unit 3401 Kitchen (Ceiling)	Various Non-Fibrous Homogeneous		27% Quartz 73% Non-fibrous (Other)	None Detected
1314-Button <i>391808804-0006B</i>	Unit 3401 Kitchen (Ceiling)	Various Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1315-Plaster <i>391808804-0007</i>	Unit 3407 Bed Rm 2	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1315-Plaster <i>391808804-0007A</i>	Unit 3407 Bed Rm 2	Various Non-Fibrous Homogeneous		28% Quartz 72% Non-fibrous (Other)	None Detected
1315-Button <i>391808804-0007B</i>	Unit 3407 Bed Rm 2	Various Non-Fibrous Heterogeneous	21% Cellulose	79% Non-fibrous (Other)	None Detected
1316 <i>391808804-0008</i> <i>No JC present.</i>	Unit 3407 Kitchen	White Non-Fibrous Heterogeneous	19% Cellulose	81% Non-fibrous (Other)	None Detected
1317 <i>391808804-0009</i> <i>No JC present.</i>	Unit 3401 Kitchen	White Non-Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
1318-Tile <i>391808804-0010</i>	Unit 3407 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1318-Mastic <i>391808804-0010A</i>	Unit 3407 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1319-Tile <i>391808804-0011</i>	Unit 3407 Hall	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1319-Mastic <i>391808804-0011A</i>	Unit 3407 Hall	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1320-Tile <i>391808804-0012</i> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1320-Mastic <i>391808804-0012A</i> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1321-Tile <i>391808804-0013</i> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Living Rm	Tan/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1321-Mastic <i>391808804-0013A</i> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1322-Tile <i>391808804-0014</i> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Hall	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 391808804  
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**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1322-Mastic <small>391808804-0014A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Hall	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1323-Tile <small>391808804-0015</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Living Rm	Brown Non-Fibrous Homogeneous		89% Non-fibrous (Other)	11% Chrysotile
1323-Mastic <small>391808804-0015A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Living Rm	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1323-Vapor <small>391808804-0015B</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Living Rm	Brown Non-Fibrous Homogeneous	46% Cellulose	54% Non-fibrous (Other)	None Detected
1323-Mastic <small>391808804-0015C</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Living Rm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1324-Tile <small>391808804-0016</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Hall	Brown Non-Fibrous Homogeneous		88% Non-fibrous (Other)	12% Chrysotile
1324-Mastic <small>391808804-0016A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Hall	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1324-Vapor <small>391808804-0016B</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Hall	Brown Non-Fibrous Homogeneous	47% Cellulose	53% Non-fibrous (Other)	None Detected
1324-Mastic <small>391808804-0016C</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Hall	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1325-Tile <small>391808804-0017</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Brown Non-Fibrous Homogeneous		87% Non-fibrous (Other)	13% Chrysotile
1325-Mastic <small>391808804-0017A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1325-Vapor <small>391808804-0017B</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Brown Non-Fibrous Homogeneous	48% Cellulose	52% Non-fibrous (Other)	None Detected
1325-Mastic <small>391808804-0017C</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Bed Rm 2	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1326-Tile <small>391808804-0018</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Living Rm	Brown Non-Fibrous Homogeneous		86% Non-fibrous (Other)	14% Chrysotile

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**EMSL Order:** 391808804  
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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1326-Mastic <small>391808804-0018A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Living Rm	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1326-Vapor <small>391808804-0018B</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Living Rm	Brown Non-Fibrous Homogeneous	49% Cellulose	51% Non-fibrous (Other)	None Detected
1326-Mastic <small>391808804-0018C</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Living Rm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1327-Tile <small>391808804-0019</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Hall	Brown Non-Fibrous Homogeneous		89% Non-fibrous (Other)	11% Chrysotile
1327-Mastic <small>391808804-0019A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Hall	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1327-Vapor <small>391808804-0019B</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Hall	Brown Non-Fibrous Homogeneous	46% Cellulose	54% Non-fibrous (Other)	None Detected
1327-Mastic <small>391808804-0019C</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 301 Hall	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1328-Flooring <small>391808804-0020</small>	Unit 3407 Kitchen	Beige Non-Fibrous Heterogeneous	27% Cellulose 17% Glass	56% Non-fibrous (Other)	None Detected
1328-Mastic <small>391808804-0020A</small>	Unit 3407 Kitchen	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1329-Flooring <small>391808804-0021</small>	Unit 3407 Bathroom	Beige Non-Fibrous Heterogeneous	28% Cellulose 18% Glass	54% Non-fibrous (Other)	None Detected
1329-Mastic <small>391808804-0021A</small>	Unit 3407 Bathroom	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1330-Flooring <small>391808804-0022</small>	Unit 3401 Bathroom	Beige Non-Fibrous Heterogeneous	29% Cellulose 19% Glass	52% Non-fibrous (Other)	None Detected
1330-Mastic <small>391808804-0022A</small>	Unit 3401 Bathroom	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1331-Flooring <small>391808804-0023</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Kitchen	Beige Non-Fibrous Heterogeneous	16% Cellulose 6% Glass	78% Non-fibrous (Other)	None Detected
1331-Mastic <small>391808804-0023A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Kitchen	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1332-Flooring <small>391808804-0024</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Kitchen	Beige Non-Fibrous Heterogeneous	17% Cellulose 7% Glass	76% Non-fibrous (Other)	None Detected

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**EMSL Order:** 391808804  
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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1332-Mastic <small>391808804-0024A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3407 Kitchen	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1333-Flooring <small>391808804-0025</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Kitchen	Beige Non-Fibrous Heterogeneous	18% Cellulose 8% Glass	74% Non-fibrous (Other)	None Detected
1333-Mastic <small>391808804-0025A</small> <i>Other layers present analyzed with other samples in the order.</i>	Unit 3401 Kitchen	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1334-Adhesive <small>391808804-0026</small>	Unit 3407 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1334-Flooring <small>391808804-0026A</small>	Unit 3407 Kitchen	Beige Non-Fibrous Heterogeneous	20% Cellulose 9% Glass	71% Non-fibrous (Other)	None Detected
1334-Adhesive <small>391808804-0026B</small>	Unit 3407 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1335-Adhesive <small>391808804-0027</small>	Unit 3407 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1335-Flooring <small>391808804-0027A</small>	Unit 3407 Kitchen	Beige Non-Fibrous Heterogeneous	20% Cellulose 6% Synthetic	74% Non-fibrous (Other)	None Detected
1335-Adhesive <small>391808804-0027B</small>	Unit 3407 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1336-Adhesive <small>391808804-0028</small>	Unit 3401 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1336-Flooring <small>391808804-0028A</small>	Unit 3401 Kitchen	Beige Non-Fibrous Heterogeneous	20% Cellulose 7% Synthetic	73% Non-fibrous (Other)	None Detected
1336-Adhesive <small>391808804-0028B</small>	Unit 3401 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1337 <small>391808804-0029</small>	Unit 3407 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1338 <small>391808804-0030</small>	Unit 3407 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1339 <small>391808804-0031</small>	Unit 3407 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1340-Shingles <small>391808804-0032</small>	Roof N.W.	Red Non-Fibrous Heterogeneous	31% Glass	69% Non-fibrous (Other)	None Detected
1340-Shingles <small>391808804-0032A</small>	Roof N.W.	Various Non-Fibrous Heterogeneous	32% Glass	68% Non-fibrous (Other)	None Detected
1341-Shingles <small>391808804-0033</small>	Roof W Center	Red Non-Fibrous Heterogeneous	32% Glass	68% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1341-Tar <small>391808804-0033A</small>	Roof W Center	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1341-Shingles <small>391808804-0033B</small>	Roof W Center	Various Non-Fibrous Heterogeneous	29% Glass	71% Non-fibrous (Other)	None Detected
1342-Shingles <small>391808804-0034</small>	Roof S.W.	Red Non-Fibrous Heterogeneous	29% Glass	71% Non-fibrous (Other)	None Detected
1342-Tar <small>391808804-0034A</small>	Roof S.W.	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1342-Shingles <small>391808804-0034B</small>	Roof S.W.	Various Non-Fibrous Heterogeneous	30% Glass	70% Non-fibrous (Other)	None Detected
1343 <small>391808804-0035</small>	Exterior N.E.	White Non-Fibrous Homogeneous		12% Quartz 88% Non-fibrous (Other)	None Detected
1344 <small>391808804-0036</small>	Exterior N.W.	White Non-Fibrous Homogeneous		13% Quartz 87% Non-fibrous (Other)	None Detected
1345 <small>391808804-0037</small>	Exterior S.W.	White Non-Fibrous Homogeneous		14% Quartz 86% Non-fibrous (Other)	None Detected
1346 <small>391808804-0038</small>	Exterior S.E.	White Non-Fibrous Homogeneous		11% Quartz 89% Non-fibrous (Other)	None Detected
1347 <small>391808804-0039</small>	Exterior E Center	White Non-Fibrous Homogeneous		12% Quartz 88% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Sue Ferrario (90)

Jeff Siria, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO NVLAP Lab Code 200742-0

Initial report from: 08/18/2018 18:54:39



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EMSL Order: 151805613

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

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**Received Date:** 08/13/2018 2:55 PM

**Analysis Date:** 08/16/2018 - 08/17/2018

**Collected Date:** 07/31/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey / University of California Riverside, Utah St 3315/3317 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1348-Plaster <i>151805613-0001</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3315-Living Room - Plaster w/Button	Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1348-Drywall <i>151805613-0001A</i>	Unit 3315-Living Room - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1349-Plaster <i>151805613-0002</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3315-Kitchen - Plaster w/Button	Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1349-Drywall <i>151805613-0002A</i>	Unit 3315-Kitchen - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1350-Plaster <i>151805613-0003</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3315-Ceiling Bedrm 2 - Plaster w/Button	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1350-Drywall <i>151805613-0003A</i>	Unit 3315-Ceiling Bedrm 2 - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1351-Plaster <i>151805613-0004</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3315-Bathrm - Plaster w/Button	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1351-Drywall <i>151805613-0004A</i>	Unit 3315-Bathrm - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1352-Plaster <i>151805613-0005</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3317-Living Rm - Plaster w/Button	White/Green/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1352-Drywall <i>151805613-0005A</i>	Unit 3317-Living Rm - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1353-Plaster <i>151805613-0006</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3317-Bedrm 2 - Plaster w/Button	Gray/White/Beige Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1353-Drywall <i>151805613-0006A</i>	Unit 3317-Bedrm 2 - Plaster w/Button	Brown/White/Beige Non-Fibrous Heterogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1354-Plaster <i>151805613-0007</i> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3317-Bedrm 1 - Plaster w/Button	Gray/White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected

Initial report from: 08/17/2018 17:56:18



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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1354-Drywall <small>151805613-0007A</small>	Unit 3317-Bedrm 1 - Plaster w/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1355-Mastic <small>151805613-0008</small>	Unit 3315-Living Rm - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1355-Floor Tile <small>151805613-0008A</small>	Unit 3315-Living Rm - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1355-Mastic 2 <small>151805613-0008B</small>	Unit 3315-Living Rm - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1356-Floor Tile <small>151805613-0009</small>	Unit 3315-Hall - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1356-Mastic <small>151805613-0009A</small>	Unit 3315-Hall - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1357-Floor Tile <small>151805613-0010</small>	Unit 3315-Bedrm 1 - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1357-Mastic <small>151805613-0010A</small>	Unit 3315-Bedrm 1 - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1358-Floor Tile <small>151805613-0011</small>	Unit 3317-Living Rm - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1358-Mastic <small>151805613-0011A</small>	Unit 3317-Living Rm - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1359-Floor Tile <small>151805613-0012</small>	Unit 3317-Hall - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1359-Mastic <small>151805613-0012A</small>	Unit 3317-Hall - Top Layer: 12" Beige w/Specs Tile w/Beige Mastic	Yellow/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1360-Floor Tile <small>151805613-0013</small>	Unit 3315-Living Rm - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
1360-Mastic/Vapor <small>151805613-0013A</small>	Unit 3315-Living Rm - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1361-Floor Tile <small>151805613-0014</small>	Unit 3315-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile

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**EMSL Order:** 151805613  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1361-Mastic/Vapor <small>151805613-0014A</small>	Unit 3315-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1362-Floor Tile <small>151805613-0015</small>	Unit 3315-Bedrm 1 - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
1362-Mastic/Vapor <small>151805613-0015A</small>	Unit 3315-Bedrm 1 - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1363-Floor Tile <small>151805613-0016</small>	Unit 3317-Living Rm - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
1363-Mastic/Vapor <small>151805613-0016A</small>	Unit 3317-Living Rm - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1364-Mastic <small>151805613-0017</small>	Unit 3317-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1364-Floor Tile <small>151805613-0017A</small>	Unit 3317-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
1364-Mastic/Vapor <small>151805613-0017B</small>	Unit 3317-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1364-Leveler <small>151805613-0017C</small>	Unit 3317-Hall - Bottom Layer: Brown Floor Tile w/Black Mastic & Vapor	Gray/White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1365-Drywall <small>151805613-0018</small>	Unit 3317-Kitchen - Drywall w/JC	Brown Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1365-Joint Compound <small>151805613-0018A</small> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3317-Kitchen - Drywall w/JC	White Non-Fibrous Heterogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
1366-Drywall <small>151805613-0019</small>	Unit 3317-Kitchen - Drywall w/JC	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1366-Joint Compound <small>151805613-0019A</small>	Unit 3317-Kitchen - Drywall w/JC	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1366-Texture <small>151805613-0019B</small> <i>Inseparable paint / coating layer included in analysis</i>	Unit 3317-Kitchen - Drywall w/JC	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1367-Sheet Flooring <small>151805613-0020</small>	Unit 3315-Kitchen - Top Layer: Small Rectangle Sheet Floor w/Mastic	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

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**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1367-Mastic <i>151805613-0020A</i>	Unit 3315-Kitchen - Top Layer: Small Rectangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1368-Sheet Flooring <i>151805613-0021</i>	Unit 3315-Bathrm - Top Layer: Small Rectangle Sheet Floor w/Mastic	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1368-Mastic <i>151805613-0021A</i>	Unit 3315-Bathrm - Top Layer: Small Rectangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1369-Sheet Flooring <i>151805613-0022</i>	Unit 3315-Bathrm - Top Layer: Small Rectangle Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1369-Mastic <i>151805613-0022A</i>	Unit 3315-Bathrm - Top Layer: Small Rectangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1370-Sheet Flooring <i>151805613-0023</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1370-Mastic <i>151805613-0023A</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1371-Sheet Flooring <i>151805613-0024</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1371-Mastic <i>151805613-0024A</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1372-Sheet Flooring <i>151805613-0025</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1372-Mastic <i>151805613-0025A</i>	Unit 3317-Bathrm - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1373 <i>151805613-0026</i> <i>Inseparable mastic</i>	Unit 3315-Kitchen - Middle Layer: Marble Sheet Floor w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1374 <i>151805613-0027</i> <i>Inseparable mastic</i>	Unit 3317-Kitchen - Middle Layer: Marble Sheet Floor w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1375 <i>151805613-0028</i> <i>Inseparable mastic</i>	Unit 3317-Kitchen - Middle Layer: Marble Sheet Floor w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1376 <i>151805613-0029</i> <i>Inseparable mastic</i>	Unit 3315-Kitchen - Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile

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**EMSL Order:** 151805613  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1377 <i>151805613-0030</i>	Unit 3317-Kitchen - Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
<i>Inseparable mastic</i>					
1378 <i>151805613-0031</i>	Unit 3317-Kitchen - Middle Bottom Layer: Flower Sheet Floor Bottom Layer: w/Mastic	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
<i>Inseparable mastic</i>					
1379-Flooring <i>151805613-0032</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1379-Floor Tile <i>151805613-0032A</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Red/Black/Blue Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1379-Mastic/Vapor <i>151805613-0032B</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1380-Flooring <i>151805613-0033</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1380-Floor Tile <i>151805613-0033A</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Brown/Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1380-Mastic/Vapor <i>151805613-0033B</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1381-Floor Tile <i>151805613-0034</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Brown/Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1381-Mastic/Vapor <i>151805613-0034A</i>	Unit 3315-Kitchen - Bottom Layer: 12" Red/Blue Specs Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1382 <i>151805613-0035</i>	Exterior-NE - Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1383 <i>151805613-0036</i>	Exterior-E Center - Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					

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**EMSL Order:** 151805613  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1384 <small>151805613-0037</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior-SE - Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1385-Sheet Flooring <small>151805613-0038</small>	Exterior-SW - Exterior Stucco	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1385-Mastic <small>151805613-0038A</small>	Exterior-SW - Exterior Stucco	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1386 <small>151805613-0039A</small>	Exterior-NW - Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1387-Sheet Flooring <small>151805613-0040</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1387-Mastic <small>151805613-0040A</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1388-Sheet Flooring <small>151805613-0041</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	White/Gold Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1388-Mastic <small>151805613-0041A</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1389-Sheet Flooring <small>151805613-0042</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1389-Mastic <small>151805613-0042A</small>	Unit 3317-Kitchen - Top Layer: Small Triangle Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1390-Shingle 1 <small>151805613-0043</small>	Roof-NE - Roof Shingles	Red Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1390-Shingle 2 <small>151805613-0043A</small>	Roof-NE - Roof Shingles	Gray/Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1391-Shingle 1 <small>151805613-0044</small>	Roof-E Center - Roof Shingles	Red Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1391-Shingle 2 <small>151805613-0044A</small>	Roof-E Center - Roof Shingles	Gray/Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1392 <small>151805613-0045</small>	Roof-SE - Roof Shingles	Tan/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

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**EMSL Order:** 151805613

**Customer ID:** 32CITA50D

**Customer PO:** 7076.1017.0

**Project ID:** JS

Analyst(s)

*Jenny Drapela (41)*

*Michelle Leggett (6)*

*Wanda Porch (38)*

Michelle Leggett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Houston, TX NVLAP Lab Code 102106-0, AZ 0925, CO AL-15355, LA 04126, TX 300159

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EMSL Order: 151805612

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/13/2018 2:55 PM

**Analysis Date:** 08/17/2018 - 08/20/2018

**Collected Date:** 07/31/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey / University of California Riverside, Utah St 3342/3344 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1393-Plaster <i>151805612-0001</i> <i>Inseparable paint / coating layer included in analysis</i>	Living Rm - Unit 3342 - Plaster W/Button	White/Green Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1393-Drywall <i>151805612-0001A</i>	Living Rm - Unit 3342 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1394-Plaster <i>151805612-0002</i>	Kitchen - Unit 3342 - Plaster W/Button	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1394-Drywall <i>151805612-0002A</i>	Kitchen - Unit 3342 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1395-Plaster <i>151805612-0003</i>	Bedrm 1 - Unit 3342 - Plaster W/Button	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1395-Drywall <i>151805612-0003A</i>	Bedrm 1 - Unit 3342 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1396-Plaster <i>151805612-0004</i>	Bedrm 2 - Unit 3342 - Plaster W/Button	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1396-Drywall <i>151805612-0004A</i>	Bedrm 2 - Unit 3342 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1397-Plaster <i>151805612-0005</i> <i>Inseparable paint / coating layer included in analysis</i>	Living Rm - Unit 3344 - Plaster W/Button	Gray/White/Green Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1397-Drywall <i>151805612-0005A</i>	Living Rm - Unit 3344 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1398-Plaster 1 <i>151805612-0006</i> <i>Inseparable paint / coating layer included in analysis</i>	Kitchen - Unit 3344 - Plaster W/Button	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1398-Plaster 2 <i>151805612-0006A</i>	Kitchen - Unit 3344 - Plaster W/Button	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1398-Drywall <i>151805612-0006B</i>	Kitchen - Unit 3344 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1399-Plaster <i>151805612-0007</i>	Bedrm 2 - Unit 3344 - Plaster W/Button	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1399-Drywall <i>151805612-0007A</i>	Bedrm 2 - Unit 3344 - Plaster W/Button	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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EMSL Order: 151805612

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1400-Drywall <i>151805612-0008</i>	Kitchen - Unit 3342 - Drywall w/JC	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1400-Joint Compound <i>151805612-0008A</i> <i>Inseparable paint / coating layer included in analysis</i>	Kitchen - Unit 3342 - Drywall w/JC	Gray/White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1401-Drywall <i>151805612-0009</i>	Kitchen - Unit 3344 - Drywall w/JC	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1401-Joint Compound <i>151805612-0009A</i> <i>Inseparable paint / coating layer included in analysis</i>	Kitchen - Unit 3344 - Drywall w/JC	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1402-Floor Tile <i>151805612-0010</i>	Living Rm - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1402-Mastic <i>151805612-0010A</i>	Living Rm - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1403-Floor Tile 1 <i>151805612-0011</i>	Bedrm 2 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1403-Mastic <i>151805612-0011A</i>	Bedrm 2 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1403-Floor Tile 2 <i>151805612-0011B</i>	Bedrm 2 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Brown Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1404-Floor Tile 1 <i>151805612-0012</i>	Bedrm 1 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1404-Mastic <i>151805612-0012A</i>	Bedrm 1 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1404-Floor Tile 2 <i>151805612-0012B</i>	Bedrm 1 - Unit 3342 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1405-Floor Tile <i>151805612-0013</i>	Living Rm - Unit 3344 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1405-Mastic <i>151805612-0013A</i>	Living Rm - Unit 3344 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1406-Floor Tile <i>151805612-0014</i>	Bedrm 2 - Unit 3345 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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EMSL Order: 151805612

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1406-Mastic 151805612-0014A	Bedrm 2 - Unit 3345 - Top Layer 12" Beige w/Specs Tile w/ Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1407-Mastic 151805612-0015	Living Rm - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1407-Floor Tile 151805612-0015A	Living Rm - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1407-Mastic/Vapor 151805612-0015B	Living Rm - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1408-Mastic 151805612-0016	Bedrm 2 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1408-Floor Tile 151805612-0016A	Bedrm 2 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1408-Mastic/Vapor 151805612-0016B	Bedrm 2 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1409-Mastic 151805612-0017	Bedrm 1 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1409-Floor Tile 151805612-0017A	Bedrm 1 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1409-Mastic/Vapor 151805612-0017B	Bedrm 1 - Unit 3342 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1410-Mastic 151805612-0018	Living Rm - Unit 3344 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1410-Floor Tile 151805612-0018A	Living Rm - Unit 3344 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile

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EMSL Order: 151805612

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1410-Mastic/Vapor 151805612-0018B	Living Rm - Unit 3344 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1411-Floor Tile 151805612-0019	Bedrm 2 - Unit 3344 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Brown Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1411-Mastic/Vapor 151805612-0019A	Bedrm 2 - Unit 3344 - Bottom Layer 12" Brown Floor Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1412-Sheet Floor 151805612-0020	Bathrm - Unit 3342 - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1412-Mastic 151805612-0020A	Bathrm - Unit 3342 - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1413-Sheet Floor 151805612-0021	Bathrm - Unit 3344 - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1413-Mastic 151805612-0021A	Bathrm - Unit 3344 - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1414-Sheet Floor 151805612-0022A	Bathrm - Unit 3344 - 6" Square Sheet Floor w/Mastic	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1414-Mastic 151805612-0022B	Bathrm - Unit 3344 - 6" Square Sheet Floor w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1415-Sheet Floor 151805612-0023	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Yellow Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1415-Mastic 151805612-0023A	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1416-Sheet Floor 151805612-0024	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Yellow Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1416-Mastic 151805612-0024A	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1417-Sheet Floor 151805612-0025	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Yellow Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1417-Mastic 151805612-0025A	Kitchen - Unit 3342 - Middle Layer: Yellow Sheet Floor w/Beige Mastic	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 151805612  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1418 <i>151805612-0026</i>	Kitchen - Unit 3342 - Bottom Middle Layer; Flower Sheet Floor	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1419-Sheet Floor <i>151805612-0027</i>	Kitchen - Unit 3342 - Bottom Middle Layer; Flower Sheet Floor	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1419-Floor Tile <i>151805612-0027A</i>	Kitchen - Unit 3342 - Bottom Middle Layer; Flower Sheet Floor	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1419-Mastic <i>151805612-0027B</i>	Kitchen - Unit 3342 - Bottom Middle Layer; Flower Sheet Floor	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1420 <i>151805612-0028</i>	Kitchen - Unit 3342 - Bottom Middle Layer; Flower Sheet Floor	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1421-Floor Tile <i>151805612-0029A</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Tan/Red/Blue Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1421-Mastic/Vapor <i>151805612-0029B</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1422-Floor Tile <i>151805612-0030A</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Tan/Red/Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1422-Mastic/Vapor <i>151805612-0030B</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1423-Floor Tile <i>151805612-0031</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Tan/Red/Blue Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1423-Mastic/Vapor <i>151805612-0031A</i>	Kitchen - Unit 3342 - Bottom Layer: 12" Tan w/Red/Blue w/Black Mastic & Vapor	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
1424 <i>151805612-0032</i>	SW - Exterior Stucco	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1425 <i>151805612-0033</i> <i>Inseparable paint / coating layer included in analysis</i>	S Center - Exterior Stucco	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1426 <i>151805612-0034</i> <i>Inseparable paint / coating layer included in analysis</i>	SE - Exterior Stucco	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1427 <i>151805612-0035</i> <i>Inseparable paint / coating layer included in analysis</i>	NE - Exterior Stucco	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1428 <i>151805612-0036</i> <i>Inseparable paint / coating layer included in analysis</i>	NW - Exterior Stucco	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected

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**EMSL Order:** 151805612

**Customer ID:** 32CITA50D

**Customer PO:** 7076.1017.0

**Project ID:** JS

Analyst(s)

*Jenny Drapela (16)*

*Wanda Porch (57)*

Michelle Leggett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Houston, TX NVLAP Lab Code 102106-0, AZ 0925, CO AL-15355, LA 04126, TX 300159

Initial report from: 08/20/2018 13:08:58





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EMSL Order: 091817954

Customer ID: 32CITA50D

Customer PO: 7076-1017-0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/16/2018 9:00 AM

**Analysis Date:** 08/19/2018 - 08/20/2018

**Collected Date:** 08/01/2018

**Project:** 7076-1017-0 - HALEY & ALDRICH - CANYON CREST FAMILY HOUSING SURVEY - UNIVERSITY OF CALIFORNIA RIVERSIDE-GRAPE ST. 725/727 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1429-Plaster <small>091817954-0001</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1429-Button Board <small>091817954-0001A</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1430-Plaster <small>091817954-0002</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray/White Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1430-Skim Coat <small>091817954-0002A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Tan Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1430-Button Board <small>091817954-0002B</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1431-Plaster <small>091817954-0003</small>	WHITE-PLASTER W/ BUTTON-HALL	Gray Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1431-Button Board <small>091817954-0003A</small>	WHITE-PLASTER W/ BUTTON-HALL	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1432-Plaster <small>091817954-0004</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1432-Button Board <small>091817954-0004A</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1433-Plaster <small>091817954-0005</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1433-Button Board <small>091817954-0005A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1434-Plaster <small>091817954-0006</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1434-Button Board <small>091817954-0006A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1435-Drywall <small>091817954-0007</small>	WHITE-DRYWALL W/ JC-KITCHEN	White/Pink Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1435-Joint Compound <small>091817954-0007A</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1436-Drywall <small>091817954-0008</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected

Initial report from: 08/20/2018 14:02:11



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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1436-Joint Compound <small>091817954-0008A</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1437--Floor Tile <small>091817954-0009</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-LIVING RM	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1437--Mastic <small>091817954-0009A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-LIVING RM	Tan Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
1438--Floor Tile <small>091817954-0010</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-BEDRM 1	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1438--Mastic <small>091817954-0010A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-BEDRM 1	Yellow Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1439--Floor Tile <small>091817954-0011</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-LIVING RM	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1439--Mastic <small>091817954-0011A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-LIVING RM	Tan Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1440--Floor Tile <small>091817954-0012</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-HALL	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1440--Mastic <small>091817954-0012A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-HALL	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1441--Floor Tile <small>091817954-0013</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-BEDRM 1	Beige Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1441--Mastic <small>091817954-0013A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS W/ BEIGE MASTIC-BEDRM 1	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1442-Floor Tile <small>091817954-0014</small>	BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC & VAPOR-LIVING RM	Brown Non-Fibrous Homogeneous		40% Ca Carbonate 56% Non-fibrous (Other)	4% Chrysotile
1442-Mastic <small>091817954-0014A</small>	BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC & VAPOR-LIVING RM	Black Non-Fibrous Homogeneous		40% Matrix 57% Non-fibrous (Other)	3% Chrysotile
1442-Vapor <small>091817954-0014B</small>	BROWN-BOTTOM LAYER 12: BROWN W. BLACK MASTIC & VAPOR-LIVING RM	Black Fibrous Homogeneous	50% Cellulose	30% Matrix 18% Non-fibrous (Other)	2% Chrysotile

Result includes a small amount of inseparable attached material

Initial report from: 08/20/2018 14:02:11



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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1443-Floor Tile <i>091817954-0015</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Brown Non-Fibrous Homogeneous		45% Ca Carbonate 50% Non-fibrous (Other)	5% Chrysotile
1443-Mastic <i>091817954-0015A</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Non-Fibrous Homogeneous		30% Matrix 66% Non-fibrous (Other)	4% Chrysotile
1443-Vapor <i>091817954-0015B</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Fibrous Homogeneous	40% Cellulose	30% Matrix 27% Non-fibrous (Other)	3% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
1444-Floor Tile <i>091817954-0016</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Brown Non-Fibrous Homogeneous		50% Ca Carbonate 45% Non-fibrous (Other)	5% Chrysotile
1444-Mastic <i>091817954-0016A</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1444-Vapor <i>091817954-0016B</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Fibrous Homogeneous	35% Cellulose	40% Matrix 25% Non-fibrous (Other)	None Detected
1445-Floor Tile <i>091817954-0017</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-HALL	Brown Non-Fibrous Homogeneous		45% Ca Carbonate 50% Non-fibrous (Other)	5% Chrysotile
1445-Mastic <i>091817954-0017A</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-HALL	Black Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1445-Vapor <i>091817954-0017B</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-HALL	Brown/Black Fibrous Homogeneous	45% Cellulose	30% Matrix 25% Non-fibrous (Other)	None Detected
1446-Floor Tile <i>091817954-0018</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Brown Non-Fibrous Homogeneous		50% Ca Carbonate 45% Non-fibrous (Other)	5% Chrysotile
1446-Mastic <i>091817954-0018A</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1446-Vapor <i>091817954-0018B</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Fibrous Homogeneous	45% Cellulose	30% Matrix 25% Non-fibrous (Other)	None Detected
1447-Sheet Flooring <i>091817954-0019</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1447-Mastic <i>091817954-0019A</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	Beige Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1448-Sheet Flooring <i>091817954-0020</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	17% Cellulose	30% Ca Carbonate 53% Non-fibrous (Other)	None Detected
1448-Mastic <i>091817954-0020A</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	Beige Non-Fibrous Homogeneous		45% Matrix 55% Non-fibrous (Other)	None Detected
1449-Sheet Flooring <i>091817954-0021</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1449-Mastic <i>091817954-0021A</i>	WHITE-SMALL RECTANGLES SHEET FLOORING W/ MASTIC-BATH RM	Beige Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1450-Sheet Floor <i>091817954-0022</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1450-Mastic <i>091817954-0022A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous	3% Cellulose	40% Matrix 57% Non-fibrous (Other)	None Detected
1451-Sheet Floor <i>091817954-0023</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1451-Mastic <i>091817954-0023A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous	2% Cellulose	50% Matrix 48% Non-fibrous (Other)	None Detected
1452-Sheet Floor <i>091817954-0024</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	White Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1452-Mastic <i>091817954-0024A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous	2% Cellulose	50% Matrix 48% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1453-Sheet Flooring <i>091817954-0025</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Green/Beige Fibrous Homogeneous	10% Cellulose	30% Ca Carbonate 45% Non-fibrous (Other)	15% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1453-Mastic <i>091817954-0025A</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Yellow Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1454-Sheet Flooring <i>091817954-0026</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Green/Beige Fibrous Homogeneous	10% Cellulose	30% Ca Carbonate 48% Non-fibrous (Other)	12% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1454-Mastic <i>091817954-0026A</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Tan Non-Fibrous Homogeneous		30% Matrix 70% Non-fibrous (Other)	None Detected
1455-Sheet Flooring <i>091817954-0027</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Green/Beige Fibrous Homogeneous	10% Cellulose	30% Ca Carbonate 45% Non-fibrous (Other)	15% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1455-Mastic <i>091817954-0027A</i>	BEIGE-GREEN FLOWER SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Tan Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1456-Sheet Flooring <i>091817954-0028</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1456-Mastic <i>091817954-0028A</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Beige Non-Fibrous Homogeneous		30% Matrix 70% Non-fibrous (Other)	None Detected
1456-Vapor <i>091817954-0028B</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Black Fibrous Homogeneous	65% Cellulose	25% Matrix 10% Non-fibrous (Other)	None Detected
1457-Sheet Flooring <i>091817954-0029</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1457-Mastic <i>091817954-0029A</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected

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**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1457-Vapor <i>091817954-0029B</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Black Fibrous Homogeneous	50% Cellulose	25% Matrix 25% Non-fibrous (Other)	None Detected
1458-Sheet Flooring <i>091817954-0030</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	20% Cellulose	30% Matrix 35% Non-fibrous (Other)	15% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1458-Mastic <i>091817954-0030A</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1458-Vapor <i>091817954-0030B</i>	TAN-RED/BLUE SPECS SHEET FLOOR W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Gray Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1459-Sheet Flooring <i>091817954-0031</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Brown/Beige Fibrous Homogeneous	10% Cellulose	20% Ca Carbonate 58% Non-fibrous (Other)	12% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1459-Mastic <i>091817954-0031A</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Green Non-Fibrous Homogeneous		45% Matrix 55% Non-fibrous (Other)	None Detected
1460-Sheet Flooring <i>091817954-0032</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Brown/Beige Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 43% Non-fibrous (Other)	12% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1460-Mastic <i>091817954-0032A</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Tan Non-Fibrous Homogeneous		45% Matrix 55% Non-fibrous (Other)	None Detected
1461-Sheet Flooring <i>091817954-0033</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN	Brown/Beige Fibrous Homogeneous	10% Cellulose	20% Ca Carbonate 55% Non-fibrous (Other)	15% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1461-Mastic <i>091817954-0033A</i>	BEIGE-BROWN DESIGN SHEET FL W/ MASTIC-MIDDLE LAYER KITCHEN				Not Submitted
<i>No Mastic present in sample</i>					
1462-Sheet Flooring <i>091817954-0034</i>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Green Non-Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1462-Mastic <small>091817954-0034A</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Brown/Black Non-Fibrous Homogeneous	4% Cellulose	50% Matrix 46% Non-fibrous (Other)	None Detected
1462-Backing <small>091817954-0034B</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	10% Cellulose	70% Non-fibrous (Other)	20% Chrysotile
1462-Vapor <small>091817954-0034C</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1463-Sheet Flooring <small>091817954-0035</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Green Non-Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1463-Mastic <small>091817954-0035A</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1463-Backing <small>091817954-0035B</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	15% Cellulose	65% Non-fibrous (Other)	20% Chrysotile
1463-Vapor <small>091817954-0035C</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Black Fibrous Homogeneous	45% Cellulose	30% Matrix 25% Non-fibrous (Other)	None Detected
1464-Sheet Flooring <small>091817954-0036</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Green Non-Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1464-Mastic <small>091817954-0036A</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Brown Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1464-Backing <small>091817954-0036B</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Tan Fibrous Homogeneous	10% Cellulose	68% Non-fibrous (Other)	22% Chrysotile
1464-Vapor <small>091817954-0036C</small>	GREEN-GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BOTTOM LAYER KITCHEN	Gray/Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
1465 <small>091817954-0037</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	10% Cellulose	50% Ca Carbonate 40% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817954  
**Customer ID:** 32CITA50D  
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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1466 <small>091817954-0038</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	12% Cellulose	50% Ca Carbonate 38% Non-fibrous (Other)	None Detected
1467 <small>091817954-0039</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	10% Cellulose	50% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1468 <small>091817954-0040</small>	WHITE-EXTERIOR STUCCO-SE	Gray/White Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
1469 <small>091817954-0041</small>	WHITE-EXTERIOR STUCCO-S CENTER	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1470 <small>091817954-0042</small>	WHITE-EXTERIOR STUCCO-SW	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1471 <small>091817954-0043</small>	WHITE-EXTERIOR STUCCO-NW	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1472 <small>091817954-0044</small>	WHITE-EXTERIOR STUCCO-NE	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
1473-Shingle <small>091817954-0045</small>	RED-ROOF SHINGLES-SE	Red Fibrous Homogeneous	12% Glass	10% Quartz 60% Matrix 18% Non-fibrous (Other)	None Detected
1473-Shingle 2 <small>091817954-0045A</small>	RED-ROOF SHINGLES-SE	Black Fibrous Homogeneous	10% Glass	8% Quartz 60% Matrix 22% Non-fibrous (Other)	None Detected
1474-Shingle <small>091817954-0046</small>	RED-ROOF SHINGLES-S CENTER	Red Fibrous Homogeneous	15% Glass	10% Quartz 60% Matrix 15% Non-fibrous (Other)	None Detected
1474-Shingle 2 <small>091817954-0046A</small>	RED-ROOF SHINGLES-S CENTER	Black Fibrous Homogeneous	12% Glass	10% Quartz 50% Matrix 28% Non-fibrous (Other)	None Detected
1475-Shingle <small>091817954-0047</small>	RED-ROOF SHINGLES-SW	Red Fibrous Homogeneous	10% Glass	10% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected
1475-Shingle 2 <small>091817954-0047A</small>	RED-ROOF SHINGLES-SW	Black Fibrous Homogeneous	15% Glass	10% Quartz 65% Matrix 10% Non-fibrous (Other)	None Detected
1476-Plaster <small>091817954-0048</small>	WHITE-PLASTER W/ BUTTON-BATHRM	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1476-Button Board <small>091817954-0048A</small>	WHITE-PLASTER W/ BUTTON-BATHRM	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected

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**Customer ID:** 32CITA50D

**Customer PO:** 7076-1017-0

**Project ID:** JS

Analyst(s)

Beheshta Ahadi (102)

Matthew Batongbacal  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

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EMSL Order: 141804506

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
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**Fax:** (714) 547-4647

**Received Date:** 08/13/2018 2:55 PM

**Analysis Date:** 08/20/2018

**Collected Date:** 08/02/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1477-Plaster <small>141804506-0001</small>	815 - 1st - Living Room - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1477-Drywall <small>141804506-0001A</small>	815 - 1st - Living Room - White - Plaster w/ Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1478-Plaster <small>141804506-0002</small>	815 - 1st - Kitchen - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1478-Drywall <small>141804506-0002A</small>	815 - 1st - Kitchen - White - Plaster w/ Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1479-Plaster <small>141804506-0003</small>	815 - 1st - Bedroom 1 - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1479-Drywall <small>141804506-0003A</small>	815 - 1st - Bedroom 1 - White - Plaster w/ Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1480-Plaster <small>141804506-0004</small>	815 - 1st - Bedroom 2 - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1480-Drywall <small>141804506-0004A</small>	815 - 1st - Bedroom 2 - White - Plaster w/ Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1481-Plaster <small>141804506-0005</small>	813 - 1st - Living Rm - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1481-Drywall <small>141804506-0005A</small>	813 - 1st - Living Rm - White - Plaster w/ Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1482-Plaster <small>141804506-0006</small>	813 - 1st - Bathroom - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		

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**EMSL Order:** 141804506  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1482-Drywall <small>141804506-0006A</small> <i>Paper and gypsum layers included in analysis.</i>	813 - 1st - Bathroom - White - Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1483-Plaster <small>141804506-0007</small>	813 - 1st - Bedroom 2 - White - Plaster w/ Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1483-Drywall <small>141804506-0007A</small> <i>Paper and gypsum layers included in analysis.</i>	813 - 1st - Bedroom 2 - White - Plaster w/ Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1484-Drywall <small>141804506-0008</small> <i>Paper and gypsum layers included in analysis.</i>	815 - 1st - Kitchen - White - Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1484-Joint Compound <small>141804506-0008A</small>	815 - 1st - Kitchen - White - Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1485-Drywall <small>141804506-0009</small> <i>Paper and gypsum layers included in analysis.</i>	813 - 1st - Kitchen - White - Drywall w/ J.C.	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1485-Joint Compound <small>141804506-0009A</small>	813 - 1st - Kitchen - White - Drywall w/ J.C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1486-Floor Tile <small>141804506-0010</small>	815 - 1st - Living Rm - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1486-Mastic <small>141804506-0010A</small>	815 - 1st - Living Rm - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1487-Floor Tile <small>141804506-0011</small>	815 - 1st - Hall - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1487-Mastic <small>141804506-0011A</small>	815 - 1st - Hall - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1488-Floor Tile <small>141804506-0012</small>	815 - 815 - Bedroom 1 - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		

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**EMSL Order:** 141804506  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1488-Mastic <small>141804506-0012A</small>	815 - 815 - Bedroom 1 - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-50</small>					
1489-Floor Tile <small>141804506-0013</small>	813 - 1st - Living Rm - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-50</small>					
1489-Mastic <small>141804506-0013A</small>	813 - 1st - Living Rm - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-50</small>					
1490-Floor Tile <small>141804506-0014</small>	813 - 1st - Bedroom 2 - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-50</small>					
1490-Mastic <small>141804506-0014A</small>	813 - 1st - Bedroom 2 - Beige - Top Layer: 12" Beige w/ Specs W/ Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-50</small>					
1491-Floor Tile <small>141804506-0015</small>	815 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
<small>HA: 12VFT-51</small>					
1491-Mastic <small>141804506-0015A</small>	815 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
<small>HA: 12VFT-51</small>					
1491-Vapor Barrier <small>141804506-0015B</small>	815 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-51</small>					
1492-Floor Tile <small>141804506-0016</small>	815 - 1st - Hall - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
<small>HA: 12VFT-51</small>					
1492-Mastic <small>141804506-0016A</small>	815 - 1st - Hall - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
<small>HA: 12VFT-51</small>					
1492-Vapor Barrier <small>141804506-0016B</small>	815 - 1st - Hall - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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**EMSL Order:** 141804506  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: 12VFT-51					
1493-Floor Tile <small>141804506-0017</small>	815 - 1st - Bedrm 1 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					
1493-Mastic <small>141804506-0017A</small>	815 - 1st - Bedrm 1 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
HA: 12VFT-51					
1493-Vapor Barrier <small>141804506-0017B</small>	815 - 1st - Bedrm 1 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-51					
1494-Floor Tile <small>141804506-0018</small>	813 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					
1494-Mastic <small>141804506-0018A</small>	813 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
HA: 12VFT-51					
1494-Vapor Barrier <small>141804506-0018B</small>	813 - 1st - Living Rm - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-51					
1495-Floor Tile <small>141804506-0019</small>	813 - 1st - Bedrm 2 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					
1495-Mastic <small>141804506-0019A</small>	813 - 1st - Bedrm 2 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
HA: 12VFT-51					
1495-Vapor Barrier <small>141804506-0019B</small>	813 - 1st - Bedrm 2 - Brown - Bottom Layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-51					
1496-Sheet Flooring <small>141804506-0020</small>	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-56					

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**EMSL Order:** 141804506  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1496-Mastic 141804506-0020A	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1496-Vapor Barrier 141804506-0020B	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1497-Sheet Flooring 141804506-0021	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1497-Mastic 141804506-0021A	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1497-Vapor Barrier 141804506-0021B	813 - 1st - Kitchen - White - 6" Square Sheet Floor w/ Mastic & Vapor	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1498-Sheet Flooring 141804506-0022	813 - 1st - Bathrm - White - 6" Square Sheet Floor w/ Mastic & Vapor	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1498-Mastic 141804506-0022A	813 - 1st - Bathrm - White - 6" Square Sheet Floor w/ Mastic & Vapor	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1498-Vapor Barrier 141804506-0022B	813 - 1st - Bathrm - White - 6" Square Sheet Floor w/ Mastic & Vapor	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
			HA: VSF-56		
1499-Sheet Flooring 141804506-0023	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
			HA: VSF-59		
1499-Mastic 141804506-0023A	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: VSF-59		
1500-Sheet Flooring 141804506-0024	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
			HA: VSF-59		
1500-Mastic 141804506-0024A	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 141804506  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: VSF-59					
1501-Sheet Flooring 141804506-0025	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
HA: VSF-59					
1501-Mastic 141804506-0025A	813 - 1st - Bathrm - Yellow - Bottom Layer: Yellow Floor Sheet w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-59					
1502 141804506-0026	815 - 1st - Kitchen - White - Small Triangle Sheet Flooring	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1503 141804506-0027	815 - 1st - Kitchen - White - Small Triangle Sheet Flooring	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1504 141804506-0028	815 - 1st - Kitchen - White - Small Triangle Sheet Flooring	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1505-Sheet Flooring 141804506-0029	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-60					
1505-Mastic 141804506-0029A	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-60					
1506-Sheet Flooring 141804506-0030	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-60					
1506-Mastic 141804506-0030A	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-60					
1507-Sheet Flooring 141804506-0031	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-60					
1507-Mastic 141804506-0031A	815 - 1st - Bathrm - White - Rectangle Sheet Floor w/ Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-60					
1508 141804506-0032	Exterior - 1st - S.E. - White - Exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1509 141804506-0033	Exterior - 1st - W. Center - White - Exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1510 141804506-0034	Exterior - 1st - N.W. - White - Exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: ES-50					
1511 <small>141804506-0035</small>	Exterior - 1st - N.E. - White - Exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1512 <small>141804506-0036</small>	Exterior - 1st - S.E. - White - Exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1513-Shingle <small>141804506-0037</small>	Roof - 1st - S.W. - Red - Roof Shingles	Gray/Black Fibrous Homogeneous	70% Glass	30% Non-fibrous (Other)	None Detected
HA: RS-50					
1513-Shingle <small>141804506-0037A</small>	Roof - 1st - S.W. - Red - Roof Shingles	Black/Yellow Fibrous Homogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
HA: RS-50					
1513-Shingle <small>141804506-0037B</small>	Roof - 1st - S.W. - Red - Roof Shingles	Red/Black Fibrous Homogeneous	50% Glass	50% Non-fibrous (Other)	None Detected
HA: RS-50					
1514-Shingle <small>141804506-0038</small>	Roof - 1st - S.W. - Red - Roof Shingles	Gray/Black Fibrous Homogeneous	70% Glass	30% Non-fibrous (Other)	None Detected
HA: RS-50					
1514-Shingle <small>141804506-0038A</small>	Roof - 1st - S.W. - Red - Roof Shingles	Black/Yellow Fibrous Homogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
HA: RS-50					
1514-Shingle <small>141804506-0038B</small>	Roof - 1st - S.W. - Red - Roof Shingles	Red/Black Fibrous Homogeneous	50% Glass	50% Non-fibrous (Other)	None Detected
HA: RS-50					
1515-Shingle <small>141804506-0039</small>	Roof - 1st - S.E. - Red - Roof Shingles	Gray/Black Fibrous Homogeneous	70% Glass	30% Non-fibrous (Other)	None Detected
HA: RS-50					
1515-Shingle <small>141804506-0039A</small>	Roof - 1st - S.E. - Red - Roof Shingles	Black/Yellow Fibrous Homogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
HA: RS-50					
1515-Shingle <small>141804506-0039B</small>	Roof - 1st - S.E. - Red - Roof Shingles	Red/Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
HA: RS-50					

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**EMSL Order:** 141804506

**Customer ID:** 32CITA50D

**Customer PO:**

**Project ID:**

Analyst(s)

Tom Hanes (81)

Rhonda McGee, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NVLAP Lab Code 200056-0

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EMSL Order: 091817967

Customer ID: 32CITA50D

Customer PO: 7076-1017-0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/15/2018 9:00 AM

**Analysis Date:** 08/17/2018 - 08/19/2018

**Collected Date:** 08/02/2018

**Project:** 7076-1017-0 - HALEY & ALDRICH - CANYON CREST FAMILY HOUSING SURVEY - UNIVERSITY OF CALIFORNIA RIVERSIDE-GRAPE ST 840/842 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1516-Plaster <small>091817967-0001</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray/White Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1516-Button Board <small>091817967-0001A</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1517-Plaster <small>091817967-0002</small>	WHITE-PLASTER W/ BUTTON-HALL	Gray/White Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1517-Button Board <small>091817967-0002A</small>	WHITE-PLASTER W/ BUTTON-HALL	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1518-Plaster <small>091817967-0003</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray/White Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1518-Button Board <small>091817967-0003A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1519-Plaster <small>091817967-0004</small>	WHITE-PLASTER W/ BUTTON-KITCHEN	Gray/White Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1519-Button Board <small>091817967-0004A</small>	WHITE-PLASTER W/ BUTTON-KITCHEN	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1520-Plaster <small>091817967-0005</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray/White Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
1520-Button Board <small>091817967-0005A</small>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1521-Plaster <small>091817967-0006</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray/White Non-Fibrous Homogeneous		25% Quartz 50% Gypsum 25% Non-fibrous (Other)	None Detected
1521-Drywall <small>091817967-0006A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1522-Plaster <small>091817967-0007</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray/White Non-Fibrous Homogeneous		25% Quartz 50% Gypsum 25% Non-fibrous (Other)	None Detected
1522-Drywall <small>091817967-0007A</small>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1523-Drywall <small>091817967-0008</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1523-Joint Compound <small>091817967-0008A</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817967  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1524-Drywall <small>091817967-0009</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
1524-Joint Compound <small>091817967-0009A</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous	3% Cellulose	80% Ca Carbonate 17% Non-fibrous (Other)	None Detected
1524-Joint Compound 2 <small>091817967-0009B</small>	WHITE-DRYWALL W/ JC-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1525-Floor Tile <small>091817967-0010</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-LIVING RM	Tan/Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1525-Mastic <small>091817967-0010A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-LIVING RM	Tan/Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1526-Floor Tile <small>091817967-0011</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 1	Tan/Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1526-Mastic <small>091817967-0011A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 1	Tan/Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1527-Floor Tile <small>091817967-0012</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 2	Tan/Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1527-Mastic <small>091817967-0012A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 2	Tan/Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1528-Floor Tile <small>091817967-0013</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-LIVING RM	Tan/Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1528-Mastic <small>091817967-0013A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-LIVING RM	Tan/Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1529-Floor Tile <small>091817967-0014</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 1	Tan/Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1529-Mastic <small>091817967-0014A</small>	BEIGE-TOP LAYER 12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BEDRM 1	Tan/Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817967  
**Customer ID:** 32CITA50D  
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**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1530-Floor Tile 091817967-0015	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Brown/Tan Non-Fibrous Homogeneous		80% Ca Carbonate 17% Non-fibrous (Other)	3% Chrysotile
1530-Mastic 091817967-0015A	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1530-Felt 091817967-0015B	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected
1531-Floor Tile 091817967-0016	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Brown/Tan Non-Fibrous Homogeneous		80% Ca Carbonate 17% Non-fibrous (Other)	3% Chrysotile
1531-Mastic 091817967-0016A	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1531-Felt 091817967-0016B	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected
1532-Floor Tile 091817967-0017	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 2	Brown/Tan Non-Fibrous Homogeneous		80% Ca Carbonate 17% Non-fibrous (Other)	3% Chrysotile
1532-Mastic 091817967-0017A	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 2	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1532-Felt 091817967-0017B	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 2	Black Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected
1533-Floor Tile 091817967-0018	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Brown/Tan Non-Fibrous Homogeneous		80% Matrix 18% Non-fibrous (Other)	2% Chrysotile
1533-Mastic 091817967-0018A	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1533-Felt 091817967-0018B	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-LIVING RM	Black Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected

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EMSL Order: 091817967

Customer ID: 32CITA50D

Customer PO: 7076-1017-0

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1534-Floor Tile <i>091817967-0019</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Brown/Tan Non-Fibrous Homogeneous		80% Ca Carbonate 17% Non-fibrous (Other)	3% Chrysotile
1534-Mastic <i>091817967-0019A</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1534-Felt <i>091817967-0019B</i>	BROWN-BOTTOM LAYER 12" BROWN FLOOR TILE W/ BLACK MASTIC & VAPOR-BEDRM 1	Black Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected
1535-Vinyl Sheet Flooring <i>091817967-0020</i> <i>This is a composite result of both vinyl and backing layer</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN	Beige Fibrous Homogeneous	25% Cellulose 5% Glass	40% Matrix 30% Non-fibrous (Other)	None Detected
1535-Mastic <i>091817967-0020A</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN				Insufficient Material
1536-Vinyl Sheet Flooring <i>091817967-0021</i> <i>This is a composite result of both vinyl and backing layer</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN	Beige Fibrous Homogeneous	25% Cellulose 5% Glass	40% Matrix 30% Non-fibrous (Other)	None Detected
1536-Mastic <i>091817967-0021A</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN				Insufficient Material
1537-Vinyl Sheet Flooring <i>091817967-0022</i> <i>This is a composite result of both vinyl and backing layer</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN	Beige Non-Fibrous Homogeneous	25% Cellulose 5% Glass	40% Matrix 30% Non-fibrous (Other)	None Detected
1537-Mastic <i>091817967-0022A</i>	WHITE TOP LAYER SMALL TRIANGLES SHEET FLOOR W/ MASTIC-KITCHEN				Insufficient Material
1538-Vinyl Sheet Flooring <i>091817967-0023</i> <i>This is a composite result of both vinyl and backing layer</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-KITCHEN	Brown/Tan Fibrous Homogeneous	5% Cellulose	40% Matrix 30% Non-fibrous (Other)	25% Chrysotile
1538-Mastic <i>091817967-0023A</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-KITCHEN				Insufficient Material
1539-Vinyl Sheet Flooring <i>091817967-0024</i> <i>This is a composite result of both vinyl and backing layer</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-KITCHEN	Beige Fibrous Homogeneous	5% Cellulose	40% Matrix 30% Non-fibrous (Other)	25% Chrysotile

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**EMSL Order:** 091817967  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1539-Mastic <i>091817967-0024A</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-KITCHEN	Brown Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
1540-Vinyl Sheet Flooring <i>091817967-0025</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	Beige Fibrous Homogeneous	5% Cellulose	40% Matrix 30% Non-fibrous (Other)	25% Chrysotile
1540-Mastic <i>091817967-0025A</i>	YELLOW-BROWN FLOWER SHEET FLOOR W/ MASTIC BOTTOM LAYER-BATHRM				Insufficient Material
1541-Vinyl Sheet Flooring <i>091817967-0026</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	Gray/White Fibrous Homogeneous	50% Cellulose	30% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1541-Mastic <i>091817967-0026A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1542-Vinyl Sheet Flooring <i>091817967-0027</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	Gray/White Fibrous Homogeneous	50% Cellulose	30% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1542-Mastic <i>091817967-0027A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1543-Vinyl Sheet Flooring <i>091817967-0028</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM <i>This is a composite result of both vinyl and backing layer</i>	Gray/White Fibrous Homogeneous	50% Cellulose	30% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1543-Mastic <i>091817967-0028A</i>	WHITE-6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Tan/Yellow Non-Fibrous Homogeneous		85% Matrix 15% Non-fibrous (Other)	None Detected
1544-Vinyl Sheet Flooring <i>091817967-0029</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	White Non-Fibrous Homogeneous	5% Cellulose	15% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	None Detected
1544-Mastic <i>091817967-0029A</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
1545-Vinyl Sheet Flooring <i>091817967-0030</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	White Non-Fibrous Homogeneous	5% Cellulose	15% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	None Detected
1545-Mastic <i>091817967-0030A</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817967  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1546-Vinyl Sheet Flooring <i>091817967-0031</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	White Non-Fibrous Homogeneous	10% Cellulose	15% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1546-Mastic <i>091817967-0031A</i>	WHITE-TOP LAYER SMALL RECTANGLE SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous	20% Cellulose	70% Matrix 10% Non-fibrous (Other)	None Detected
1547 <i>091817967-0032</i>	WHITE-EXTERIOR STUCCO-NW	Gray Non-Fibrous Homogeneous		20% Quartz 40% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1548 <i>091817967-0033</i>	WHITE-EXTERIOR STUCCO-SW	White Non-Fibrous Homogeneous		25% Quartz 40% Gypsum 35% Non-fibrous (Other)	None Detected
1549 <i>091817967-0034</i>	WHITE-EXTERIOR STUCCO-S CENTER	Gray Non-Fibrous Homogeneous		20% Quartz 40% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1550 <i>091817967-0035</i>	WHITE-EXTERIOR STUCCO-SE	Gray Non-Fibrous Homogeneous	5% Cellulose	20% Quartz 35% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1551 <i>091817967-0036</i>	WHITE-EXTERIOR STUCCO-NE	Gray/White Non-Fibrous Homogeneous		25% Quartz 30% Ca Carbonate 45% Non-fibrous (Other)	None Detected
1552-Shingle <i>091817967-0037</i>	RED-ROOF SHINGLES-NW	Red/Black Non-Fibrous Homogeneous	3% Glass	10% Quartz 25% Ca Carbonate 50% Matrix 12% Non-fibrous (Other)	None Detected
1552-Shingle 2 <i>091817967-0037A</i>	RED-ROOF SHINGLES-NW	Black Non-Fibrous Homogeneous	5% Glass	20% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1552-Tar <i>091817967-0037B</i>	RED-ROOF SHINGLES-NW	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1553-Shingle <i>091817967-0038</i>	RED-ROOF SHINGLES-N CENTER	Red/Black Non-Fibrous Homogeneous	5% Glass	20% Ca Carbonate 50% Matrix 25% Non-fibrous (Other)	None Detected
1553-Shingle 2 <i>091817967-0038A</i>	RED-ROOF SHINGLES-N CENTER	Brown/Red/Black Non-Fibrous Homogeneous	3% Glass	25% Ca Carbonate 50% Matrix 22% Non-fibrous (Other)	None Detected
1553-Tar <i>091817967-0038B</i>	RED-ROOF SHINGLES-N CENTER	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1554-Shingle <i>091817967-0039</i>	RED-ROOF SHINGLES-NE	Red/Black Non-Fibrous Homogeneous	5% Glass	15% Quartz 15% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
1554-Shingle 2 <i>091817967-0039A</i>	RED-ROOF SHINGLES-NE	Brown/Black Non-Fibrous Homogeneous	4% Glass	15% Ca Carbonate 60% Matrix 21% Non-fibrous (Other)	None Detected
1554-Tar <i>091817967-0039B</i>	RED-ROOF SHINGLES-NE	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected

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**Project ID:** JS

Analyst(s)

*Jared Martin (7)*

*Kevin Lares (29)*

*Oscar Merino (41)*

Matthew Batongbacal  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 08/19/2018 22:08:59





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EMSL Order: 141804507

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
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**Received Date:** 08/13/2018 2:55 PM

**Analysis Date:** 08/20/2018

**Collected Date:** 08/07/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1555-Plaster <small>141804507-0001</small>	Living Rm - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1555-Drywall <small>141804507-0001A</small>	Living Rm - White Plaster w/Button <i>Paper and gypsum layers included in analysis.</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1556-Plaster <small>141804507-0002</small>	kitchen - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1556-Drywall <small>141804507-0002A</small>	kitchen - White Plaster w/Button <i>Paper and gypsum layers included in analysis</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1557-Plaster <small>141804507-0003</small>	Bedroom 1 - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1557-Drywall <small>141804507-0003A</small>	Bedroom 1 - White Plaster w/Button <i>Paper and gypsum layers included in analysis</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1558-Plaster <small>141804507-0004</small>	Bedroom 2 - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1558-Drywall <small>141804507-0004A</small>	Bedroom 2 - White Plaster w/Button <i>Paper and gypsum layers included in analysis</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1559-Plaster <small>141804507-0005</small>	Living Rm. - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1559-Drywall <small>141804507-0005A</small>	Living Rm. - White Plaster w/Button <i>Paper and gypsum layers included in analysis</i>	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1560-Plaster <small>141804507-0006</small>	Bedroom 1 - White Plaster w/Button	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1560-Drywall <small>141804507-0006A</small> <i>Paper and gypsum layers included in analysis</i>	Bedroom 1 - White Plaster w/Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1561-Plaster <small>141804507-0007</small>	Bedroom 2 - White Plaster w/Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1561-Drywall <small>141804507-0007A</small> <i>Paper and gypsum layers included in analysis</i>	Bedroom 2 - White Plaster w/Button	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WPF-50		
1562-Drywall <small>141804507-0008</small> <i>Paper and gypsum layers included in analysis</i>	Kitchen - White Drywall w/Joint C.	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1562-Joint Compound <small>141804507-0008A</small>	Kitchen - White Drywall w/Joint C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1563-Drywall <small>141804507-0009</small> <i>Paper and gypsum layers included in analysis</i>	Kitchen - White Drywall w/Joint C.	Brown/Pink Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1563-Joint Compound <small>141804507-0009A</small>	Kitchen - White Drywall w/Joint C.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: WS/J-50		
1564-Floor Tile <small>141804507-0010</small>	Living Rm. - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1564-Mastic <small>141804507-0010A</small>	Living Rm. - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1565-Floor Tile <small>141804507-0011</small>	Hall - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1565-Mastic <small>141804507-0011A</small>	Hall - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1566-Floor Tile <small>141804507-0012</small>	Bedroom 2 - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT-50		
1566-Mastic <small>141804507-0012A</small>	Bedroom 2 - Beige Top layer: 12" Beige w/Specs Tile w/o black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: 12VFT-50					
1567-Floor Tile 141804507-0013	Living Rm - Beige Top layer: 12" Beige w/specs tile w/ beige mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 12VFT-50					
1567-Mastic 141804507-0013A	Living Rm - Beige Top layer: 12" Beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 12VFT-50					
1568-Floor Tile 141804507-0014	Bedroom 2 - Beige Top layer: 12" Beige w/specs tile w/ beige mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 12VFT-50					
1568-Mastic 141804507-0014A	Bedroom 2 - Beige Top layer: 12" Beige w/specs tile w/ beige mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 12VFT-50					
1569-Floor Tile 141804507-0015	Living Rm - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					
1569-Mastic 141804507-0015A	Living Rm - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
HA: 12VFT-51					
1569-Vapor Barrier 141804507-0015B	Living Rm - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-51					
1570-Floor Tile 141804507-0016	Hall - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					
1570-Mastic 141804507-0016A	Hall - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
HA: 12VFT-51					
1570-Vapor Barrier 141804507-0016B	Hall - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-51					
1571-Floor Tile 141804507-0017	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HA: 12VFT-51					

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1571-Mastic <small>141804507-0017A</small>	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
<small>HA: 12VFT-51</small>					
1571-Vapor Barrier <small>141804507-0017B</small>	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-51</small>					
1572-Floor Tile <small>141804507-0018</small>	Living Rm. - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
<small>HA: 12VFT-51</small>					
1572-Mastic <small>141804507-0018A</small>	Living Rm. - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
<small>HA: 12VFT-51</small>					
1572-Vapor Barrier <small>141804507-0018B</small>	Living Rm. - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-51</small>					
1573-Floor Tile <small>141804507-0019</small>	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Brown Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
<small>HA: 12VFT-51</small>					
1573-Mastic <small>141804507-0019A</small>	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
<small>HA: 12VFT-51</small>					
1573-Vapor Barrier <small>141804507-0019B</small>	Bedroom 2 - Brown Bottom layer: 12" Brown Tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
<small>HA: 12VFT-51</small>					
1574-Sheet Flooring <small>141804507-0020</small>	Kitchen - White Top layer: 6" Square Sheet H	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
<small>HA: VSF-56</small>					
1574-Mastic <small>141804507-0020A</small>	Kitchen - White Top layer: 6" Square Sheet H	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF-56</small>					
1575-Sheet Flooring <small>141804507-0021</small>	Bathroom - White Top layer: 6" Square Sheet H	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
<small>HA: VSF-56</small>					
1575-Mastic <small>141804507-0021A</small>	Bathroom - White Top layer: 6" Square Sheet H	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF-56</small>					
1576-Sheet Flooring <small>141804507-0022</small>	Kitchen - White Top layer: 6" Square Sheet H	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
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**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: VSF-56					
1576-Mastic 141804507-0022A	Kitchen - White Top layer: 6" Square Sheet H	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-56					
1577-Sheet Flooring 141804507-0023	Bathroom - White Small Triangles Sheet Flooring w/Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1577-Mastic 141804507-0023A	Bathroom - White Small Triangles Sheet Flooring w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-57					
1578-Sheet Flooring 141804507-0024	Bathroom - White Small Triangles Sheet Flooring w/Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1578-Mastic 141804507-0024A	Bathroom - White Small Triangles Sheet Flooring w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-57					
1579-Sheet Flooring 141804507-0025	Bathroom - White Small Triangles Sheet Flooring w/Mastic	White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HA: VSF-57					
1579-Mastic 141804507-0025A	Bathroom - White Small Triangles Sheet Flooring w/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-57					
1580-Sheet Flooring 141804507-0026	Kitchen - White Middle layer: Brown Flower Sheet Flooring w/Mastic	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: VSF-58					
1580-Mastic 141804507-0026A	Kitchen - White Middle layer: Brown Flower Sheet Flooring w/Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-58					
1581-Sheet Flooring 141804507-0027	Kitchen - White Middle layer: Brown Flower Sheet Flooring w/Mastic	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: VSF-58					
1581-Mastic 141804507-0027A	Kitchen - White Middle layer: Brown Flower Sheet Flooring w/Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: VSF-58					
1582 141804507-0028	Bathroom - White Middle layer: Brown Flower Sheet Flooring w/Mastic	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: VSF-58					
1583-Floor Tile 141804507-0029	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: 12VFT-54					

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1583-Vapor Barrier 141804507-0029A	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-54					
1584-Floor Tile 141804507-0030	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: 12VFT-54					
1584-Vapor Barrier 141804507-0030A	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-54					
1585-Floor Tile 141804507-0031	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Tan Fibrous Homogeneous		60% Non-fibrous (Other)	40% Chrysotile
HA: 12VFT-54					
1585-Vapor Barrier 141804507-0031A	Kitchen - Tan Bottom layer Red/Blue Specs 12" Floor tile w/Black Mastic & Vapor	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HA: 12VFT-54					
1586 141804507-0032	N.E. - White exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1587 141804507-0033	S.E. - White exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1588 141804507-0034	S.W. - White exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1589 141804507-0035	N.W. - White exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1590 141804507-0036	N. Center - White exterior Stucco	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: ES-50					
1591-Shingle 141804507-0037	N.E. - Red Roof Shingles	Black/Orange Fibrous Homogeneous	50% Glass	50% Non-fibrous (Other)	None Detected
HA: RS-50					
1591-Shingle 141804507-0037A	N.E. - Red Roof Shingles	Red/Black/Green Fibrous Homogeneous	40% Glass	60% Non-fibrous (Other)	None Detected
HA: RS-50					
1592-Shingle 141804507-0038	N.E. - Red Roof Shingles	Black/Orange Fibrous Homogeneous	50% Glass	50% Non-fibrous (Other)	None Detected
HA: RS-50					

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**EMSL Order:** 141804507  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1592-Shingle <small>141804507-0038A</small>	N.E. - Red Roof Shingles	Red/Black/Green Fibrous Homogeneous	40% Glass	60% Non-fibrous (Other)	None Detected
			<small>HA: RS-50</small>		
1593-Shingle <small>141804507-0039</small>	N.W. - Red Roof Shingles	Black/Orange Fibrous Homogeneous	50% Glass	50% Non-fibrous (Other)	None Detected
			<small>HA: RS-50</small>		
1593-Shingle <small>141804507-0039A</small>	N.W. - Red Roof Shingles	Red/Black/Green Fibrous Homogeneous	40% Glass	60% Non-fibrous (Other)	None Detected
			<small>HA: RS-50</small>		

Analyst(s) \_\_\_\_\_  
 Tom Hanes (77)

  
 Rhonda McGee, Laboratory Manager  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NVLAP Lab Code 200056-0

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EMSL Order: 391808805

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/16/2018 9:10 AM

**Analysis Date:** 08/16/2018 - 08/17/2018

**Collected Date:**

**Project:** Canyon Crest Family Housing Survey 7076.1017.0 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1594-Plaster <small>391808805-0001</small>	Unit 758 Living Rm	Various Non-Fibrous Homogeneous		28% Quartz 72% Non-fibrous (Other)	None Detected
1594-Button <small>391808805-0001A</small>	Unit 758 Living Rm	White Non-Fibrous Heterogeneous	21% Cellulose	79% Non-fibrous (Other)	None Detected
1595-Plaster <small>391808805-0002</small>	Unit 758 Bathrm	Various Non-Fibrous Homogeneous		29% Quartz 71% Non-fibrous (Other)	None Detected
1595-Button <small>391808805-0002A</small>	Unit 758 Bathrm	White Non-Fibrous Heterogeneous	22% Cellulose	78% Non-fibrous (Other)	None Detected
1596-Plaster <small>391808805-0003</small>	Unit 758 Bedrm 2	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1596-Plaster <small>391808805-0003A</small>	Unit 758 Bedrm 2	Various Non-Fibrous Homogeneous		26% Quartz 74% Non-fibrous (Other)	None Detected
1596-Button <small>391808805-0003B</small>	Unit 758 Bedrm 2	White Non-Fibrous Heterogeneous	19% Cellulose	81% Non-fibrous (Other)	None Detected
1597-Plaster <small>391808805-0004</small>	Unit 758 Ceiling: Bedrm 1	Various Non-Fibrous Homogeneous		27% Quartz 73% Non-fibrous (Other)	None Detected
1597-Button <small>391808805-0004A</small>	Unit 758 Ceiling: Bedrm 1	White Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1598-Texture <small>391808805-0005</small>	Unit 760 Living Rm	Various Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1598-Plaster <small>391808805-0005A</small>	Unit 760 Living Rm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1598-Plaster <small>391808805-0005B</small>	Unit 760 Living Rm	Various Non-Fibrous Homogeneous		28% Quartz 72% Non-fibrous (Other)	None Detected
1598-Button <small>391808805-0005C</small>	Unit 760 Living Rm	White Non-Fibrous Heterogeneous	21% Cellulose	79% Non-fibrous (Other)	None Detected
1599-Plaster <small>391808805-0006</small>	Unit 760 Kitchen	Various Non-Fibrous Homogeneous		29% Quartz 71% Non-fibrous (Other)	None Detected
1599-Button <small>391808805-0006A</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous	22% Cellulose	78% Non-fibrous (Other)	None Detected
1600-Texture <small>391808805-0007</small>	Unit 760 Bedrm 1	Various Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 391808805  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1600-Plaster <small>391808805-0007A</small>	Unit 760 Bedrm 1	Various Non-Fibrous Homogeneous		26% Quartz 74% Non-fibrous (Other)	None Detected
1600-Button <small>391808805-0007B</small>	Unit 760 Bedrm 1	White Non-Fibrous Heterogeneous	19% Cellulose	81% Non-fibrous (Other)	None Detected
1601-Joint C. <small>391808805-0008</small>	Unit 758 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1601-Drywall <small>391808805-0008A</small>	Unit 758 Kitchen	Various Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1602-Joint C. <small>391808805-0009</small>	Unit 760 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1602-Tape <small>391808805-0009A</small>	Unit 760 Kitchen	Gray Fibrous Homogeneous	100% Cellulose		None Detected
1602-Joint C. <small>391808805-0009B</small>	Unit 760 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1602-Drywall <small>391808805-0009C</small>	Unit 760 Kitchen	Various Non-Fibrous Heterogeneous	21% Cellulose	79% Non-fibrous (Other)	None Detected
1603-Tile <small>391808805-0010</small>	Unit 758 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1603-Mastic <small>391808805-0010A</small>	Unit 758 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1604-Tile <small>391808805-0011</small>	Unit 758 Bedrm 1	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1604-Mastic <small>391808805-0011A</small>	Unit 758 Bedrm 1	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1605-Tile <small>391808805-0012</small>	Unit 758 Bedrm 2	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1605-Mastic <small>391808805-0012A</small>	Unit 758 Bedrm 2	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1606-Tile <small>391808805-0013</small>	Unit 760 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1606-Mastic <small>391808805-0013A</small>	Unit 760 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1607-Tile <small>391808805-0014</small>	Unit 760 Bedrm 1	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1607-Mastic <small>391808805-0014A</small>	Unit 760 Bedrm 1	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1608-Tile <small>391808805-0015</small>	Unit 758 Living Rm	Brown Non-Fibrous Homogeneous		81% Non-fibrous (Other)	19% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1608-Mastic 391808805-0015A	Unit 758 Living Rm	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1608-Vapor 391808805-0015B	Unit 758 Living Rm	Brown Non-Fibrous Homogeneous	49% Cellulose	51% Non-fibrous (Other)	None Detected
1608-Mastic 391808805-0015C	Unit 758 Living Rm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1609-Tile 391808805-0016	Unit 758 Bedrm 1	Brown Non-Fibrous Homogeneous		84% Non-fibrous (Other)	16% Chrysotile
1609-Mastic 391808805-0016A	Unit 758 Bedrm 1	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1609-Vapor 391808805-0016B	Unit 758 Bedrm 1	Brown Fibrous Homogeneous	46% Cellulose	54% Non-fibrous (Other)	None Detected
1609-Mastic 391808805-0016C	Unit 758 Bedrm 1	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1610-Tile 391808805-0017	Unit 758 Bedrm 2	Brown Non-Fibrous Homogeneous		83% Non-fibrous (Other)	17% Chrysotile
1610-Mastic 391808805-0017A	Unit 758 Bedrm 2	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1610-Vapor 391808805-0017B	Unit 758 Bedrm 2	Brown Non-Fibrous Homogeneous	47% Cellulose	53% Non-fibrous (Other)	None Detected
1610-Mastic 391808805-0017C	Unit 758 Bedrm 2	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1611-Tile 391808805-0018	Unit 760 Living Rm	Brown Non-Fibrous Homogeneous		82% Non-fibrous (Other)	18% Chrysotile
1611-Mastic 391808805-0018A	Unit 760 Living Rm	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1611-Vapor 391808805-0018B	Unit 760 Living Rm	Brown Non-Fibrous Homogeneous	48% Cellulose	52% Non-fibrous (Other)	None Detected
1611-Mastic 391808805-0018C	Unit 760 Living Rm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1612-Tile 391808805-0019	Unit 760 Bedrm 1	Brown Non-Fibrous Homogeneous		81% Non-fibrous (Other)	19% Chrysotile
1612-Mastic 391808805-0019A	Unit 760 Bedrm 1	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1612-Vapor 391808805-0019B	Unit 760 Bedrm 1	Brown Non-Fibrous Homogeneous	49% Cellulose	51% Non-fibrous (Other)	None Detected
1612-Mastic 391808805-0019C	Unit 760 Bedrm 1	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1613-Tile <small>391808805-0020</small>	Unit 758 Living Rm	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1613-Mastic <small>391808805-0020A</small>	Unit 758 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1613-Leveler <small>391808805-0020B</small>	Unit 758 Living Rm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1614-Tile <small>391808805-0021</small>	Unit 758 Living Rm	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1614-Mastic <small>391808805-0021A</small>	Unit 758 Living Rm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1615-Tile <small>391808805-0022</small>	Unit 758 Hall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1615-Mastic <small>391808805-0022A</small>	Unit 758 Hall	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1616-Sheet Flooring <small>391808805-0023</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous	16% Cellulose 6% Glass	78% Non-fibrous (Other)	None Detected
1616-Mastic <small>391808805-0023A</small>	Unit 760 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1617-Sheet Flooring <small>391808805-0024</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous	17% Cellulose 7% Glass	76% Non-fibrous (Other)	None Detected
1617-Mastic <small>391808805-0024A</small>	Unit 760 Kitchen	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1618-Sheet Flooring <small>391808805-0025</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous	18% Cellulose 8% Glass	74% Non-fibrous (Other)	None Detected
1618-Mastic <small>391808805-0025A</small>	Unit 760 Kitchen	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1619-Sheet Flooring <small>391808805-0026</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous		83% Non-fibrous (Other)	17% Chrysotile
1619-Mastic <small>391808805-0026A</small>	Unit 760 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1619-Vapor <small>391808805-0026B</small>	Unit 760 Kitchen	Brown Fibrous Homogeneous	79% Cellulose 19% Synthetic	2% Non-fibrous (Other)	None Detected
1619-Mastic <small>391808805-0026C</small>	Unit 760 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1619-Vapor <small>391808805-0026D</small>	Unit 760 Kitchen	Green Fibrous Homogeneous	76% Cellulose 16% Synthetic	8% Non-fibrous (Other)	None Detected
1620-Sheet Flooring <small>391808805-0027</small>	Unit 760 Kitchen	White Non-Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile

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**Project ID:** JS

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1620-Mastic 391808805-0027A	Unit 760 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1620-Vapor 391808805-0027B	Unit 760 Kitchen	Brown Fibrous Homogeneous	76% Cellulose 16% Synthetic	8% Non-fibrous (Other)	None Detected
1620-Mastic 391808805-0027C	Unit 760 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1620-Vapor 391808805-0027D	Unit 760 Kitchen	Green Fibrous Homogeneous	77% Cellulose 17% Synthetic	6% Non-fibrous (Other)	None Detected
1621-Sheet Flooring 391808805-0028	Unit 760 Kitchen	White Non-Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
1621-Mastic 391808805-0028A	Unit 760 Kitchen	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1621-Vapor 391808805-0028B	Unit 760 Kitchen	Brown Fibrous Homogeneous	77% Cellulose 17% Synthetic	6% Non-fibrous (Other)	None Detected
1621-Mastic 391808805-0028C	Unit 760 Kitchen	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1621-Vapor 391808805-0028D	Unit 760 Kitchen	Green Fibrous Homogeneous	78% Cellulose 18% Synthetic	4% Non-fibrous (Other)	None Detected
1622-Sheet Flooring 391808805-0029	Unit 760 Kitchen	White Non-Fibrous Heterogeneous	18% Cellulose 8% Glass	74% Non-fibrous (Other)	None Detected
1622-Mastic 391808805-0029A	Unit 758 Kitchen	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1622-Leveler 391808805-0029B	Unit 758 Kitchen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1623-Sheet Flooring 391808805-0030	Unit 758 Bathrm	Various Non-Fibrous Heterogeneous	19% Cellulose 9% Glass	72% Non-fibrous (Other)	None Detected
1623-Mastic 391808805-0030A	Unit 758 Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1623-Leveler 391808805-0030B	Unit 758 Bathrm	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1624-Sheet Flooring 391808805-0031	Unit 760 Bathrm	White Non-Fibrous Heterogeneous	16% Cellulose 6% Glass	78% Non-fibrous (Other)	None Detected
1624-Mastic 391808805-0031A	Unit 760 Bathrm	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1624-Leveler 391808805-0031B	Unit 760 Bathrm	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1625-Stucco 391808805-0032	Exterior N.E.	Gray Non-Fibrous Homogeneous		12% Quartz 88% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1625-Stucco <small>391808805-0032A</small>	Exterior N.E.	Orange Non-Fibrous Homogeneous		17% Quartz 83% Non-fibrous (Other)	None Detected
1626-Stucco <small>391808805-0033</small>	Exterior S.E.	Gray Non-Fibrous Homogeneous		13% Quartz 87% Non-fibrous (Other)	None Detected
1626-Stucco <small>391808805-0033A</small>	Exterior S.E.	Orange Non-Fibrous Homogeneous		18% Quartz 82% Non-fibrous (Other)	None Detected
1627 <small>391808805-0034</small>	Exterior S. Center	Orange Non-Fibrous Homogeneous		19% Quartz 81% Non-fibrous (Other)	None Detected
1628 <small>391808805-0035</small>	Exterior S.W.	Orange Non-Fibrous Homogeneous		16% Quartz 84% Non-fibrous (Other)	None Detected
1629 <small>391808805-0036</small>	Exterior N.W.	Orange Non-Fibrous Homogeneous		17% Quartz 83% Non-fibrous (Other)	None Detected
1630-Shingles <small>391808805-0037</small>	Roof N.E.	Red Non-Fibrous Heterogeneous	31% Glass	69% Non-fibrous (Other)	None Detected
1630-Tar <small>391808805-0037A</small>	Roof N.E.	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1630-Shingles <small>391808805-0037B</small>	Roof N.E.	Various Non-Fibrous Heterogeneous	32% Glass	68% Non-fibrous (Other)	None Detected
1631-Shingles <small>391808805-0038</small>	Roof N.E.	Red Non-Fibrous Heterogeneous	32% Glass	68% Non-fibrous (Other)	None Detected
1631-Tar <small>391808805-0038A</small>	Roof N.E.	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1631-Shingles <small>391808805-0038B</small>	Roof N.E.	Various Non-Fibrous Heterogeneous	29% Glass	71% Non-fibrous (Other)	None Detected
1632-Shingles <small>391808805-0039</small>	Roof N. Center	Red Non-Fibrous Heterogeneous	29% Glass	71% Non-fibrous (Other)	None Detected
1632-Tar <small>391808805-0039A</small>	Roof N. Center	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1632-Shingles <small>391808805-0039B</small>	Roof N. Center	Various Non-Fibrous Heterogeneous	30% Glass	70% Non-fibrous (Other)	None Detected

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**Project ID:** JS

Analyst(s)

Sue Ferrario (107)

Jeff Siria, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO NVLAP Lab Code 200742-0

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EMSL Order: 091817959

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/15/2018 9:15 AM

**Analysis Date:** 08/17/2018

**Collected Date:** 08/09/2018

**Project:** 7076.1017.0 - HALEY & ALDRICH - CANYON CREST FAMILY HOUSING SURVEY - UNIVERSITY OF CALIFORNIA RIVERSIDE-UTAH ST 3321/3323 (JS)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1633-Plaster <i>091817959-0001</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1633-Button Board <i>091817959-0001A</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	4% Cellulose	3% Quartz 80% Gypsum 13% Non-fibrous (Other)	None Detected
1634-Plaster <i>091817959-0002</i>	WHITE-PLASTER W/ BUTTON-KITCHEN	Gray Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected
1634-Button Board <i>091817959-0002A</i>	WHITE-PLASTER W/ BUTTON-KITCHEN	White Non-Fibrous Homogeneous	6% Cellulose	2% Quartz 80% Gypsum 12% Non-fibrous (Other)	None Detected
1635-Plaster <i>091817959-0003</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected
1635-Skim Coat <i>091817959-0003A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Green Non-Fibrous Homogeneous		35% Quartz 20% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected
<i>Under second layer of paint (matte, tan)</i>					
1635-Texture <i>091817959-0003B</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
<i>Under top layer of paint (glossy, white)</i>					
1635-Button Board <i>091817959-0003C</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous	6% Cellulose	2% Quartz 80% Gypsum 12% Non-fibrous (Other)	None Detected
1636-Plaster <i>091817959-0004</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1636-Button Board <i>091817959-0004A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous	6% Cellulose	2% Quartz 80% Gypsum 12% Non-fibrous (Other)	None Detected
1637-Plaster <i>091817959-0005</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1637-Button Board <i>091817959-0005A</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	5% Cellulose	2% Quartz 80% Gypsum 13% Non-fibrous (Other)	None Detected
1638-Plaster <i>091817959-0006</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
1638-Button Board <i>091817959-0006A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous	6% Cellulose	2% Quartz 80% Gypsum 12% Non-fibrous (Other)	None Detected
1639-Plaster <i>091817959-0007</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected
1639-Button Board <i>091817959-0007A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous	6% Cellulose	2% Quartz 80% Gypsum 12% Non-fibrous (Other)	None Detected
1640-Drywall <i>091817959-0008</i>	WHITE-DRYWALL W/ JOINT C. -KITCHEN	White Non-Fibrous Homogeneous	2% Glass	80% Gypsum 18% Non-fibrous (Other)	None Detected
1640-Joint Compound <i>091817959-0008A</i>	WHITE-DRYWALL W/ JOINT C. -KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1641-Drywall <i>091817959-0009</i>	WHITE-DRYWALL W/ JOINT C. -KITCHEN	White Non-Fibrous Homogeneous	2% Glass	80% Gypsum 18% Non-fibrous (Other)	None Detected
1641-Joint Compound <i>091817959-0009A</i>	WHITE-DRYWALL W/ JOINT C. -KITCHEN	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1641-Skim Coat <i>091817959-0009B</i>	WHITE-DRYWALL W/ JOINT C. -KITCHEN	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1642-Sheet Floor <i>091817959-0010</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Beige Fibrous Homogeneous	30% Cellulose	40% Matrix 30% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1642-Mastic <i>091817959-0010A</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1643-Sheet Floor <i>091817959-0011</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Beige Fibrous Homogeneous	30% Cellulose	40% Matrix 30% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1643-Mastic <i>091817959-0011A</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1644-Sheet Floor <i>091817959-0012</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Beige Non-Fibrous Homogeneous	30% Cellulose	40% Matrix 30% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1644-Mastic <i>091817959-0012A</i>	WHITE-TOP LAYER 6" SQUARE SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1645-Sheet Floor <i>091817959-0013</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR-BATHRM	White Fibrous Homogeneous	20% Cellulose 8% Glass	15% Ca Carbonate 40% Matrix 17% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					

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**EMSL Order:** 091817959  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1645-Mastic <i>091817959-0013A</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR-BATHRM	White Non-Fibrous Homogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
1646-Sheet Floor <i>091817959-0014</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR-BATHRM	Tan Non-Fibrous Homogeneous	25% Cellulose 5% Glass	15% Ca Carbonate 40% Matrix 15% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1646-Mastic <i>091817959-0014A</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOOR-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1647-Sheet Floor <i>091817959-0015</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOORING-BATHRM	Tan Fibrous Homogeneous	25% Cellulose 10% Glass	15% Ca Carbonate 40% Matrix 10% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1647-Mastic <i>091817959-0015A</i>	WHITE-MIDDLE LAYER SMALL TRIANGLE SHEET FLOORING-BATHRM	Yellow Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
1648-Sheet Floor <i>091817959-0016</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Tan Fibrous Homogeneous		40% Matrix 35% Non-fibrous (Other)	25% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1648-Mastic <i>091817959-0016A</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM				Insufficient Material
1649-Sheet Floor <i>091817959-0017</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Tan Fibrous Homogeneous		40% Matrix 35% Non-fibrous (Other)	25% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1649-Mastic <i>091817959-0017A</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM				Insufficient Material
1650-Sheet Floor <i>091817959-0018</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Tan Fibrous Homogeneous		40% Matrix 35% Non-fibrous (Other)	25% Chrysotile
<i>This is a composite result of both vinyl and backing layer</i>					
1650-Mastic <i>091817959-0018A</i>	YELLOW-BOTTOM MIDDLE LAYER FLOWER SHEET FLOOR W/ MASTIC-BATHRM				Insufficient Material

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1651-Sheet Flooring <i>091817959-0019</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Blue Non-Fibrous Homogeneous	25% Cellulose	50% Matrix 25% Non-fibrous (Other)	None Detected
1651-Vapor Barrier <i>091817959-0019A</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	60% Cellulose	20% Matrix 20% Non-fibrous (Other)	None Detected
1652-Sheet Flooring <i>091817959-0020</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Blue Non-Fibrous Homogeneous	25% Cellulose	50% Matrix 25% Non-fibrous (Other)	None Detected
1652-Vapor Barrier <i>091817959-0020A</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	60% Cellulose	20% Matrix 20% Non-fibrous (Other)	None Detected
1653-Sheet Flooring <i>091817959-0021</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Blue Non-Fibrous Homogeneous	25% Cellulose	50% Matrix 25% Non-fibrous (Other)	None Detected
1653-Vapor Barrier <i>091817959-0021A</i>	GREEN-BOTTOM LAYER GREEN SHEET FLOORING W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	60% Cellulose	20% Matrix 20% Non-fibrous (Other)	None Detected
1654-Stucco 1 <i>091817959-0022</i>	WHITE-EXTERIOR STUCCO-S.E.	Gray Non-Fibrous Homogeneous		35% Quartz 20% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected
<i>Inseparable paint / coating layer included in analysis</i>					
1654-Stucco 2 <i>091817959-0022A</i>	WHITE-EXTERIOR STUCCO-S.E.	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1655 <i>091817959-0023</i>	WHITE-EXTERIOR STUCCO-S.W	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1656 <i>091817959-0024</i>	WHITE-EXTERIOR STUCCO-W. CENTER	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1657 <i>091817959-0025</i>	WHITE-EXTERIOR STUCCO-N.W	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1658 <i>091817959-0026</i>	WHITE-EXTERIOR STUCCO-N.E	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 20% Gypsum 20% Non-fibrous (Other)	None Detected
1659 <i>091817959-0027</i>	GREY-WINDOW PUTTY-N.E	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 2% Mica 50% Matrix 18% Non-fibrous (Other)	None Detected

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**Project ID:** JS

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1660 <small>091817959-0028</small>	GREY-WINDOW PUTTY-N.E	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 2% Mica 50% Matrix 18% Non-fibrous (Other)	None Detected
1661 <small>091817959-0029</small>	GREY WINDOW FRAME PUTTY-S.E.	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 2% Mica 50% Matrix 18% Non-fibrous (Other)	None Detected
1662 <small>091817959-0030</small>	RED-ROOF SHINGLES-N.E	Brown/Red/Black Non-Fibrous Homogeneous	15% Glass	5% Quartz 50% Matrix 30% Non-fibrous (Other)	None Detected
1663 <small>091817959-0031</small>	RED-ROOF SHINGLES-N.E	Brown/Red/Black Non-Fibrous Homogeneous	15% Glass	5% Quartz 50% Matrix 30% Non-fibrous (Other)	None Detected
1664 <small>091817959-0032</small>	RED-ROOF SHINGLES-S.E	Brown/Red/Black Non-Fibrous Homogeneous	15% Glass	4% Quartz 50% Matrix 31% Non-fibrous (Other)	None Detected
1665 <small>091817959-0033</small>	BEIGE-BASEBOARD MASTIC-KITCHEN	Beige Non-Fibrous Homogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
1666-Mastic 1 <small>091817959-0034</small>	BEIGE-BASEBOARD MASTIC-KITCHEN	Beige Non-Fibrous Homogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
1666-Mastic 2 <small>091817959-0034A</small>	BEIGE-BASEBOARD MASTIC-KITCHEN	Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 70% Matrix 15% Non-fibrous (Other)	None Detected
1667-Mastic 1 <small>091817959-0035</small>	BEIGE-BASEBOARD MASTIC-KITCHEN	Beige Non-Fibrous Homogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
1667-Mastic 2 <small>091817959-0035A</small>	BEIGE-BASEBOARD MASTIC-KITCHEN	Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 70% Matrix 15% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_  
 Cecilia Yu (59)

  
 Matthew Batongbacal  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

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EMSL Order: 091817946

Customer ID: 32CITA50D

Customer PO: 7076-1017-0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/15/2018 9:15 AM

**Analysis Date:** 08/20/2018

**Collected Date:** 08/10/2018

**Project:** 7076-1017-0 - HALEY & ALDRICH - CANYON CREST FAMILY HOUSING SURVEY - UNIVERSITY OF CALIFORNIA RIVERSIDE-IDAHO ST 3323/3325 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1668-Plaster <i>091817946-0001</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1668-Button Board <i>091817946-0001A</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1669-Plaster <i>091817946-0002</i>	WHITE-PLASTER W/ BUTTON-KITCHEN	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1669-Button Board <i>091817946-0002A</i>	WHITE-PLASTER W/ BUTTON-KITCHEN	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1670-Plaster <i>091817946-0003</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1670-Button Board <i>091817946-0003A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1671-Plaster <i>091817946-0004</i>	WHITE-PLASTER W/ BUTTON-BATHRM	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1671-Button Board <i>091817946-0004A</i>	WHITE-PLASTER W/ BUTTON-BATHRM	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1672-Plaster <i>091817946-0005</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1672-Button Board <i>091817946-0005A</i>	WHITE-PLASTER W/ BUTTON-LIVING RM	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1673-Plaster <i>091817946-0006</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1673-Button Board <i>091817946-0006A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 2	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1674-Plaster <i>091817946-0007</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1674-Button Board <i>091817946-0007A</i>	WHITE-PLASTER W/ BUTTON-BEDRM 1	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1675-Drywall <i>091817946-0008</i>	WHITE-DRYWALL W/ JOINT C.-KITCHEN	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1675-Joint Compound <i>091817946-0008A</i>	WHITE-DRYWALL W/ JOINT C.-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1676-Drywall <small>091817946-0009</small>	WHITE-DRYWALL W/ JOINT C.-KITCHEN	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
1676-Joint Compound <small>091817946-0009A</small>	WHITE-DRYWALL W/ JOINT C.-KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1677-Vinyl Floor Tile <small>091817946-0010</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Beige Non-Fibrous Homogeneous		70% Ca Carbonate 5% Matrix 25% Non-fibrous (Other)	None Detected
1677-Mastic <small>091817946-0010A</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1678-Vinyl Floor Tile <small>091817946-0011</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Beige Non-Fibrous Homogeneous		70% Ca Carbonate 5% Matrix 25% Non-fibrous (Other)	None Detected
1678-Mastic <small>091817946-0011A</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1679-Vinyl Floor Tile <small>091817946-0012</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Beige Non-Fibrous Homogeneous		70% Ca Carbonate 5% Matrix 25% Non-fibrous (Other)	None Detected
1679-Mastic <small>091817946-0012A</small>	BEIGE-TOP LAYER-12" BEIGE W/ SPECS TILE W/ BEIGE MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1680-Vinyl Sheet Flooring <small>091817946-0013</small>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	10% Chrysotile
1680-Mastic <small>091817946-0013A</small>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1681-Vinyl Sheet Flooring <small>091817946-0014</small>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	10% Chrysotile
1681-Mastic <small>091817946-0014A</small>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1682-Vinyl Sheet Flooring <small>091817946-0015</small>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	15% Chrysotile

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			% Fibrous	% Non-Fibrous	% Type
1682-Mastic <i>091817946-0015A</i>	YELLOW-MIDDLE LAYER MARBLE SHEET FLOORING W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1683-Vinyl Sheet Flooring <i>091817946-0016</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1683-Mastic <i>091817946-0016A</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1684-Vinyl Sheet Flooring <i>091817946-0017</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Non-Fibrous Homogeneous	15% Cellulose 5% Glass	10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1684-Mastic <i>091817946-0017A</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1685-Vinyl Sheet Flooring <i>091817946-0018</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Fibrous Homogeneous	12% Cellulose 5% Glass	10% Ca Carbonate 50% Matrix 23% Non-fibrous (Other)	None Detected
1685-Mastic <i>091817946-0018A</i>	YELLOW-TOP LAYER SMALL TRIANGLE SHEET FL W/ MASTIC	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1686-Vinyl Sheet Flooring <i>091817946-0019</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Yellow Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	10% Chrysotile
1686-Mastic <i>091817946-0019A</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1687-Vinyl Sheet Flooring <i>091817946-0020</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Yellow Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	10% Chrysotile
1687-Mastic <i>091817946-0020A</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1688-Vinyl Sheet Flooring <i>091817946-0021</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 50% Matrix 30% Non-fibrous (Other)	None Detected
1688-Mastic <i>091817946-0021A</i>	YELLOW-BOTTOM MIDDLE LAYER BROWN FLOWER SHEET FLOOR W/ MASTIC-BATHRM	Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 08/20/2018 12:39:11



# EMSL Analytical, Inc.

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**EMSL Order:** 091817946  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1689-Vinyl Sheet Flooring <small>091817946-0022</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Tan Non-Fibrous Homogeneous	30% Cellulose	50% Matrix 20% Non-fibrous (Other)	None Detected
1689-Mastic <small>091817946-0022A</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Brown Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1689-Vapor Barrier <small>091817946-0022B</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	40% Cellulose	40% Matrix 20% Non-fibrous (Other)	None Detected
1690-Vinyl Sheet Flooring <small>091817946-0023</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Tan Fibrous Homogeneous	30% Cellulose	50% Matrix 20% Non-fibrous (Other)	None Detected
1690-Mastic <small>091817946-0023A</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Beige Non-Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected
1690-Vapor Barrier <small>091817946-0023B</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	40% Cellulose	40% Matrix 20% Non-fibrous (Other)	None Detected
1691-Vinyl Sheet Flooring <small>091817946-0024</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Tan Non-Fibrous Homogeneous	30% Cellulose	50% Matrix 20% Non-fibrous (Other)	None Detected
1691-Mastic <small>091817946-0024A</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Beige Non-Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected
1691-Vapor Barrier <small>091817946-0024B</small>	TAN-BOTTOM LAYER RED/BLUE SPECS W/ BLACK MASTIC & VAPOR-BATHRM	Black Fibrous Homogeneous	40% Cellulose	40% Matrix 20% Non-fibrous (Other)	None Detected
1692 <small>091817946-0025</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	15% Cellulose	20% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
1693 <small>091817946-0026</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	15% Cellulose	20% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
1694 <small>091817946-0027</small>	GREY-SINK MASTIC-KITCHEN	Gray Non-Fibrous Homogeneous	10% Cellulose	20% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1695 <small>091817946-0028</small>	GREY-EXTERIOR WINDOW FRAME PUTTY-NE	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091817946  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076-1017-0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1696 <small>091817946-0029</small>	GREY-EXTERIOR WINDOW FRAME PUTTY-SE	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
1697 <small>091817946-0030</small>	GREY-EXTERIOR WINDOW FRAME PUTTY-N	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1698 <small>091817946-0031</small>	WHITE-EXTERIOR STUCCO-NE	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1699 <small>091817946-0032</small>	WHITE-EXTERIOR STUCCO-SE	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1700 <small>091817946-0033</small>	WHITE-EXTERIOR STUCCO-S CENTER	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1701 <small>091817946-0034</small>	WHITE-EXTERIOR STUCCO-SW	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1702 <small>091817946-0035</small>	WHITE-EXTERIOR STUCCO-NW	Tan Non-Fibrous Homogeneous		10% Ca Carbonate 70% Matrix 20% Non-fibrous (Other)	None Detected
1703-Shingle 1 <small>091817946-0036</small>	RED-ROOF SHINGLES-NE	Brown/Black Fibrous Homogeneous	10% Glass	8% Quartz 60% Matrix 22% Non-fibrous (Other)	None Detected
1703-Shingle 2 <small>091817946-0036A</small>	RED-ROOF SHINGLES-NE	Gray/Black Fibrous Homogeneous	10% Glass	5% Quartz 60% Matrix 25% Non-fibrous (Other)	None Detected
1704-Shingle 1 <small>091817946-0037</small>	RED-ROOF SHINGLES-SE	Brown/Black Fibrous Homogeneous	10% Glass	5% Quartz 60% Matrix 25% Non-fibrous (Other)	None Detected
1704-Shingle 2 <small>091817946-0037A</small>	RED-ROOF SHINGLES-SE	Gray/Black Fibrous Homogeneous	10% Glass	5% Quartz 60% Matrix 25% Non-fibrous (Other)	None Detected
1705-Shingle 1 <small>091817946-0038</small>	RED-ROOF SHINGLES-SE	Brown/Black Fibrous Homogeneous	10% Glass	5% Quartz 60% Matrix 25% Non-fibrous (Other)	None Detected
1705-Shingle 2 <small>091817946-0038A</small>	RED-ROOF SHINGLES-SE	Gray/Black Fibrous Homogeneous	15% Glass	5% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected

Analyst(s)

Shane Heisser (68)

Matthew Batongbacal  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 08/20/2018 12:39:11





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EMSL Order: 151805782

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
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151 Kalmus Drive  
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Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/23/2018 - 08/24/2018

**Collected Date:** 08/10/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey / University of California Riverside, Idaho St 3359/3361 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1706-Plaster <i>151805782-0001</i>	Plaster w/ Button - Living Rm	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1706-Drywall <i>151805782-0001A</i>	Plaster w/ Button - Living Rm	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1707-Plaster <i>151805782-0002</i>	Plaster w/ Button - Kitchen	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1707-Drywall <i>151805782-0002A</i>	Plaster w/ Button - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1708-Plaster <i>151805782-0003</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/ Button - Bedrm 1	Pink/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1708-Drywall <i>151805782-0003A</i>	Plaster w/ Button - Bedrm 1	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1709-Plaster <i>151805782-0004</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/ Button - Bedrm 2	White/Blue/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1709-Drywall <i>151805782-0004A</i>	Plaster w/ Button - Bedrm 2	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1710-Plaster <i>151805782-0005</i>	Plaster w/ Button - Living Rm	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1710-Drywall <i>151805782-0005A</i>	Plaster w/ Button - Living Rm	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1711-Drywall <i>151805782-0006</i>	Plaster w/ Button - Hall	Brown/White Non-Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1711-Plaster <i>151805782-0006A</i>	Plaster w/ Button - Hall	Beige Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
1711-Texture <i>151805782-0006B</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/ Button - Hall	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1712-Drywall <i>151805782-0007</i>	Plaster w/ Button - Bedrm 1	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1712-Plaster <i>151805782-0007A</i>	Plaster w/ Button - Bedrm 1	Gray/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected

Initial report from: 08/24/2018 10:29:16



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**EMSL Order:** 151805782  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1712-Texture <i>151805782-0007B</i>	Plaster w/ Button - Bedrm 1	Pink/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1713-Drywall <i>151805782-0008</i>	Drywall w/ Joint C. - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1713-Joint Compound <i>151805782-0008A</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/ Joint C. - Kitchen	White Non-Fibrous Heterogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
1714-Drywall <i>151805782-0009</i>	Drywall w/ Joint C. - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1714-Texture <i>151805782-0009A</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/ Joint C. - Kitchen	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1715-Sheet Flooring <i>151805782-0010</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1715-Mastic <i>151805782-0010A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1716-Sheet Flooring <i>151805782-0011</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1716-Mastic <i>151805782-0011A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1717-Sheet Flooring <i>151805782-0012</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1717-Mastic <i>151805782-0012A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1718 <i>151805782-0013</i>	Baseboard Mastic - Kitchen	White/Beige/Rust Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1719 <i>151805782-0014</i>	Baseboard Mastic - Kitchen	White/Beige/Rust Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1720 <i>151805782-0015</i>	Baseboard Mastic - Kitchen	Beige/Rust Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1721 <i>151805782-0016</i>	Exterior Window Frame Putty - NE	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1722 <i>151805782-0017</i>	Exterior Window Frame Putty - E Center	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1723 <i>151805782-0018</i>	Exterior Window Frame Putty - SE	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1724 <i>151805782-0019</i> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NE	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected

Initial report from: 08/24/2018 10:29:16



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**EMSL Order:** 151805782  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1725 <small>151805782-0020</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - E Center	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1726 <small>151805782-0021</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - SW	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1727 <small>151805782-0022</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NW	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1728 <small>151805782-0023</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NW	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1729-Shingle 1 <small>151805782-0024</small>	Roof Shingles - NW	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1729-Shingle 2 <small>151805782-0024A</small>	Roof Shingles - NW	Gray/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1730-Shingle 1 <small>151805782-0025</small>	Roof Shingles - NE	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1730-Shingle 2 <small>151805782-0025A</small>	Roof Shingles - NE	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1731-Shingle 1 <small>151805782-0026</small>	Roof Shingles	Red/Black Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1731-Shingle 2 <small>151805782-0026A</small>	Roof Shingles	Black Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_  
 Collin Creel (16)  
 Jenny Drapela (27)

  
 Michelle Leggett, Laboratory Manager  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Houston, TX NVLAP Lab Code 102106-0, AZ 0925, CO AL-15355, LA 04126, TX 300159

Initial report from: 08/24/2018 10:29:16



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EMSL Order: 091818573

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/23/2018 9:00 AM

**Analysis Date:** 08/26/2018

**Collected Date:** 08/14/2018

**Project:** 7076.1017.0 - CANYON CREST FAMILY HOUSING SURVEY (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1732-Plaster <small>091818573-0001</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - LIVING RM.	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1732-Button Board <small>091818573-0001A</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - LIVING RM.	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1733-Plaster <small>091818573-0002</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST -BATHRM	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1733-Button Board <small>091818573-0002A</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST -BATHRM	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1734-Plaster <small>091818573-0003</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - BEDRM 1	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1734-Button Board <small>091818573-0003A</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - BEDRM 1	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1735-Plaster <small>091818573-0004</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - BEDRM 2	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1735-Button Board <small>091818573-0004A</small>	WHITE - PLASTER W/ BUTTON - UNIT 747 - 1ST - BEDRM 2	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1736-Plaster <small>091818573-0005</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - LIVING RM	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1736-Button Board <small>091818573-0005A</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - LIVING RM	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1737-Plaster <small>091818573-0006</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - BEDRM 1	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1737-Button Board <small>091818573-0006A</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - BEDRM 1	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1738-Plaster <small>091818573-0007</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - HALL	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1738-Button Board <small>091818573-0007A</small>	WHITE - PLASTER W/ BUTTON - UNIT 749 - 1ST - HALL	Beige Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1739-Drywall <small>091818573-0008</small>	WHITE - DRYWALL W/ JOINT C. - UNIT 747 - 1ST - KITCHEN	Beige Non-Fibrous Homogeneous	4% Cellulose <1% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected

Initial report from: 08/26/2018 18:53:01



# EMSL Analytical, Inc.

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**EMSL Order:** 091818573  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1739-Joint Compound <i>091818573-0008A</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 747 - 1ST - KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1740-Drywall <i>091818573-0009</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 749 - 1ST - KITCHEN	Beige Non-Fibrous Homogeneous	4% Cellulose <1% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected
1740-Joint Compound <i>091818573-0009A</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 749 - 1ST - KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1741-Sheet Flooring <i>091818573-0010</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 747 - 1ST - BATHRM	Tan Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1741-Mastic <i>091818573-0010A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 747 - 1ST - BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1742-Sheet Flooring <i>091818573-0011</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 747 - 1ST - BATHRM	Tan Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1742-Mastic <i>091818573-0011A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 747 - 1ST - BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1743-Sheet Flooring <i>091818573-0012</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 749 - BATHRM	Tan Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1743-Mastic <i>091818573-0012A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - UNIT 749 - BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1744-Sheet Flooring <i>091818573-0013</i>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Beige Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1744-Mastic <i>091818573-0013A</i>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Yellow Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
1745-Sheet Flooring <i>091818573-0014</i>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Tan Fibrous Homogeneous	15% Cellulose 4% Glass	10% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
1745-Mastic <i>091818573-0014A</i>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 08/26/2018 18:53:01



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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1746-Sheet Flooring <small>091818573-0015</small>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Tan Fibrous Homogeneous	15% Cellulose 2% Glass	10% Ca Carbonate 50% Matrix 23% Non-fibrous (Other)	None Detected
1746-Mastic <small>091818573-0015A</small>	WHITE - MIDDLE LAYER: SMALL TRIANGLE SHEET FL. - UNIT 747 - 1ST - BATHRM	Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1747-Leveling Compound <small>091818573-0016</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Gray Non-Fibrous Homogeneous	10% Cellulose	20% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1747-Mastic <small>091818573-0016A</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Beige Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1748-Leveling Compound <small>091818573-0017</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Gray Non-Fibrous Homogeneous	10% Cellulose	20% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1748-Mastic <small>091818573-0017A</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Beige Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1749-Leveling Compound <small>091818573-0018</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Gray Non-Fibrous Homogeneous	10% Cellulose	20% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1749-Mastic <small>091818573-0018A</small>	GREY - BOTTOM LAYER: LEVELING COMPOUND - UNIT 747 - 1ST - BATHRM	Beige Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1750 <small>091818573-0019</small>	WHITE - BASEBOARD MASTIC - UNIT 749 - 1ST - KITCHEN	Beige Non-Fibrous Homogeneous		25% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1751 <small>091818573-0020</small>	WHITE - BASEBOARD MASTIC - UNIT 749 - 1ST - KITCHEN	White/Beige Non-Fibrous Homogeneous		30% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected
1752 <small>091818573-0021</small>	WHITE - BASEBOARD MASTIC - UNIT 749 - 1ST - KITCHEN	Beige Non-Fibrous Homogeneous		30% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected
1753 <small>091818573-0022</small>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - N.E.	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1754 <small>091818573-0023</small>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - N.W.	Gray Non-Fibrous Homogeneous		20% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	None Detected
1755 <small>091818573-0024</small>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - S.E.	Gray Non-Fibrous Homogeneous		20% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	None Detected

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**Project ID:** JS

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1756 <i>091818573-0025</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S.E.	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1757 <i>091818573-0026</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S. CENTER	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1758 <i>091818573-0027</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S.W.	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1759 <i>091818573-0028</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - N.W.	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1760 <i>091818573-0029</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - N.E.	Tan Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1761-Shingle 1 <i>091818573-0030</i>	RED - ROOF SHINGLES - ROOF - 1ST - S.E.	Red/Black Fibrous Homogeneous	15% Glass	5% Quartz 10% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1761-Shingle 2 <i>091818573-0030A</i>	RED - ROOF SHINGLES - ROOF - 1ST - S.E.	Gray/Black Fibrous Homogeneous	10% Glass	5% Quartz 10% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1762-Shingle 1 <i>091818573-0031</i>	RED - ROOF SHINGLES - ROOF - 1ST - S.E.	Red/Black Fibrous Homogeneous	10% Glass	6% Quartz 10% Ca Carbonate 60% Matrix 14% Non-fibrous (Other)	None Detected
1762-Shingle 2 <i>091818573-0031A</i>	RED - ROOF SHINGLES - ROOF - 1ST - S.E.	Gray/Black Fibrous Homogeneous	10% Glass	5% Quartz 10% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
1763 <i>091818573-0032</i>	RED - ROOF SHINGLES - ROOF - 1ST - S.W.	Red/Black Fibrous Homogeneous	10% Glass	10% Quartz 5% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected

Analyst(s)

Shane Heisser (52)

Matthew Batongbacal  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

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EMSL Order: 091818572

Customer ID: 32CITA50D

Customer PO: 7076.1017.0

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/23/2018 9:00 AM

**Analysis Date:** 08/26/2018 - 08/27/2018

**Collected Date:** 08/14/2018

**Project:** 7076.1017.0 - CANYON CREST FAMILY HOUSING SURVEY (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1764-Plaster <small>091818572-0001</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - LIVING RM.	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1764-Button Board <small>091818572-0001A</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - LIVING RM.	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1765-Plaster <small>091818572-0002</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - HALL	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1765-Button Board <small>091818572-0002A</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - HALL	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1766-Plaster <small>091818572-0003</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - BEDRM 1	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1766-Button Board <small>091818572-0003A</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - BEDRM 1	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1766-Skim Coat <small>091818572-0003B</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - BEDRM 1	Green Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1767-Plaster <small>091818572-0004</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - BEDRM 2	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
1767-Button Board <small>091818572-0004A</small>	WHITE - PLASTER W/ BUTTON - UNIT 3413 - 1ST - BEDRM 2	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1768-Plaster <small>091818572-0005</small>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - LIVING RM	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1768-Skim Coat <small>091818572-0005A</small>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - LIVING RM	White/Green Non-Fibrous Homogeneous		25% Quartz 60% Ca Carbonate 15% Non-fibrous (Other)	None Detected
1768-Button Board <small>091818572-0005B</small>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - LIVING RM	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1769-Plaster <small>091818572-0006</small>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 1	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1769-Skim Coat <i>091818572-0006A</i>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 1	White/Green Non-Fibrous Homogeneous		15% Quartz 50% Ca Carbonate 35% Non-fibrous (Other)	None Detected
1769-Button Board <i>091818572-0006B</i>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 1	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1770-Plaster <i>091818572-0007</i>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 2	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
1770-Skim Coat <i>091818572-0007A</i>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 2	Green Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1770-Button Board <i>091818572-0007B</i>	WHITE - PLASTER W/ BUTTON - UNIT 3411 - 1ST - BEDRM 2	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1771-Drywall <i>091818572-0008</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 3413 - 1ST - KITCHEN	White Non-Fibrous Homogeneous	2% Cellulose	70% Gypsum 28% Non-fibrous (Other)	None Detected
1771-Joint Compound <i>091818572-0008A</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 3413 - 1ST - KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1772-Drywall <i>091818572-0009</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 3411 - 1ST - KITCHEN	White Non-Fibrous Homogeneous	3% Cellulose	70% Gypsum 27% Non-fibrous (Other)	None Detected
1772-Joint Compound <i>091818572-0009A</i>	WHITE - DRYWALL W/ JOINT C. - UNIT 3411 - 1ST - KITCHEN	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1773-Sheet Flooring <i>091818572-0010</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3413 - 1ST - BATHRM  <i>This is a composite result of both vinyl and backing layer</i>	White/Beige Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1773-Mastic <i>091818572-0010A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3413 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous	3% Cellulose	40% Matrix 57% Non-fibrous (Other)	None Detected
1774-Sheet Flooring <i>091818572-0011</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3413 - 1ST - BATHRM  <i>This is a composite result of both vinyl and backing layer</i>	White/Beige Fibrous Homogeneous	17% Cellulose	35% Ca Carbonate 48% Non-fibrous (Other)	None Detected
1774-Mastic <i>091818572-0011A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3413 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous	4% Cellulose	50% Matrix 46% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1775-Sheet Flooring <i>091818572-0012</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3411 - 1ST - BATHRM	White/Beige Non-Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1775-Mastic <i>091818572-0012A</i>	WHITE - TOP LAYER: 6" SQUARE SHEET FLOORING W/ MASTIC - 3411 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1776-Sheet Flooring <i>091818572-0013</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan/Yellow Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1776-Mastic <i>091818572-0013A</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1777-Sheet Flooring <i>091818572-0014</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan/Yellow Fibrous Homogeneous	20% Cellulose	35% Ca Carbonate 45% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1777-Mastic <i>091818572-0014A</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous		40% Matrix 60% Non-fibrous (Other)	None Detected
1778-Sheet Flooring <i>091818572-0015</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan/Yellow Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1778-Mastic <i>091818572-0015A</i>	YELLOW - MIDDLE LAYER: FLOWER SHEET FLOORING W/MASTIC - 3413 - 1ST - BATHRM	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1779-Sheet Flooring <i>091818572-0016</i>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Green Fibrous Homogeneous	20% Cellulose	40% Ca Carbonate 40% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1779-Mastic <i>091818572-0016A</i>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1779-Vapor <i>091818572-0016B</i>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown/Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1780-Sheet Flooring <small>091818572-0017</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Green Fibrous Homogeneous	20% Cellulose	45% Ca Carbonate 35% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1780-Mastic <small>091818572-0017A</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1780-Vapor <small>091818572-0017B</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown/Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1781-Sheet Flooring <small>091818572-0018</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Green Fibrous Homogeneous	20% Cellulose	40% Ca Carbonate 40% Non-fibrous (Other)	None Detected
<i>This is a composite result of both vinyl and backing layer</i>					
1781-Mastic <small>091818572-0018A</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1781-Vapor <small>091818572-0018B</small>	GREEN - BOTTOM LAYER: GREEN SHEET FLOORING - 3413 - 1ST - BATHRM	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1782-Mastic <small>091818572-0019</small>	WHITE - BASEBOARD MASTIC - 3413 - 1ST - KITCHEN	Gray/Black Non-Fibrous Homogeneous		30% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
1782-Mastic 2 <small>091818572-0019A</small>	WHITE - BASEBOARD MASTIC - 3413 - 1ST - KITCHEN	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
1783-Mastic <small>091818572-0020</small>	WHITE - BASEBOARD MASTIC - 3413 - 1ST - KITCHEN	Gray/Black Non-Fibrous Homogeneous		40% Ca Carbonate 35% Matrix 25% Non-fibrous (Other)	None Detected
1783-Mastic 2 <small>091818572-0020A</small>	WHITE - BASEBOARD MASTIC - 3413 - 1ST - KITCHEN	Tan Non-Fibrous Homogeneous		45% Matrix 55% Non-fibrous (Other)	None Detected
1784-Mastic <small>091818572-0021</small>	WHITE - BASEBOARD MASTIC - 3411 - 1ST - KITCHEN	Gray/Black Non-Fibrous Homogeneous		40% Ca Carbonate 50% Matrix 10% Non-fibrous (Other)	None Detected
1784-Mastic 2 <small>091818572-0021A</small>	WHITE - BASEBOARD MASTIC - 3411 - 1ST - KITCHEN	Tan Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091818572  
**Customer ID:** 32CITA50D  
**Customer PO:** 7076.1017.0  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1785 <i>091818572-0022</i>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - N. CENTER	Gray/White Non-Fibrous Homogeneous	3% Cellulose	70% Ca Carbonate 27% Non-fibrous (Other)	None Detected
1786 <i>091818572-0023</i>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - N.E.	Gray/White Non-Fibrous Homogeneous	3% Cellulose	70% Ca Carbonate 27% Non-fibrous (Other)	None Detected
1787 <i>091818572-0024</i>	WHITE - EXTERIOR WINDOW FRAME PUTTY - EXTERIOR - 1ST - N.W.	Gray/White Non-Fibrous Homogeneous	4% Cellulose	70% Ca Carbonate 26% Non-fibrous (Other)	None Detected
1788 <i>091818572-0025</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - N.W.	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1789 <i>091818572-0026</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - N.E.	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1790 <i>091818572-0027</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S CENTER	Tan Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected
1791 <i>091818572-0028</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S.E.	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1792 <i>091818572-0029</i>	WHITE - EXTERIOR STUCCO - EXTERIOR - 1ST - S.E.	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
1793-Shingle <i>091818572-0030</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.W.	Red/Black Non-Fibrous Homogeneous		10% Quartz 60% Matrix 30% Non-fibrous (Other)	None Detected
1793-Shingle 2 <i>091818572-0030A</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.W.	Black Fibrous Homogeneous	10% Glass	10% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected
1794-Shingle <i>091818572-0031</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.W.	Red/Black Non-Fibrous Homogeneous	10% Glass	10% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected
1794-Shingle 2 <i>091818572-0031A</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.W.	Black Non-Fibrous Homogeneous	12% Glass	8% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected
1795-Shingle <i>091818572-0032</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.E.	Red/Black Non-Fibrous Homogeneous	12% Glass	10% Quartz 60% Matrix 18% Non-fibrous (Other)	None Detected
1795-Shingle 2 <i>091818572-0032A</i>	RED - ROOF SHINGLES - ROOF - 1ST - N.E.	Black Non-Fibrous Homogeneous	12% Glass	10% Quartz 60% Matrix 18% Non-fibrous (Other)	None Detected

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**EMSL Order:** 091818572

**Customer ID:** 32CITA50D

**Customer PO:** 7076.1017.0

**Project ID:** JS

Analyst(s)

Beheshta Ahadi (63)

Matthew Batongbacal  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 08/27/2018 12:14:30



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EMSL Order: 111801316

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/23/2018 - 08/24/2018

**Collected Date:**

**Project:** 7076.117.0 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1796-Plaster <small>111801316-0001</small>	3424-Living Room - White Plaster with Button	Gray Non-Fibrous Homogeneous	3% Cellulose <small>HA: WPF</small>	97% Non-fibrous (Other)	None Detected
1796-Drywall <small>111801316-0001A</small>	3424-Living Room - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected
1797-Plaster <small>111801316-0002</small>	3424-Bathroom - White Plaster with Button	Gray Non-Fibrous Homogeneous	3% Cellulose <small>HA: WPF</small>	97% Non-fibrous (Other)	None Detected
1797-Drywall <small>111801316-0002A</small>	3424-Bathroom - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected
1798-Plaster <small>111801316-0003</small>	3424-Bedroom 1 - White Plaster with Button	Gray Non-Fibrous Homogeneous	3% Cellulose <small>HA: WPF</small>	97% Non-fibrous (Other)	None Detected
1798-Drywall <small>111801316-0003A</small>	3424-Bedroom 1 - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected
1799-Plaster <small>111801316-0004</small>	3424-bedroom 2 - White Plaster with Button	Gray Non-Fibrous Homogeneous	3% Cellulose <small>HA: WPF</small>	97% Non-fibrous (Other)	None Detected
1799-Drywall <small>111801316-0004A</small>	3424-bedroom 2 - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected
1800-Plaster <small>111801316-0005</small>	3422-Living Room - White Plaster with Button	Gray Fibrous Homogeneous	1% Cellulose <small>HA: WPF</small>	99% Non-fibrous (Other)	None Detected
1800-Drywall <small>111801316-0005A</small>	3422-Living Room - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected
1801-Plaster <small>111801316-0006</small>	3422-Bedroom 1 - White Plaster with Button	Gray Fibrous Homogeneous	2% Cellulose <small>HA: WPF</small>	98% Non-fibrous (Other)	None Detected
1801-Drywall <small>111801316-0006A</small>	3422-Bedroom 1 - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose <small>HA: WPF</small>	90% Gypsum	None Detected

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**EMSL Order:** 111801316  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1802-Plaster <small>111801316-0007</small>	3422-Bedroom 2 - White Plaster with Button	Gray Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
<small>HA: WPF</small>					
1802-Drywall <small>111801316-0007A</small>	3422-Bedroom 2 - White Plaster with Button	Tan/White Fibrous Homogeneous	15% Cellulose	85% Gypsum	None Detected
<small>HA: WPF</small>					
1803-Joint Compound <small>111801316-0008</small>	3424 Kitchen - Drywall with Joint Compund	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
<small>HA: WSJ</small>					
1803-Drywall <small>111801316-0008A</small>	3424 Kitchen - Drywall with Joint Compund	Tan/White Non-Fibrous Homogeneous	10% Cellulose	90% Gypsum	None Detected
<small>HA: WSJ</small>					
1804-Joint Compound <small>111801316-0009</small>	3422-Kitchen - Drywall with Joint Compund	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
<small>HA: WSJ</small>					
1804-Drywall <small>111801316-0009A</small>	3422-Kitchen - Drywall with Joint Compund	Tan/White Fibrous Homogeneous	20% Cellulose	80% Gypsum	None Detected
<small>HA: WSJ</small>					
1805-Sheet Flooring <small>111801316-0010</small>	3424-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1805-Mastic <small>111801316-0010A</small>	3424-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1806-Sheet Flooring <small>111801316-0011</small>	3424-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1806-Mastic <small>111801316-0011A</small>	3424-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1807-Sheet Flooring <small>111801316-0012</small>	3422-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1807-Mastic <small>111801316-0012A</small>	3422-Bathroom - Top Layer: Small Triangle Sheet Floor with Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1808-Floor Tile <small>111801316-0013</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: 12VFT</small>					

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**EMSL Order:** 111801316  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1808-Mastic <small>111801316-0013A</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT		
1809-Floor Tile <small>111801316-0014</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT		
1809-Mastic <small>111801316-0014A</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT		
1810-Floor Tile <small>111801316-0015</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT		
1810-Mastic <small>111801316-0015A</small>	3424-Bathroom - Middle Layer: Beige with Specs Tile with Beige Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 12VFT		
1811 <small>111801316-0016</small>	3424-Bathroom - Floor Vapor Barrier Paper	Pink Fibrous Homogeneous	100% Cellulose		None Detected
			HA: MISC		
1812 <small>111801316-0017</small>	3424-Bathroom - Floor Vapor Barrier Paper	Pink Fibrous Homogeneous	100% Cellulose		None Detected
			HA: MISC		
1813 <small>111801316-0018</small>	3424-Bathroom - Floor Vapor Barrier Paper	Pink Fibrous Homogeneous	100% Cellulose		None Detected
			HA: MISC		
1814 <small>111801316-0019</small>	3424-Kitchen - Baseboard Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: FBM		
1815 <small>111801316-0020</small>	3424-Kitchen - Baseboard Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: FBM		
1816 <small>111801316-0021</small>	3422-Kitchen - Baseboard Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: FBM		
1817 <small>111801316-0022</small>	Exterior SE - Exterior Stucco	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1818 <small>111801316-0023</small>	Exterior E Center - Exterior Stucco	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		

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**EMSL Order:** 111801316  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1819 <small>111801316-0024</small>	Exterior NE - Exterior Stucco	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1820 <small>111801316-0025</small>	Exterior NW - Exterior Stucco	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1821 <small>111801316-0026</small>	Exterior SW - Exterior Stucco	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		

Analyst(s) \_\_\_\_\_

Cindy Nguyen (25)

Michael Kinney (16)

Cindy Nguyen, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Dallas, TX NVLAP Lab Code 600111-0, TX 300456

Initial report from: 08/27/2018 11:05:36



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EMSL Order: 111801315

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/24/2018 - 08/27/2018

**Collected Date:**

**Project:** 7076.1017.0 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1822-Plaster <small>111801315-0001</small>	3459-Living Room - White Plaster with Button	Gray Non-Fibrous Homogeneous	3% Cellulose <small>HA: WPF</small>	97% Non-fibrous (Other)	None Detected
1822-Drywall <small>111801315-0001A</small>	3459-Living Room - White Plaster with Button	Tan/White Fibrous Homogeneous <small>HA: WPF</small>	10% Cellulose	90% Gypsum	None Detected
1823-Top Plaster <small>111801315-0002</small>	3459-Kitchen - White Plaster with Button	Beige Non-Fibrous Homogeneous <small>HA: WPF</small>	1% Fibrous (Other)	99% Non-fibrous (Other)	None Detected
1823-Bottom Plaster <small>111801315-0002A</small>	3459-Kitchen - White Plaster with Button	Gray Non-Fibrous Homogeneous <small>HA: WPF</small>	3% Cellulose	97% Non-fibrous (Other)	None Detected
1823-Drywall <small>111801315-0002B</small>	3459-Kitchen - White Plaster with Button	Tan/White Fibrous Homogeneous <small>HA: WPF</small>	10% Cellulose	90% Gypsum	None Detected
1824-Plaster <small>111801315-0003</small>	3459-Bedroom 1 - White Plaster with Button	Gray Non-Fibrous Homogeneous <small>HA: WPF</small>	5% Cellulose	95% Non-fibrous (Other)	None Detected
1824-Drywall <small>111801315-0003A</small>	3459-Bedroom 1 - White Plaster with Button	Tan/White Fibrous Homogeneous <small>HA: WPF</small>	10% Cellulose	90% Gypsum	None Detected
1825-Plaster <small>111801315-0004</small>	3459-Ceiling Bedroom 2 - White Plaster with Button	Gray Non-Fibrous Homogeneous <small>HA: WPF</small>	3% Cellulose	97% Non-fibrous (Other)	None Detected
1825-Drywall <small>111801315-0004A</small>	3459-Ceiling Bedroom 2 - White Plaster with Button	Tan/White Fibrous Homogeneous <small>HA: WPF</small>	10% Cellulose	90% Gypsum	None Detected
1826-Plaster <small>111801315-0005</small>	3461-Living Room Bedroom 1 - White Plaster with Button	Gray Fibrous Homogeneous <small>HA: WPF</small>	2% Cellulose	98% Non-fibrous (Other)	None Detected
1826-Drywall <small>111801315-0005A</small>	3461-Living Room Bedroom 1 - White Plaster with Button	Tan/Pink Fibrous Homogeneous <small>HA: WPF</small>	10% Cellulose	90% Gypsum	None Detected
1827-Plaster <small>111801315-0006</small>	3461-Bedroom 1 - White Plaster with Button	Gray/White Fibrous Homogeneous <small>HA: WPF</small>	3% Cellulose	97% Non-fibrous (Other)	None Detected

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**EMSL Order:** 111801315  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1827-Drywall <small>111801315-0006A</small>	3461-Bedroom 1 - White Plaster with Button	Tan/Pink Fibrous Homogeneous	10% Cellulose	90% Gypsum	None Detected
<small>HA: WPF</small>					
1828-Plaster <small>111801315-0007</small>	3461 Bathroom - White Plaster with Button	Gray/White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
<small>HA: WPF</small>					
1828-Drywall <small>111801315-0007A</small>	3461 Bathroom - White Plaster with Button	Tan/Pink Fibrous Homogeneous	10% Cellulose	90% Gypsum	None Detected
<small>HA: WPF</small>					
1829-Joint Compound <small>111801315-0008</small>	3459-Kitchen - Dry Wall with Joint Compund	White Non-Fibrous Homogeneous		100% Ca Carbonate	None Detected
<small>HA: WS/J</small>					
1829-Drywall <small>111801315-0008A</small>	3459-Kitchen - Dry Wall with Joint Compund	Tan/White Fibrous Homogeneous	10% Cellulose 1% Glass	89% Gypsum	None Detected
<small>HA: WS/J</small>					
1830-Joint Compound <small>111801315-0009</small>	3461-Kitchen - Dry Wall with Joint Compund	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
<small>HA: WS/J</small>					
1830-Drywall <small>111801315-0009A</small>	3461-Kitchen - Dry Wall with Joint Compund	Tan/White Fibrous Homogeneous	10% Cellulose 1% Glass	89% Gypsum	None Detected
<small>HA: WS/J</small>					
1831-Sheet Flooring <small>111801315-0010</small>	3459-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1831-Mastic <small>111801315-0010A</small>	3459-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1832-Sheet Flooring <small>111801315-0011</small>	3459-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1832-Mastic <small>111801315-0011A</small>	3459-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1833-Sheet Flooring <small>111801315-0012</small>	3461-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1833-Mastic <small>111801315-0012A</small>	3461-Bathroom - 6" Square Sheet Flooring with Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: VSF</small>					
1834 <small>111801315-0013</small>	3459-Kitchen - Baseboard Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<small>HA: FBM</small>					

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**EMSL Order:** 111801315  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1835 <small>111801315-0014</small>	3461-Kitchen - Baseboard Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: FBM		
1836 <small>111801315-0015</small>	3461-Kitchen - Baseboard Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: FBM		
1837 <small>111801315-0016</small>	Exterior NE - Exterior Window Frame Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: MISC		
1838 <small>111801315-0017</small>	Exterior NW - Exterior Window Frame Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: MISC		
1839 <small>111801315-0018</small>	Exterior SE - Exterior Window Frame Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: MISC		
1840 <small>111801315-0019</small>	Exterior NE - Exterior Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1841 <small>111801315-0020</small>	Exterior E Center - Exterior Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1842 <small>111801315-0021</small>	Exterior SE - Exterior Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1843 <small>111801315-0022</small>	Exterior SW - Exterior Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1844 <small>111801315-0023</small>	Exterior NW - Exterior Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: ES		
1845-Roof Shingle 1 <small>111801315-0024</small>	Roof NE - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1845-Roof Shingle 2 <small>111801315-0024A</small>	Roof NE - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1845-Roof Shingle 3 <small>111801315-0024B</small>	Roof NE - Roof Shingles	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1846-Roof Shingle 1 <small>111801315-0025</small>	Roof NE - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		

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**EMSL Order:** 111801315  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1846-Roof Shingle 2  111801315-0025A	Roof NE - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1846-Roof Shingle 3  111801315-0025B	Roof NE - Roof Shingles	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1847-Roof Shingle 1  111801315-0026	Roof NW - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		
1847-Roof Shingle 2  111801315-0026A	Roof NW - Roof Shingles	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
			HA: RS		

Analyst(s) \_\_\_\_\_

Cindy Nguyen (28)

Michael Kinney (16)

Cindy Nguyen, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Dallas, TX NVLAP Lab Code 600111-0, TX 300456

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EMSL Order: 151805791

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
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**Phone:** (562) 599-9918

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**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/24/2018

**Collected Date:** 08/15/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey / University of California Riverside, Avacado St 3489/3491 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1848-Plaster <i>151805791-0001</i>	Plaster w/Button - Living Rm	White/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1848-Drywall <i>151805791-0001A</i>	Plaster w/Button - Living Rm	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1849-Plaster <i>151805791-0002</i>	Plaster w/Button - Kitchen	White/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1849-Drywall <i>151805791-0002A</i>	Plaster w/Button - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1850-Plaster <i>151805791-0003</i>	Plaster w/Button - Bedrm 1	White/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1850-Drywall <i>151805791-0003A</i>	Plaster w/Button - Bedrm 1	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1851-Plaster <i>151805791-0004</i>	Plaster w/Button - Bedrm 2	White/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1851-Drywall <i>151805791-0004A</i>	Plaster w/Button - Bedrm 2	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1852-Plaster <i>151805791-0005</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/Button - Living Rm	White/Green/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1852-Drywall <i>151805791-0005A</i>	Plaster w/Button - Living Rm	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1853-Plaster <i>151805791-0006</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/Button - Bathrm	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1853-Drywall <i>151805791-0006A</i>	Plaster w/Button - Bathrm	Brown/White Non-Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1854-Plaster <i>151805791-0007</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/Button - Bedrm 2	White/Green/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1854-Drywall <i>151805791-0007A</i>	Plaster w/Button - Bedrm 2	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1855-Drywall <i>151805791-0008</i>	Drywall w/Joint C. - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected

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EMSL Order: 151805791

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1855-Joint Compound <i>151805791-0008A</i>	Drywall w/Joint C. - Kitchen	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1855-Texture <i>151805791-0008B</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/Joint C. - Kitchen	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1856-Drywall <i>151805791-0009</i>	Drywall w/Joint C. - Kitchen	White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1856-Caulk <i>151805791-0009A</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/Joint C. - Kitchen	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1856-Texture <i>151805791-0009B</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/Joint C. - Kitchen	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1857-Sheet Flooring <i>151805791-0010</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1857-Mastic <i>151805791-0010A</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1858-Sheet Flooring <i>151805791-0011</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1858-Mastic <i>151805791-0011A</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1859-Sheet Flooring <i>151805791-0012</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1859-Mastic <i>151805791-0012A</i>	Top Layer 6" Square Sheet Floor w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1860-Sheet Flooring <i>151805791-0013</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1860-Mastic <i>151805791-0013A</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1861-Sheet Flooring <i>151805791-0014</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	White/Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1861-Mastic <i>151805791-0014A</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1862-Sheet Flooring <i>151805791-0015</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	Beige Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1862-Mastic <i>151805791-0015A</i>	Top Layer Small Triangle Sheet Fl w/Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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**EMSL Order:** 151805791  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1863-Floor Tile <small>151805791-0016</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1863-Mastic <small>151805791-0016A</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Beige Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
1864-Floor Tile <small>151805791-0017</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1864-Mastic <small>151805791-0017A</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Beige Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					
1865-Mastic 1 <small>151805791-0018</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Yellow/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1865-Floor Tile <small>151805791-0018A</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1865-Mastic 2 <small>151805791-0018B</small>	Middle Layer Small Traingle Sheet FI w/Beige Mastic - Bathrm	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1866 <small>151805791-0019</small>	Bottom Middle Layer Brown Design Sheet FI w/Mastic - Bathrm	Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1867 <small>151805791-0020</small>	Bottom Middle Layer Brown Design Sheet FI w/Mastic - Bathrm	Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1868 <small>151805791-0021</small>	Bottom Middle Layer Brown Design Sheet FI w/Mastic - Bathrm	Beige Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1869-Sheet Flooring <small>151805791-0022</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Yellow/Beige Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1869-Vapor 1 <small>151805791-0022A</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
1869-Vapor 2 <small>151805791-0022B</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Gray Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
1869-Other <small>151805791-0022C</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1870-Sheet Flooring <small>151805791-0023</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Yellow Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1870-Vapor <small>151805791-0023A</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected

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**Customer PO:**  
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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1871-Sheet Flooring <small>151805791-0024</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Yellow/Beige Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1871-Vapor <small>151805791-0024A</small>	Bottom Layer Yellow Sheet Floor w/Mastic & Vapor - Bathrm	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
1872 <small>151805791-0025</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Window Frame Putty - N Center	Gray/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
1873 <small>151805791-0026</small>	Exterior Window Frame Putty - NE	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1874 <small>151805791-0027</small>	Exterior Window Frame Putty - NW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1875 <small>151805791-0028</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NW	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1876 <small>151805791-0029</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NE	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1877 <small>151805791-0030</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - E Center	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1878 <small>151805791-0031</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - SE	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1879 <small>151805791-0032</small> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - SW	Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1880-Shingle 1 <small>151805791-0033</small>	Roof Shingles - NW	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1880-Shingle 2 <small>151805791-0033A</small>	Roof Shingles - NW	Black/Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1881-Shingle 1 <small>151805791-0034</small>	Roof Shingles - NW	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1881-Shingle 2 <small>151805791-0034A</small>	Roof Shingles - NW	Black/Beige Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1882-Shingle 1 <small>151805791-0035</small>	Roof Shingles - NE	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1882-Shingle 2 <small>151805791-0035A</small>	Roof Shingles - NE	Black/Beige Fibrous Homogeneous	15% Cellulose 10% Glass	75% Non-fibrous (Other)	None Detected

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**EMSL Order:** 151805791

**Customer ID:** 32CITA50D

**Customer PO:**

**Project ID:** JS

Analyst(s)

*Collin Creel (21)*

*Jenny Drapela (43)*

Michelle Leggett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Houston, TX NVLAP Lab Code 102106-0, AZ 0925, CO AL-15355, LA 04126, TX 300159

Initial report from: 08/27/2018 10:26:45



# EMSL Analytical, Inc.

5950 Fairbanks N. Houston Rd. Houston, TX 77040

Tel/Fax: (713) 686-3635 / (713) 686-3645

<http://www.EMSL.com/houstonlab@emsl.com>

EMSL Order: 151805780

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/20/2018 12:30 PM

**Analysis Date:** 08/23/2018 - 08/24/2018

**Collected Date:** 08/15/2018

**Project:** 7076.1017.0 / Canyon Crest Family Housing Survey / University of California Riverside, Avacado St 3472/3474 (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1883-Plaster <i>151805780-0001</i>	Plaster w/ Button - Living Room	White/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1883-Drywall <i>151805780-0001A</i>	Plaster w/ Button - Living Room	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1884-Plaster <i>151805780-0002</i>	Plaster w/ Button - Hall	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1884-Drywall <i>151805780-0002A</i>	Plaster w/ Button - Hall	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1885-Plaster <i>151805780-0003</i>	Plaster w/ Button - Bedrm 2	Green/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1885-Drywall <i>151805780-0003A</i>	Plaster w/ Button - Bedrm 2	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1885-Texture <i>151805780-0003B</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/ Button - Bedrm 2	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1886-Plaster <i>151805780-0004</i>	Plaster w/ Button - Bedrm 1	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1886-Drywall <i>151805780-0004A</i>	Plaster w/ Button - Bedrm 1	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1887-Plaster Base Coat <i>151805780-0005</i>	Plaster w/ Button - Living Room	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1887-Plaster Skim Coat <i>151805780-0005A</i> <i>Inseparable paint / coating layer included in analysis</i>	Plaster w/ Button - Living Room	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1887-Drywall <i>151805780-0005B</i>	Plaster w/ Button - Living Room	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1888-Plaster <i>151805780-0006</i>	Plaster w/ Button - Bedrm 1	Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1888-Drywall <i>151805780-0006A</i>	Plaster w/ Button - Bedrm 1	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1889-Plaster <i>151805780-0007</i>	Plaster w/ Button - Bedrm 2	Beige Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected

Initial report from: 08/24/2018 12:07:04



# EMSL Analytical, Inc.

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<http://www.EMSL.com/houstonlab@emsl.com>

EMSL Order: 151805780

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1889-Drywall <i>151805780-0007A</i>	Plaster w/ Button - Bedrm 2	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1890-Drywall <i>151805780-0008</i>	Drywall w/ Joint C. - Kitchen	Brown/White Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1890-Joint Compound <i>151805780-0008A</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/ Joint C. - Kitchen	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1891-Drywall <i>151805780-0009</i>	Drywall w/ Joint C. - Kitchen	Brown/White Non-Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
1891-Joint Compound <i>151805780-0009A</i> <i>Inseparable paint / coating layer included in analysis</i>	Drywall w/ Joint C. - Kitchen	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
1892-Sheet Flooring <i>151805780-0010</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1892-Mastic <i>151805780-0010A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1893-Sheet Flooring <i>151805780-0011</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1893-Mastic <i>151805780-0011A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1894-Sheet Flooring <i>151805780-0012</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	White Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1894-Mastic <i>151805780-0012A</i>	6" Square Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1895-Sheet Flooring <i>151805780-0013</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1895-Mastic <i>151805780-0013A</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1895-Felt <i>151805780-0013B</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1896-Sheet Flooring <i>151805780-0014</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1896-Mastic <i>151805780-0014A</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1896-Felt <i>151805780-0014B</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1897-Sheet Flooring <i>151805780-0015</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Beige Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected

Initial report from: 08/24/2018 12:07:04



# EMSL Analytical, Inc.

5950 Fairbanks N. Houston Rd. Houston, TX 77040

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<http://www.EMSL.com/houstonlab@emsl.com>

**EMSL Order:** 151805780  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:** JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1897-Mastic <i>151805780-0015A</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1897-Felt <i>151805780-0015B</i>	Small Rectangle Sheet Flooring w/ Mastic - Bathrm	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1898 <i>151805780-0016</i>	Baseboard Mastic - Kitchen	Brown/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1899 <i>151805780-0017</i>	Baseboard Mastic - Kitchen	Brown/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1900 <i>151805780-0018</i>	Baseboard Mastic - Kitchen	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1901 <i>151805780-0019</i>	Exterior Stucco - SE	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1902 <i>151805780-0020</i> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - S Center	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1903 <i>151805780-0021</i> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - SW	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1904 <i>151805780-0022</i> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NW	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1905 <i>151805780-0023</i> <i>Inseparable paint / coating layer included in analysis</i>	Exterior Stucco - NE	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1906-Shingle 1 <i>151805780-0024</i>	Roof Shingles - SE	Gray/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1906-Shingle 2 <i>151805780-0024A</i>	Roof Shingles - SE	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1907-Shingle 1 <i>151805780-0025</i>	Roof Shingles - SE	Gray/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1907-Shingle 2 <i>151805780-0025A</i>	Roof Shingles - SE	Red/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1908-Shingle 1 <i>151805780-0026</i>	Roof Shingles - SW	Gray/Black Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
1908-Shingle 2 <i>151805780-0026A</i>	Roof Shingles - SW	Red/Black Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Initial report from: 08/24/2018 12:07:04



# EMSL Analytical, Inc.

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**EMSL Order:** 151805780

**Customer ID:** 32CITA50D

**Customer PO:**

**Project ID:** JS

Analyst(s)

*Collin Creel (16)*

*Michelle Leggett (33)*

Michelle Leggett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Houston, TX NVLAP Lab Code 102106-0, AZ 0925, CO AL-15355, LA 04126, TX 300159

Initial report from: 08/24/2018 12:07:04



# EMSL Analytical, Inc.

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Tel/Fax: (206) 269-6310 / (206) 900-8789

<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

EMSL Order: 511802584

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/04/2018

**Collected Date:**

**Project:** 7076.1017.0, Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2118-Membrane <small>511802584-0001</small>	Roof Membrane - Roof, N.E.	Gray/Black Fibrous Homogeneous	40% Glass	5% Quartz 55% Non-fibrous (Other)	None Detected
2118-Insulation <small>511802584-0001B</small>	Roof Membrane - Roof, N.E.	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2118-Styrofoam <small>511802584-0001C</small>	Roof Membrane - Roof, N.E.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2119-Membrane <small>511802584-0002</small>	Roof Membrane - Roof, W. Center	Gray/Black Fibrous Homogeneous	40% Glass	5% Quartz 55% Non-fibrous (Other)	None Detected
2119-Insulation <small>511802584-0002B</small>	Roof Membrane - Roof, W. Center	Brown Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2119-Styrofoam <small>511802584-0002C</small>	Roof Membrane - Roof, W. Center	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2120-Membrane <small>511802584-0003</small>	Roof Membrane - Roof, S.E.	Gray/Black Fibrous Homogeneous	45% Glass	5% Quartz 50% Non-fibrous (Other)	None Detected
2120-Insulation <small>511802584-0003B</small>	Roof Membrane - Roof, S.E.	Brown Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
2120-Styrofoam <small>511802584-0003C</small>	Roof Membrane - Roof, S.E.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2121 <small>511802584-0004</small>	Roof Parapet - Roof, N. Center	Gray/Black Non-Fibrous Homogeneous	20% Glass	5% Quartz 75% Non-fibrous (Other)	None Detected
2122-Coating <small>511802584-0005</small>	Roof Parapet - Roof, E. Center	White Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2122-Built Up Roofing <small>511802584-0005A</small>	Roof Parapet - Roof, E. Center	Black Fibrous Homogeneous	25% Glass	3% Quartz 72% Non-fibrous (Other)	None Detected
2123-Coating <small>511802584-0006</small>	Roof Parapet - Roof, W. Center	Gray/White Non-Fibrous Homogeneous	3% Cellulose	10% Quartz 87% Non-fibrous (Other)	None Detected
2123-Built Up Roofing <small>511802584-0006A</small>	Roof Parapet - Roof, W. Center	Black Fibrous Homogeneous	20% Glass	5% Quartz 75% Non-fibrous (Other)	None Detected
2124-Roof Penetration <small>511802584-0007</small>	Painted White: Roof Penetration - Roof, N.W.	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2124-Tar <small>511802584-0007A</small>	Painted White: Roof Penetration - Roof, N.W.	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 09/04/2018 17:02:41



# EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

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<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

<b>EMSL Order:</b> 511802584
<b>Customer ID:</b> 32CITA50D
<b>Customer PO:</b>
<b>Project ID:</b>

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2125-Roof Penetration <i>511802584-0008</i>	Painted White: Roof Penetration - Roof, N. Center	White Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
2125-Tar <i>511802584-0008A</i>	Painted White: Roof Penetration - Roof, N. Center	Black Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
2126-Roof Penetration <i>511802584-0009</i>	Painted White: Roof Penetration - Roof, S. Center	White Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
2126-Tar <i>511802584-0009A</i>	Painted White: Roof Penetration - Roof, S. Center	Black Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
2127 <i>511802584-0010</i> <i>Result includes a small amount of attached material</i>	Roof Penetration - Roof, W. Area	Gray/White Non-Fibrous Homogeneous	8% Synthetic	15% Quartz 77% Non-fibrous (Other)	None Detected
2128 <i>511802584-0011</i> <i>Result includes a small amount of attached material</i>	Roof Penetration - Roof, W. Area	Gray/White Non-Fibrous Homogeneous	5% Synthetic	10% Quartz 85% Non-fibrous (Other)	None Detected
2129-Roof Penetration <i>511802584-0012</i> <i>Result includes a small amount of attached material</i>	Roof Penetration - Roof, W. Area	Gray/White Non-Fibrous Homogeneous	5% Synthetic	15% Quartz 80% Non-fibrous (Other)	None Detected
2129-Tar <i>511802584-0012A</i>	Roof Penetration - Roof, W. Area	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Ehrin Baul (24)

Lauren Kerber, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/04/2018 17:02:41



### CHAIN OF CUSTODY



**CITADEL LOCATION:**

#331815187

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 1725 Victory Blvd.  
 Glendale, CA 91201  
 Phone: (818) 246-2707  
 Fax: (818) 246-3145

Contact: Jack Samuels  
 jsamuels@citadelenvironmental.com  
 151 Kalmus Drive, Suite F-4  
 Costa Mesa, CA 92626  
 Phone: (562) 599-9918  
 Fax: (714) 547-4647

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 28212 Kelly Johnson Parkway  
 Valencia, CA 91355  
 Phone: (661) 257-9009  
 Fax: (661) 257-9019

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 3700 West 190th Street  
 Torrance, CA 90509  
 Phone: (310) 212-1714  
 Fax: (310) 212-1702

**PROJECT AND SAMPLE INFORMATION**

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey -

NUMBER OF SAMPLES: 38<sup>JH</sup> 59

SAMPLE NUMBERS: 01 - 38<sup>JH</sup> 59

TYPE OF SAMPLES (CIRCLE ONE):  
 AIR \_\_\_\_\_ TAPE \_\_\_\_\_ WATER \_\_\_\_\_ WIPE \_\_\_\_\_  
 ZEFON \_\_\_\_\_ ANDERSEN \_\_\_\_\_  
 BULK \_\_\_\_\_ SOIL \_\_\_\_\_ AIR-O-CELL \_\_\_\_\_ PLATE \_\_\_\_\_ OTHER \_\_\_\_\_

TYPE OF ANALYSIS:  
**Asbestos**  
 \_\_\_\_\_ Phase Contrast Microscopy  
 Polarized Light Microscopy  
 \_\_\_\_\_ 1st Positive Stop  
 \_\_\_\_\_ Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count  
 \_\_\_\_\_ Transmission Electron Microscopy  
 \_\_\_\_\_ Qualitative \_\_\_\_\_ Quantitative

**Lead**  
 \_\_\_\_\_ Flame Atomic Absorption  
 \_\_\_\_\_ TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TCLP

**Culturable Air**  
 \_\_\_\_\_ Andersen Fungi (genue ID, Aspergillus)  
 \_\_\_\_\_ Andersen Bacteria

**Non-Culturable Air**  
 \_\_\_\_\_ Non-Viable Spore Trap Slide

**Surface Samples**  
 \_\_\_\_\_ Surface Sample (direct examination)

**Culturable Samples**  
 \_\_\_\_\_ Quantitative Fungi-dust, bulk swab-1 medium  
 \_\_\_\_\_ Quantitative Fungi-dust, bulk swab-3 media  
 \_\_\_\_\_ Quantitative Bacteria-dust, bulk swab-1 medium  
 \_\_\_\_\_ Quantitative Bacteria-dust, bulk, swab-3 media  
 \_\_\_\_\_ E.coli and Coliforms (MUG)

**Other**  
 \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):  
 Rush \_\_\_\_\_ 12 HOURS \_\_\_\_\_ 24 HOURS \_\_\_\_\_  48 HOURS \_\_\_\_\_  
 3 DAYS \_\_\_\_\_ ~~5 DAYS~~ \_\_\_\_\_ 5-10 DAYS \_\_\_\_\_ OTHER \_\_\_\_\_

*Call if this is an issue. Its OK*

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):  
 PHONE \_\_\_\_\_ FAX \_\_\_\_\_ WRITTEN REPORT \_\_\_\_\_  PDF

NOTES/COMMENTS:  
 Special Project "JS" - Perform layered analysis and provide layered results.  
 Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: <u>7/23/18</u> Time: <u>4:40 PM</u>	Date: <u>7/23/18</u> Time: <u>1:00</u>
Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: <u>7/23/18</u> Time: <u>7:02 PM</u>	Date: <u>7/24/18</u> Time: <u>8am</u>

LABORATORY INFORMATION: NAME: LA Testing LOCATION: H13

DISPOSITION OF SAMPLES:  
 RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS  
 OTHER \_\_\_\_\_  
 YEAR (S) \_\_\_\_\_

# #331815187 BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 3 1 8		PAGE			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		DOSH HOOPER		OF			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		14-5288					
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE	
			COLOR	TEXTURE/PATTERN							
12VFT	1	01	B2162	12" B2162 FLOOR TILE w/ GRAY STIPPLES + YELLOW MASTIC (TOP LAYERS)	811 PLUM ST	1			NF	6	N/A
12VFT	1	02									
12VFT	1	03									
12VFT	2	04	BROWN	12" BROWN FLOOR TILE w/ WHITE & BROWN STIPPLES w/ YELLOW MASTIC TOP LAYER							
12VFT	2	05									
12VFT	2	06									
12VFT	3	07	DARK BROWN	BOTTOM LAYERS 12" BROWN w/ BROWN STIPPLES + BLACK MASTIC + PLASTER BARRELOR TOP LAYER							
12VFT	3	08									
12VFT	3	09									
VSF	1	10	WHITE / GRAY	BROWN SHEET FLOORING w/ 6" SQUARES + YELLOW MASTIC					F		
VSF	1	11									
VSF	1	12									
VSF	2	13	WHITE / GRAY	WHITNEY SHEET FLOORING MIXED SQUARES/TRIMMER w/ YELLOW MASTIC (TOP LAYER)					F		
12VFT	4	14	B2162	2ND LAYER 12" FLOOR TILE B2162 w/ BLACK MASTIC					NF		



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BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 3 1 8		PAGE	
CLIENT:		Hailey & Aldrich		INSPECTOR(S):		JOSH HOONER		OF		CITADEL ENVIRONMENTAL SERVICES, INC.	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		14-5289		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
12VFF	5	15	BEIGE	3RD LAYER BEIGE w/ BROWN & WHITE STREAKS 12" FLOOR TILE w/ BROWN MASTIC	811 PLUM ST	1	KITCHEN SE			MF	6
VSF	2	16	WHITE / BROWN	1ST LAYER WHITE & BROWN FLOORING MIXED SQUARE PATTERN w/ YELLOW MASTIC			KITCHEN NE			F	
12VFF	4	17	BEIGE	2ND LAYER 12" FLOOR TILE BEIGE w/ BLACK MASTIC						MF	
12VFF	5	18	BEIGE	3RD LAYER BEIGE w/ BROWN WHITE STREAKS 12" FLOOR TILE w/ BROWN MASTIC						I	
VSF	3	19	WHITE / YELLOW	4TH LAYER WHITE & YELLOW PEBBLE PATTERN STREET FLOORING w/ BLACK MASTIC						F	
VSF	2	20	BROWN				KITCHEN SW			F	
12VFF	4	21	BEIGE							MF	
12VFF	5	22	BEIGE							MF	
VSF	3	23	WHITE / YELLOW							F	
WPF	1	24	WHITE	PLASTER			LIVING RM NORTH	3220	SE	MF	
WPF	1	25					BEDROOM 2 NORTH				
WPF	1	26					BEDROOM 1 EAST				
WPF	1	27					KITCHEN NORTH				
WPF	1	28					HALLWAY SOUTH				

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 7 2 3 1 8

INSPECTOR(S): JOSE HOOPER

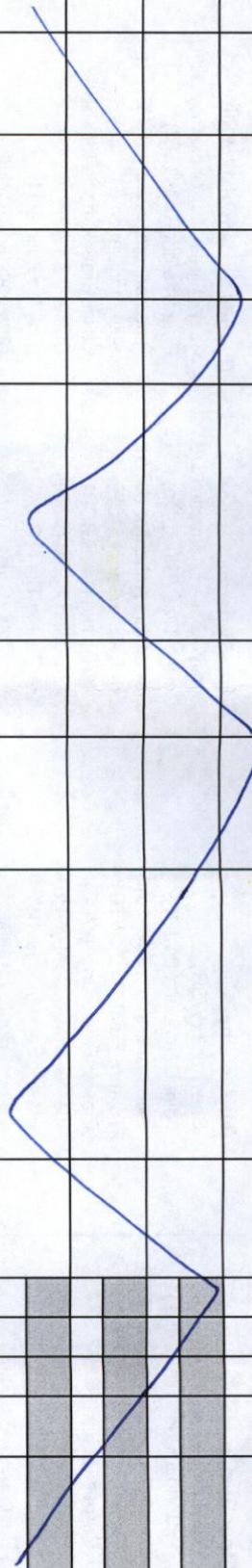
CSST/CAC NO: 14-5288

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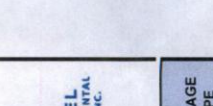
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
ES	29	YELLOW	STUCCO SKIM COAT	811 PLUM ST	1	SOUTHWEST	785	SF	NF	6	N/A
ES	30					WEST					
ES	31					NORTH					
RS	32	BLACK	ROOF SAMPLES w/ BLACK 3/8" GRANULES SURVEIL + WATER BARRIER		ROOF	SW					
RS	33										
RS	34										
WS/A	35	WHITE	SMOOTH DRY WALL			KITCHEN SE					
FBM	36	BEIGE	BASEBOARDS MASTIC BASE 4" BK PB			KITCHEN SE					
FBM	37					SW					
FBM	38					WEST					



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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 3 1 8		PAGE				
CLIENT: Haley & Aldrich		INSPECTOR(S): JOSH HOOPER		OF				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288						
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION				
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	LEVEL	AREALOCATION	QUANTITY	FRIABILITY	DAMAGE TYPE
HA NO.		COLOR	TEXTURE/PATTERN			NO.		
12VFT	39	BROWN	12" BROWN FLOOR TILE w/ WHITE & BROWN STREAKS + YELLOW MASTIC (TOP LAYER)	822	LIVING RM SW		NF	6 N/A
12VFT	40				BEDROOM 2 SW			
12VFT	41				BEDROOM 1 NW			
12VFT	42	BEIGE	BOTTOM LAYER 12" BEIGE FLOOR TILE w/ BLACK MASTIC + VARIOUS BARRIER PATTERNS		LIVING RM SW			
12VFT	43				BEDROOM 2 SW			
12VFT	44				BEDROOM 1 NW			
12VFT	45	WHITE	WHITE/GRAY SHEET FLOORING WITH 6" SQUARES + YELLOW MASTIC		BATH ROOM SE		F	
12VFT	46							
12VFT	47							
12VFT	48	WHITE	WHITE/GRAY SHEET FLOORING WITH SQUARE/TERRAZZO PATTERN + BEIGE MASTIC (TOP LAYER)		KITCHEN NW			
12VFT	49							
12VFT	50							
12VFT	51	GREEN	GREEN/YELLOW SHEET FLOORING SQUARE PATTERN w/ BLACK MASTIC (THIRD LAYER)		NW			
12VFT	52							
12VFT								



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BULK SAMPLE DATA FORM

PROJECT NO.:		7	0	7	6	1		0	1	7	0	
CLIENT:		Haley & Aldrich										
PROJECT ID:		Canyon Crest Family Housing Survey										
SITE ADDRESS:		University of California Riverside										
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN			AREA/LOCATION	NO.	UNIT				
VSF 4	53	GREEN yellow	↓	822 PUMPT	1	KITCHEN SW			F	6	N/A	
WPF 1	54	WHITE	PLASTER			LIVING RM EAST	3220	SE	NE			
WPF 1	55					BEDROOM 1 EAST						
WPF 1	56					BED ROOM 2 SOUTH						
WPF 1	57					KITCHEN SOUTH						
WPF 1	58					HALLWAY SOUTH						
WPF 1	59	WHITE	DRYWALL SMOOTH			KITCHEN NE						

DATE: 07 23 18

INSPECTOR(S): JOSE HOVOR

CSST/CAC NO: 14-5228

PAGE

OF



## CHAIN OF CUSTODY



### CITADEL LOCATION:

<input type="checkbox"/> <b>GLENDALE</b>	<input checked="" type="checkbox"/> <b>ORANGE COUNTY</b>	<input type="checkbox"/> <b>VALENCIA</b>	<input type="checkbox"/> <b>TORRANCE OFFICE</b>
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone:(562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone:(661) 257-9009 Fax:(661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone:(310) 212-1714 Fax:(310) 212-1702

### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 136 SAMPLE NUMBERS: 60-195

TYPE OF SAMPLES (CIRCLE ONE):

<input type="checkbox"/> AIR	<input type="checkbox"/> TAPE	<input type="checkbox"/> WATER	<input type="checkbox"/> WIPE
<input checked="" type="checkbox"/> BULK	<input type="checkbox"/> SOIL	<input type="checkbox"/> ZEFON	<input type="checkbox"/> ANDERSEN
		<input type="checkbox"/> AIR-O-CELL	<input type="checkbox"/> PLATE
			<input type="checkbox"/> OTHER

TYPE OF ANALYSIS:

**Asbestos**

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop  
 Point Count     400 Point Count     1000 Point Count  
 Transmission Electron Microscopy  
 Qualitative     Quantitative

**Lead**

Flame Atomic Absorption  
 TTLC     STLC     TCLP

**Culturable Air**

Andersen Fungi (genue ID, Aspergillus)  
 Andersen Bacteria

**Non-Culturable Air**

Non-Viable Spore Trap Slide

**Surface Samples**

Surface Sample (direct examination)

**Culturable Samples**

Quantitative Fungi-dust, bulk swab-1 medium  
 Quantitative Fungi-dust, bulk swab-3 media  
 Quantitative Bacteria-dust, bulk swab-1 medium  
 Quantitative Bacteria-dust, bulk, swab-3 media  
 E.coli and Coliforms (MUG)

**Other**

TURNAROUND TIME (CIRCLE ONE):

<input type="checkbox"/> Rush	<input checked="" type="checkbox"/> 12 HOURS	<input type="checkbox"/> 24 HOURS	<input type="checkbox"/> 48 HOURS
<input type="checkbox"/> 3 DAYS	<input checked="" type="checkbox"/> 5 DAYS	<input type="checkbox"/> 5-10 DAYS	<input type="checkbox"/> OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

<input type="checkbox"/> PHONE	<input type="checkbox"/> FAX	<input type="checkbox"/> WRITTEN REPORT	<input checked="" type="checkbox"/> PDF
--------------------------------	------------------------------	---	---

NOTES/COMMENTS: **Special Project "JS" - Perform layered analysis and provide layered results.**  
**Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.**

TRANSMITTAL RECORD:

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: <u>7/27/18</u> Time: <u>1400</u>	Date: <u>7/30</u> Time: <u>1:20</u>
Relinquished By: _____	Received By: _____
Date: _____ Time: _____	Date: _____ Time: _____

LABORATORY INFORMATION: NAME: \_\_\_\_\_ LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

<input type="checkbox"/> RETURN _____ DAYS AFTER ANALYSIS	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> RETAIN FOR _____ DAYS	<input type="checkbox"/> YEAR (S) _____

# BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 5 1 8		PAGE			
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S):		OF			
PROJECT ID:		University of California Riverside		BULK SAMPLE LOCATION		QUANTITY		FRIABILITY			
SITE ADDRESS:		University of California Riverside		AREA/LOCATION		NO.		DAMAGE TYPE			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
ES	1	60	BS16E	STUCCO SKIM COAT	822 PUUM ST	1	EXTERIOR	NW		6	N/A
ES	1	61				1		SW			
ES	1	62				1		SE			
RS	1	63	BLACK <del>ORANGE</del>	ROOFING SHINGLE & VAPOR BARRIER		ROOF		NW			
RS	1	64						SOUTH			
RS	1	65						SW			
RPm	1	66	GRAY <del>BLACK</del>	ROOF PENETRATION MASTIC				SOUTH			
RPm	1	67									
RPm	1	68									
12VFT	2	69	BROWN	12" BRN FLOOR TILE w/ WHITE & BRN STRIPS w/ YELLOW MASTIC (TOP LAYER)	3398 10440	1	LIVING RM	SW			
12VFT	2	70					BED RM 1	SOUTH			
12VFT	2	71					BED RM 2	NE			
12VFT	4	72	BS16E	12" BEIGE FLOOR TILE w/ BLACK MASTIC + VAPOR BARRIER PAPER (BOTTOM LAYER)			LIVING RM	SW			
12VFT	4	73					BED RM 1	SOUTH			

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# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 5 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOONER		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION					
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO. UNIT	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
12VFT 4	74	BEIGE	↓	3398 10440	1	BED RM 2 NE		NF	6 N/A
VSF 2	75	WHITE GRAY	WHITE/GRAY SHEET FLOORING w/ SQUARE/TRIANGLE PATTERN w/ YELLOW MASTIC			BATH ROOM NW		F	6 N/A
VSF 2	76		↓			SOUTH			
VSF 2	77		↓			NORTH EAST			
VSF 5	78		WHITE/GRAY SHEET FLOORING w/ RECTANGLE PATTERN w/ BEIGE MASTIC			KITCHEN NW			
VSF 5	79		↓			SW			
VSF 5	80		↓			SE			
ES 1	81	BEIGE	↓			BATH ROOM NW		NF	
ES 1	82		↓			SW			
ES 1	83		↓			SE			
WPF 1	84	WHITE	↓			HALL NORTH			
WPF 1	85		↓			BED ROOM WEST			
WPF 1	86		↓			KITCHEN EAST			
WPF 1	87		↓			BATH ROOM NW/ST			

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 5 1 8		PAGE	
CLIENT:		Hailey & Aldrich				INSPECTOR(S):		J. HOOPER		OF	
PROJECT ID:		Canyon Crest Family Housing Survey				CSST/CAC NO:		14-5288			
SITE ADDRESS:		University of California Riverside				BULK SAMPLE LOCATION				CITADEL ENVIRONMENTAL SERVICES, INC.	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
WPF			WHITE	PLASTER	3398 10410	1	BED RM 2 EAST			NE	6 N/A
FBM	88		WHITE	4" BLACK VINYL BRASSBOARD w/ BEIGE MASTIC			BATHROOM SW				
FBM	89		WHITE				WEST				
FBM	90		WHITE				KITCHEN WEST				
WBS	91		WHITE	SMOOTH DRUM			KITCHEN NW				
RFM	92		BLACK	TAR ROOF w/ INSULATION w/ UNIFORM BARREL + STYROFOAM		ROOF	NE				
RFM	93		BLACK				WEST				
RFM	94		BLACK				CENTRAL				
RFM	95		BLACK				SOUTH CENTRAL				
RFM	96		BLACK	ROOF PENETRATION MASTIC			CENTRAL				
RFM	97		BLACK				EAST				
RFM	98		BLACK								
ES	99		YELLOW	STUCCO SKIM COAT	3334 10410	1	EXTERIOR WEST				
ES	100		YELLOW				SE				
ES	101		YELLOW				NE				

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 6 1 8		PAGE	
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Hoover		OF		FR	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		14-5288		MATERIAL CONDITION		DAMAGE TYPE	
SITE ADDRESS:		University of California Riverside		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		FR	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FR	DAMAGE TYPE
RS	102		BLACK	ROOFING SHINGLES & VAPOR BARRIER	3334	ROOF	SE			6	N/A
RS	103						SOUTH				
RS	104						SW				
RFM	105		GRAY	ROOF PENETRATION MASTIC			SOUTH				
RFM	106		BLACK								
RFM	107										
WPF	108		WHITE	PLASTER			LIVING RM NW				
WPF	109						KITCHEN SOUTH				
WPF	110						BED RM 1 EAST				
WPF	111						BATH RM SOUTH				
WPF	112						BED RM 2 NE				
VSF	113		WHITE	SHEET FLOORING w/ 6" SQUARES w/ yellow MASTIC			BATHRM SW				
VSF	114		GRAY				EAST				
VSF	115						NE				

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# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6		DATE: 0 7 2 6 1 8		PAGE			
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF			
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288		FRIABILITY			
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION			
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN				
12VFT	116	BROWN	12" FLOOR TILE w/ WHITE SEAM STREAKS w/ YELLOW MASTIC (TOP LAYER)	1	LIVING RM WEST	NF	N/A
12VFT	117				BED RM 1 EAST		
12VFT	118				BED RM 2 CENTRAL		
12VFT	119	BEIGE	12" FLOOR TILE w/ BEIGE MASTIC+VAPOR BARRIER FLOOR (BOTTOM LAYER)		LIVING RM WEST		
12VFT	120				BED RM 1 EAST		
12VFT	121				BED RM 2 CENTRAL		
V5F	122	BEIGE	SHEET FLOORING w/ BROWN FLOOR PATTERN w/ BEIGE MASTIC (BOTTOM LAYER)		KITCHEN SW	F	
V5F	123				SE		
V5F	124				NE		
W5/1	125	WHITE	SMOOTH PLASTER		KITCHEN NW	NF	
FBM	126	BEIGE	4" BLACK BASEBOARD w/ BEIGE MASTIC		BATHROOM NE		
FBM	127				E		
FBM	128				SE		
CS	129	BEIGE	STUCCO SKIM COAT	1	STAIRWELL SW	NF	N/A

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# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY						
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE	
		COLOR	TEXTURE/PATTERN							NO.
ES	130	BEIGE	STUCCO SKIM COAT	3370 10M <sup>2</sup> HO	1	EXTERIOR SE		NF	6	N/A
ES	131					WEST		F		
VSF	132	WHITE	SHEET FLOORING w/ SQUARE & TRIANGULAR PATTERN w/ YELLOW MARBIC (1ST LAYER)			KITCHEN NE				
VSF	133					EAST				
VSF	134					SW				
VSF	135	ORANGE	SHEET FLOORING w/ BEANWOOD SPECS w/ WHITE MARBIC (2ND LAYER)			NE				
VSF	136					EAST				
VSF	137					SW				
VSF	138	WHITE	BOBBLE PATTERN SHEET FLOORING w/ YELLOW MARBIC (3RD LAYER)			NE				
VSF	139					EAST				
VSF	140					SW				
VSF	141	BEIGE	SHEET FLOORING w/ BROWN FLOWSE PATTERN w/ BLACK MARBIC + VARIOUS BEIGE TONE (4TH LAYER)			NE				
VSF	142					EAST				
VSF	143					SW				

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 6 1 8		PAGE			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. HOOPER		OF			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		14-5288					
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY NO.	UNIT	DAMAGE TYPE		
			COLOR	TEXTURE/PATTERN							
WPF	1	144	WHITE	PLASTER	3370	1			NE	6	N/A
WPF	1	145									
WPF	1	146									
WPF	1	147									
WPF	1	148									
12VFT	2	149	BROWN	12" FLOOR TILE w/ WHITE GROUT STAINES w/ YELLOW MORTAR (TOP INTER)							
12VFT	2	150									
12VFT	2	151									
12VFT	3	152	DARK BROWN	12" FLOOR TILE w/ BROWN STAINES w/ BUCK MORTIC TYPICAL BRICKS PAPER							
12VFT	3	153									
12VFT	3	154									
V5F	1	155	WHITE GRAY	SHEET FLOORING w/ 6" SUBMISS w/ YELLOW MORTIC					F		
V5F	1	156									
V5F	1	157									

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 6 1 8		PAGE	
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. HOOPER		OF			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		14-5288		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT		
FBM	158		BEIGE	4" BLACK BASEBOARD w/ BEIGE MASTIC	3370 DMHO	1	KITCHEN SW			NF	6
FBM	159						NORTH				
FBM	160						EAST				
RS	161		BLACK	ROOFING SHIMBLES & VAPOR BARRIER		ROOF	SE				
RS	162		ORANGE				EAST				
RS	163						NE				
RFM	164		GRAY	ROOF PENETRATION MASTIC			SOB EAST				
RFM	165		BLACK								
RFM	166										
ES	167		BEIGE	STUCCO SKIM COAT	3429 FLORIDA	1	STAIRS EAST			NF	
ES	168						NORTH				
ES	169						WEST				
RS	170		BLACK	ROOFING SHIMBLES & VAPOR BARRIER		ROOF	SE				
RS	171		ORANGE								

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 7 1 8		PAGE	
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Hood/Kel		OF	
PROJECT ID:		University of California Riverside		CSST/CAC NO: 14-5288		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT
RS			BLACK	ROOFING SHINGLES & WEAL BARRIER	3429 FLORIDA	ROOF	SE		MF
WRF	172		ORANGE	PLASTER			BED RM 2 NORTH		6
WRF	173		WHITE				BED RM 1 EAST		
WRF	174						LIVING RM NE		
WRF	175						HALL SE		
WRF	176						KITCHEN SOUTH		
WRF	177						SOUTH WEST		
FBM	178		BISOL	4" BLACK BASEBOARDS w/ BEIGE MARBIC			NW		
FBM	179						LIVING RM SW		
FBM	180						BED RM 1 WEST		
12VET	2	181	BROWN	12" FLOOR TILE w/ WHITE & BRN STRIPES w/ YELLOW MARBIC (TOP LAYER)			BED RM 2 EAST		
12VET	2	182					LIVING RM SW		
12VET	2	183					BED RM 1 WEST		
12VET	2	184	DARK BROWN	12" FLOOR TILE w/ BROWN STRIPES w/ BLACK MARBIC + UPPER MARBIC (BOTTOM LAYER)			BED RM 2 WEST		
12VET	3	185					LIVING RM SW		
12VET	3	185					BED RM 1 WEST		

#331815365



# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 07 27 18

INSPECTOR(S): J. KOONIK

CSST/CAC NO: 14-5288

PAGE

OF



HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL			
VSF	3	186	↓	↓	3429 FLORIDA	ROOF	NE	6	N/A
VSF	7	187	ORANGE	SHEET ROCKING w/ BROWN SPOTS w/ WHITE MASTIC (SECOND LAYER)	↓	↓	F	↓	↓
VSF	7	188	↓	↓	↓	↓	↓	↓	↓
VSF	7	189	↓	↓	↓	↓	↓	↓	↓
VSF	6	190	BEIGE	SHEET FLOOR w/ BROWN FLOOR PATTERN w/ BEK MASTIC TURF OIL PAINT (BOTTOM LAYER)	↓	↓	↓	↓	↓
VSF	6	191	↓	↓	↓	↓	↓	↓	↓
VSF	6	192	↓	↓	↓	↓	↓	↓	↓
VSF	3	193	WHITE / YELLOW	PEBBLE PATTERN SHEET ROCKING w/ YELLOW MASTIC (SECOND LAYER)	↓	↓	↓	↓	↓
VSF	3	194	↓	↓	↓	↓	↓	↓	↓
VSF	3	195	↓	↓	↓	↓	↓	↓	↓

#331815365



#331815863

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 7 1 8		PAGE			
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HODDICK		OF			
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288					
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY			
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	LEVEL	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
WPF	196	PLASTER	1	3367	VTAA	MF	N/A
WPF	197						
WPF	198						
WPF	199						
WPF	200	CEILING					
ES	201	STUCCO SKIM COAT					
ES	202						
ES	203						
FBM	204	4" BLACK BRASSBOARD w/ 4500'S MASTIC					
FBM	205						
FBM	206						
VSF	207	WHITE FLOORING 6" SQUARES w/ WHITE MASTIC				F	
VSF	208						
VSF	209						

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 3 1 1 9		PAGE	
CLIENT:		Halley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Hood/DK		OF	
PROJECT ID:		University of California Riverside		CSST/CAC NO: 14-5288		BULK SAMPLE LOCATION		FRIABILITY	
SITE ADDRESS:		University of California Riverside		MATERIAL DESCRIPTION		AREA/LOCATION		MATERIAL CONDITION	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	QUANTITY NO.	UNIT	DAMAGE TYPE
12VFT	2	210	BROWN	12" FLOOR TILE w/ WHITE & BROWN STREAKS w/ YELLOW MASTIC (TOP LAYERS)	3367 UTAH	1	LIVING RM NW	NF	6 N/A
12VFT	2	211					BED RM 1 NW		
12VFT	2	212					BED RM 2 NE		
12VFT	3	213	DARK BROWN	12" FLOOR TILE w/ BLEN STREAKS w/ BLACK MASTIC + VITRIFIED (BOTTOM LAYERS)			LIVING RM NW		
12VFT	3	214					BED RM 1 NW		
12VFT	3	215					BED RM 2 NE		
V5F	2	216	WHITE	SHEET FLOORING MIXED SANDY TRIANGLE PATTERN w/ WHIT MASTIC (1ST LAYERS)			KITCHEN NE	F	
V5F	2	217					SE		
V5F	2	218					NW		
V5F	7	219	ORANGE	SHEET FLOORING w/ BROWN SPECS w/ BLACK MASTIC (3RD LAYERS)			KITCHEN NE		
V5F	7	220					SE		
V5F	7	221					NW		
V5F	8	222	BIGE	SHEET FLOORING w/ BLUE & PINK SPECS w/ BLK MASTIC + VITRIFIED (VIN LAYERS)			KITCHEN NE		
V5F	8	223					SE		

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 1 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
VSF				3367		KITCHEN		F	
S	224			UTAH		NW			N/A
RS		ORANGE	ROOFING SHIMBLES + VAPOR BARRIER		ROOF	ROOF		NF	
I	225	BLACK				WEST			
RS						SW			
I	226					WEST			
RS						WEST			
I	227	GRAY	ROOF PENETRATION MASTIC			WEST			
RPM		BLACK							
I	228								
RPM									
I	229								
RPM									
I	230								
WS/I		WHITE	SMOOTH DRYMUL			KITCHEN SW		NF	
I	231								
WPF		WHITE	PLASTER	3341		LIVING RM NORTH			
I	232			UTAH					
WPF						KITCHEN SE			
I	233								
WPF						BED RM 1 SOUTH			
I	234					HALLWAYS NE			
WPF									
I	235					BED RM 2 WEST			
WPF			CEILING						
I	236					KITCHEN SW			
WS/I			SMOOTH PLASTER						
I	237								

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 1 1 8		PAGE							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOPER		OF							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288									
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY							
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
VSF	1	238	WHITE	SHEET FLOORING 6" SQUARES w/ BEIGE MARBIC	3341		BATH RM EAST			F	N/A
VSF	1	239	GRAY		UPAHT		SE			+	
VSF	1	240					WEST			+	
12VFT	2	241	BROWN	12" FLOOR TILE w/ WHITE & BROWN STREAKS w/ YELLOW MARBIC (TOP LAYER)			KITCHEN EAST			NF	
12VFT	2	242					NW			+	
12VFT	2	243					WEST			+	
VSF	7	244	ORANGE	SHEET FLOORING w/ BROWN STREAKS w/ BEIGE MARBIC (2ND LAYER)			KITCHEN EAST			F	
VSF	7	245					NW			+	
VSF	7	246					WEST			+	
VSF	8	247	BEIGE	SHEET FLOORING w/ BLUE & PINK STREAKS w/ BLK MARBIC w/ OR MARBIC (3RD LAYER)			KITCHEN EAST			+	
VSF	8	248					NW			+	
VSF	8	249					WEST			+	
12VFT	3	250	DARK BROWN	12" FLOOR TILE w/ BROWN STREAKS w/ BROWN MARBIC w/ OR MARBIC (2ND LAYER)			LIVING RM WEST			NF	
12VFT	3	251					BAD RM NORTH			+	

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 1 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. KOEHLER		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN							
12VFT				3341	1	Bed Rm 1			6	N/A
3	252			URATH	ROOF	WEST				
RS		GRAY	ROOFING SHINGLES + VAPOR BARRIER							
2	253	ORANGE								
RS										
2	254									
RS										
2	255	GRAY	ROOF PENETRATION							
RPM		BLACK	MASTIC							
1	256									
RPM										
1	257									
RPM										
1	258									
ES		GREEN	STUCCO SKIM COAT			EXTERIOR NE				
1	259									
ES						NW				
1	260									
ES						SW				
1	261									
ES		BIGE	STUCCO SKIM COAT	3308	1	EXTERIOR WEST				
1	262			UTAH						
ES										
1	263					SW				
ES										
1	264					SE				
ES										
WS/FS		WHITE	DRYWALL SMOOTH			KITCHEN SW				
1	265									

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
USM	266	BLACK	UNDER SINK MASTIC	3308	1	KITCHEN SOUTH		NF	6
USM	267								
USM	268								
WPF	269	WHITE	PLASTER			LIVING RM SOUTH			
WPF	270					KITCHEN NORTH			
WPF	271					HALL NW			
WPF	272					BATH SOUTH			
WPF	273		CELLING			BED RM 2 SOUTH			
FBM	274	BEIGE	4" BLACK BASEBOARD w/ BEIGE MASTIC			KITCHEN SW			
FBM	275					SOUTH			
FBM	276					BATH RM SOUTH			
VSF	277	WHITE	SHEET FLOORING MASTIC SOURCE/TELEPHONE PATTERN w/ YELLOW MASTIC (TOP LAYER)			KITCHEN WEST		F	
VSF	278					NORTH EAST			
VSF	279					EAST			





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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOONER		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
12VFT	280	BROWN	12" FLOOR TILE w/ WHITE BROWN STREAKS w/ YELLOW MASTIC (2ND LAYER)	3308 UTAPT	(	KITCHEN WEST			NF	6 N/A
12VFT	281					NE				
12VFT	282					EAST				
V5F	283	GREEN	SHORT FLOORING SQUARES w/ YELLOW MASTIC (3RD LAYER)			KITCHEN WEST			F	
V5F	284					NE				
V5F	285					EAST				
V5F	286	BEIGE	SHORT FLOORING w/ BLUE PINK STREAKS w/ BLUE MASTIC FLOOR BARRIER (BOTTOM LAYER)			WEST				
V5F	287					NE				
V5F	288					EAST				
12VFT	289	DARK BROWN	12" FLOOR TILE w/ BROWN STREAKS w/ BLUE MASTIC VAPOR BARRIER (BOTTOM LAYER)			LIVING RM NW			NF	
12VFT	290					HALL NORTH				
12VFT	291					BED RM WEST				
RS	292	ORANGE BACK	ROOFING SHINGLES + VAPOR BARRIER		ROOF	NORTH-EAST				
RS	293					EAST				

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOONER		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
RS	294	↓	↓	3308	ROOF	EAST			NE	6
RPM	295	GRAY BLACK	ROOF PENETRATION MASTIC	↓	↓	EAST				
RPM	296	↓	↓	↓	↓	↓				
RPM	297	↓	↓	↓	↓	↓				
WTF	298	WHITE	PURSEK	3384	↓	LIVING RM EAST				
WTF	299	↓	↓	↓	↓	KITCHEN NW				
WTF	300	↓	↓	↓	↓	HALL NE				
WTF	301	↓	↓	↓	↓	BED RM 1 EAST				
WTF	302	↓	↓	↓	↓	BED RM 2 SE				
ES	303	BURG	STUCCO SKIM COAT	↓	↓	NE				
ES	304	↓	↓	↓	↓	SE				
ES	305	↓	↓	↓	↓	SW				
FBM	306	WHITE	4" BLACK BASEBOARD + WHITE MASTIC	↓	↓	KITCHEN NW				
FBM	307	↓	↓	↓	↓	↓				

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hood SR		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
FBM	308	WHITE	↓	384	1	BATH RM SW			NF	6
RS	309	ORANGE	ROOFING SHINGLES + VAPOR BARRIER	↓	ROOF	SE				
RS	310	BLACK	↓	↓	↓	SOUTH				
RS	311	↓	↓	↓	↓	SW				
RPW	312	GRAY	ROOF PENETRATION	↓	↓	SOUTH				
RPW	313	BLACK	MASTIC	↓	↓	↓				
RPW	314	↓	↓	↓	↓	↓				
12VFT	315	BROWN	12" FLOOR TILE w/ WHITE BROWN STRIPES w/ YELLOW MASTIC (TOP LAYER)	↓	1	LIVING RM EAST				
12VFT	316	↓	↓	↓	↓	KITCHEN SOUTH				
12VFT	317	↓	↓	↓	↓	BATH RM SOUTH				
12VFT	318	DARK BROWN	12" FLOOR TILE w/ BROWN STRIPES w/ BLACK MASTIC + VAPOR BARRIER (BOTTOM LAYER)	↓	↓	LIVING RM EAST				
12VFT	319	↓	↓	↓	↓	BED RM 2 NORTH				
12VFT	320	↓	↓	↓	↓	BED RM 1 SOUTH				
WS/1	321	WHITE	DRYWALL SMOOTH	↓	↓	KITCHEN NW				



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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN							
GVFT	3 2 2	GREEN	9" FLOOR TILE w/ BLACK SPACS w/ yellow MARBLE (2ND LAYER)	3384 UTAH	1	KITCHEN SOUTH			NF	N/A
GVFT	3 2 3					SW				
GVFT	3 2 4					NW				
VSF	3 2 5	BLU/GR	SHEET FLOORING w/ BLUE & PINK SPACS w/ BLACK MARBLE + VAPOR BARRIER (BOTTOM LAYER)			SOUTH SW			F	
VSF	3 2 6					NW				
VSF	3 2 7									
VSF	3 2 8	BLU/GR	SHEET FLOORING w/ BROWN FLOWER PATTERN (BOTTOM LAYER)			BATH RM SOUTH				
VSF	3 2 9					SW				
VSF	3 3 0					NORTH				
ES	3 3 1	GRAY	STUCCO SKIM COAT	3350 UTAH	1	EXTERIOR NW			NF	
ES	3 3 2					N				
ES	3 3 3					EAST				
RS	3 3 4	GRAY DRAINAGE	ROOFING SHIMBLES w/ VAPOR BARRIER PAPER			ROOF WEST				
RS	3 3 5									

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BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 8 0 2 1 8		PAGE	
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Hoover		OF		OF	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		14-5288		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		DAMAGE TYPE	
HA TYPE	HA NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
RS	2	GRAY	ROOFING SHINGLES w/ VAPOR BARRIER PAPER	3350	ROOF	WEST		UNIT	NF	6	MA
RFM	1	ORANGE	ROOF PENETRATION MASTIC			WEST					
RFM	3 3 6	GRAY									
RFM	3 3 7	BLACK									
RFM	3 3 8										
RFM	3 3 9										
WPF	3 4 0	WHITE	PLASTER			LIVING RM NORTH					
WPF	3 4 1					KITCHEN SW					
WPF	3 4 2					HALL NW					
WPF	3 4 3					BED RM 2 SE					
WPF	3 4 4		CEILING			BATH RM SE					
12VFT	3 4 5	BROWN	12" FLOOR TILE w/ WHITE STREAKS w/ YELLOW MASTIC (TOP LAYER)			LIVING RM NORTH					
12VFT	3 4 6					BED RM 1 NORTH					
12VFT	3 4 7					BED RM 2 WEST					
12VFT	3 4 8	PAK BROWN	9" FLOOR TILE w/ BROWN STREAKS w/ BROWN MASTIC + VAPOR BARRIER (BOTTOM LAYER)			LIVING RM NORTH					
12VFT	3 4 9					BED RM 1 NORTH					

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 2 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOPER		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5286								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		QUANTITY						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN							
12VFT 3	350	DARK BROWN	↓	350 UNIT	KITCHEN WEST			NF	6	N/A
VSE 1	351	WHITE GRAY	SHIST FLOORING 6" SQUARES w/ YELLOW MASTIC (TOP LAYERS)		BATHRM EAST			F		
VSE 1	352		↓		KITCHEN NORTHWEST					
VSE 1	353		↓		KITCHEN WEST					
VSE 2	354	WHITE GRAY	SHIST FLOORING MIXED SQUARES TRIANGULAR PATTERN w/ YELLOW MASTIC (2ND LAYERS)		KITCHEN NW					
VSE 2	355		↓		WEST					
VSE 2	356		↓		SE					
12VFT 4	357	BEIGE	12" FLOOR TILE w/ YELLOW MASTIC (3RD LAYER)		KITCHEN NW			NF		
12VFT 4	358		↓		SE					
12VFT 4	359		↓		WEST					
FBM 1	360	BEIGE	4" BLACK BASEBOARD w/ BEIGE MASTIC		KITCHEN SW			NF		
FBM 1	361		↓		SOUTH EAST					
FBM 1	362		↓		SE					
WS/J 1	363	WHITE	SMOOTH DRYWALL		KITCHEN SW					

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BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 0 2 1 8		PAGE	
CLIENT:		Halley & Aldrich		INSPECTOR(S):		J. HOOPER		OF		FRIABILITY	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		14-5258		QUANTITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		NO.		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
12VFT	1	364	BEIGE	12" FLOOR TILE w/ GRAY STRIPES + YELLOW MATRIC (TOP LAYER) PATCHES	3350 UTAH	1	LIVING RM NE			NF	6 N/A
12VFT	1	365					EAST				
12VFT	1	366					WEST				
12VFT	2	367	BROWN	12" FLOOR TILE w/ WHITE & BROWN STRIPES w/ YELLOW MATRIC (TOP LAYER)	3348 UTAH		LIVING RM SE				
12VFT	2	368					HALLWAY EAST				
12VFT	2	369					KITCHEN WEST				
12VFT	3	370	DIRTY BROWN	9" FLOOR TILE w/ BROWN STRIPES w/ BROWN MATRIC + FURGE BARRIAGE (BOTTOM LAYER)			LIVING RM SE				
12VFT	3	371					HALLWAY WEST				
12VFT	3	372					BRD RM 2 WEST				
V5F	3	373	WHITE / YELLOW	15BBLE PATTEREN w/ YELLOW MATRIC (3RD LAYER)			KITCHEN WEST			F	
V5F	3	374					WEST				
V5F	3	375					WEST				
V5F	6	376	BEIGE	SHEET FLOORING w/ BROWN FLOWEX PATTEREN w/ YELLOW MATRIC (BOTTOM LAYER)			KITCHEN WEST				
V5F	6	377					WEST				

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 2 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
VSF	378	+	3348	1	KITCHEN EAST			F	N/A
VSF	379	WHITE SHEET PILING w/ 6" SQUARES w/ YELLOW MASTIC (TOP LAYER)	UTRAH		KITCHEN WEST ↓ EAST				
VSF	380	+			BATH RM EAST				
VSF	381	+			LIVING RM NORTHWEST				
WPF	382	WHITE			BED RM 1 SOUTH			NF	
WPF	383	+			KITCHEN SOUTH				
WPF	384	+			BATH RM NORTH				
WPF	385	+			BED RM 2 SE				
WPF	386	+			FITCHEN NW				
W5/1	387	WHITE			EXTERIOR SW				
ES	388	BL/GE			SOUTH				
ES	389	+			EAST				
ES	390	+			KITCHEN NW				
FBM	391	BL/GE							



#331815863

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 2 1 8		PAGE				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOONER		OF				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288						
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION				
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY NO. UNIT	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN					
RFM 1	392	BLACK	↓	3348 UNIT	KITCHEN NORTH		NF	6 N/A
RFM 1	393	↓	↓		NE			
RFM 1	394	BLACK	BLACK TRK W/ VAPOR BARRIER + DOWN INSULATION + STYRO FOAM		ROOF SOUTH			
RFM 1	395	↓	↓		SE			
RFM 1	396	↓	↓		NORTH			
RFM 1	397	GRAY BLACK	ROOF PENETRATION W/ASTIC		NORTH			
RFM 1	398	↓	↓					
RFM 1	399	↓	↓					
RFM 1	400	BLACK	BLACK TRK W/ VAPOR BARRIER + DOWN INSULATION + STYRO FOAM	766 GRATE	NORTH		NF	6 N/A
RFM 1	401	↓	↓		CENTRAL			
RFM 1	402	↓	↓		SOUTH			
RFM 1	403	GRAY BLACK	ROOF PENETRATION MINI-STIC		CENTRAL			
RFM 1	404	↓	↓		SOUTH			
RFM 1	405	↓	↓		SW			

#331815863

BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 8 0 3 1 8		PAGE		
CLIENT:		Haley & Aldrich				INSPECTOR(S):		J. HOON SIK		OF		
PROJECT ID:		Canyon Crest Family Housing Survey				CSST/CAC NO:		14-5288				
SITE ADDRESS:		University of California Riverside				BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY		
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	TEXTURE/PATTERN	UNIT	LEVEL	QUANTITY	NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
ES	1	406	BELGE	STUCCO BRAM	CONT	766 GRAPE	1				NF	6 N/A
ES	1	407										
ES	1	408										
WPF	1	409	WHITE	PLASTER								
WPF	1	410										
WPF	1	411										
WPF	1	412										
WPF	1	413			CEILING							
FBM	1	414	BELGE	4" BRICK BASEBOARD								
FBM	1	415										
FBM	1	416										
12VFT	2	417	BROWN	12" FLOOR TILE w/ WHITE								
12VFT	2	418		BROWN STRIPES w/ YELLOW	MASTIC (TOP LAYER)							
12VFT	2	419										

#331815863

BULK SAMPLE DATA FORM



PROJECT NO:	7 0 7 6				1 0 1 7 0				DATE: 0 8 0 3 1 8			PAGE	
	CLIENT: Haley & Aldrich								INSPECTOR(S): J. HOONIK				OF
PROJECT ID:		Canyon Crest Family Housing Survey											
SITE ADDRESS:		University of California Riverside											
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE			
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL					AREA/LOCATION	NO.	UNIT
12VFT	3	420	DRBK BROWN	9" FLOOR TILE w/ BKN SPRINKLES w/ BLACK MARBLE FLOROR BRASSIE (200 LBS)	706 GRAPL	1	BED RM SE		NE	6	N/A		
12VFT	3	421					LIVING RM NE						
12VFT	3	422					KITCHEN						
12VFT	3	423	BROG 2	12" FLOOR TILE w/ GRAY SPRINKLES + yellow MARBLE (TOP LABEL)			LIVING RM NE						
12VFT	1	424					↓ SW						
12VFT	1	425					HALLWAY CENTR						
V5F	2	426	WHITE GRAY	SHEET FLOORING MIXED SQUARES/RECTANGULAR PATTERN w/ yellow MARBLE			BATH RM SOUTH		F				
V5F	2	427					↓ NE						
V5F	2	428					↓ NORTH						
V5F	1	429	WHITE GRAY	SHEET FLOORING 6" SQUARES w/ yellow MARBLE (TOP LABEL)			KITCHEN SE						
V5F	1	430					↓ EAST						
V5F	1	431					↓ NORTH						
V5F	9	432	GRAY	SHEET FLOORING FURNIX FRAMED DESIGN w/ yellow MARBLE (200 LBS)			BATH RM NORTH						
V5F	9	433					KITCHEN EAST						

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 3 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOODKUR		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
VSF	434	GRAY	↓ 3RD COARSE	706		KITCHEN		6	N/A
VSF	435	BEGE	SHIST FLOORING w/ BEHIND FLOORING PATTERN w/ BEHIND MARBLE	↓		KITCHEN SE		↓	↓
VSF	436	↓	↓	↓		EAST		↓	↓
VSF	437	↓	↓	↓		BATH RM NORTH		↓	↓
VSF	438	WHITE	DRAGGON SMOOTH	↓		KITCHEN NE		NE	↓



CHAIN OF CUSTODY



CITADEL LOCATION:

<input type="checkbox"/> GLENDALE	<input checked="" type="checkbox"/> ORANGE COUNTY	<input type="checkbox"/> VALENCIA	<input type="checkbox"/> TORRANCE OFFICE
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone: (562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone: (661) 257-9009 Fax: (661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone: (310) 212-1714 Fax: (310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 254 SAMPLE NUMBERS: 439-693

TYPE OF SAMPLES (CIRCLE ONE):

AIR	TAPE	WATER	WIPE
<b>BULK</b>	SOIL	ZEFON	ANDERSEN
		AIR-O-CELL	PLATE
			OTHER

TYPE OF ANALYSIS:

<b>Asbestos</b>	<b>Lead</b>
Phase Contrast Microscopy _____	Flame Atomic Absorption _____
<b>X</b> Polarized Light Microscopy _____	TTLIC _____ STLC _____ TCLP _____
1st Positive Stop _____	
Point Count _____ 400 Point Count _____ 1000 Point Count _____	
Transmission Electron Microscopy _____	
Qualitative _____ Quantitative _____	

Culturable Air

Andersen Fungi (genue ID, Aspergillus) \_\_\_\_\_  
Andersen Bacteria \_\_\_\_\_

Non-Culturable Air

Non-Viable Spore Trap Slide \_\_\_\_\_

Surface Samples

Surface Sample (direct examination) \_\_\_\_\_

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium \_\_\_\_\_  
Quantitative Fungi-dust, bulk swab-3 media \_\_\_\_\_  
Quantitative Bacteria-dust, bulk swab-1 medium \_\_\_\_\_  
Quantitative Bacteria-dust, bulk, swab-3 media \_\_\_\_\_  
E.coli and Coliforms (MUG) \_\_\_\_\_

Other \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):

Rush	12 HOURS	24 HOURS	48 HOURS
3 DAYS	<b>5 DAYS</b>	5-10 DAYS	OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE	FAX	WRITTEN REPORT	<b>PDF</b>
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NOTES/COMMENTS: **Special Project "JS" - Perform layered analysis and provide layered results.**  
Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: <u>8/13/18</u> Time: <u>1215</u>	Date: <u>8-13-18</u> Time: <u>12:15</u>
Relinquished By: _____	Received By: <u>[Signature]</u>
Date: _____ Time: _____	Date: <u>8/13/18</u> Time: <u>2:55pm</u>

LABORATORY INFORMATION:

NAME: LH TESTING LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

<input type="checkbox"/> RETURN _____ DAYS AFTER ANALYSIS	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> RETAIN FOR _____ DAYS	<input type="checkbox"/> YEAR (S) _____

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 080318

INSPECTOR(S): J. HOONIKER

CSST/CAC NO: 14-5288

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HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
12VFT	2	439	BROWN	12" FLOOR TILE w/ WHITE & BROWN SPECKLES w/ SILVER MARBLE (TOP LAYER)	873	1	LIVING RM SOUTH	NF	6	N/A
12VFT	2	440					BED RM 1 SOUTH			
12VFT	2	441					BED RM 2 WEST			
12VFT	3	442	PINK BROWN	9" FLOOR TILE w/ BROWN SPECKLES + BLACK MARBLE w/ WHITE MARBLE (BOTTOM LAYER)			LIVING RM SOUTH			
12VFT	3	443					BED RM 1 SOUTH			
12VFT	3	444					BED RM 2 WEST			
V5F	5	445	WHITE	SHEET FLOORING w/ RESIN MARBLE PATTERN w/ MARBLE (TOP LAYER)			BATH RM SOUTH	F		
V5F	5	446					KITCHEN SOUTH			
V5F	5	447					SOUTH NORTH			
V5F	3	448	WHITE	SHEET FLOORING PEBBLE PATTERN w/ MARBLE (3RD LAYER)			KITCHEN SOUTH			
V5F	3	449					SOUTH SOUTH			
V5F	3	450					NORTH			
V5F	8	451	BROWN	SHEET FLOORING w/ BLUE & PINK SPECS w/ BLACK MARBLE TYPICAL BARBER (BOTTOM LAYER)			KITCHEN SOUTH			
V5F	8	452								

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# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 3 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOVER		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
WPF	453	↓	↓	873	1	KITCHEN NORTH		F	N/A
WPF	454	WHITE	PLASTER			KITCHEN EAST		NF	
WPF	455					BED RM 1 WEST			
WPF	456					BED RM 2 WEST			
WPF	457					LIVING RM WEST			
WPF	458	↓	↓			BATH RM WEST			
FBM	459	BLUE	4" BASE BOARD w/ POLYESTER MASTIC			KITCHEN WEST			
FBM	460	↓	↓			NW			
FBM	461	↓	↓			BATH RM NORTH			
WS/J	462	WHITE	SMOOTH DRYWALL			KITCHEN SW			
ES	463	BS16E	STUCCO SKIM COAT			EXTERIOR SE			
ES	464	↓	↓			SW			
ES	465	↓	↓			NW			
RS	466	BLACK / ORANGE	ROOFING SHINGLES		ROOF	EXTERIOR SOUTH			



#331816310

OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 3 1 8

INSPECTOR(S): J. Hood/ER

CSST/CAC NO: 64-5288

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HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL			
RS	467	BLACK	ROOFING SHINGLES	873	ROOF	MF	6	N/A
RS	468	BLACK	↓	873	↓			
RPM	469	GRAY	ROOF PENETRATION	786	↓			
RPM	470	BLACK	↓	BLANK	↓			
RPM	471	↓	↓	↓	↓			
WPF	472	WHITE	PLASTER	↓	↓			
WPF	473	↓	↓	↓	↓			
WPF	474	↓	↓	↓	↓			
WPF	475	↓	↓	↓	↓			
WPF	476	↓	↓	↓	↓			
12VFT	477	BROWN	12" FLOOR TILE w/ WHITE STRIPES w/ BROWN STRIPES w/ YELLOW MORTAR (TOP LAYER)	↓	↓			
12VFT	478	↓	↓	↓	↓			
12VFT	479	↓	↓	↓	↓			
12VFT	480	DARK BROWN	9" FLOOR TILE w/ BROWN STRIPES w/ BLACK MORTAR + VARIOUS BROWN (BOTTOM LAYER)	↓	↓			

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OrderID: 331816310



# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 7 1 8

INSPECTOR(S): J. Hoover

CSST/CAC NO: 14-5288

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HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
12VCF 3	481			786 BLANK	1	BED RM 1 NORTH	MF	5	N/A
12VCF 3	482					BED RM 2 EAST	F		
V5F 11	483	WHITE	SHEET FLOORING 6" SQUARE w/ SILICON MORTAR (TOP LAYER)			KITCHEN EAST	F		
V5F 11	484					NORTH			
V5F 11	485					BATH ROOM NORTH			
V5F 3	486	WHITE SILICON	SHEET FLOORING w/ PEBBLE PATTERN w/ MORTAR (TOP LAYER)			KITCHEN EAST			
V5F 3	487					NORTH			
V5F 3	488					NORTH			
V5F 8	489	BEIGE	SHEET FLOORING w/ BLUE & PINK SPECS w/ BIE MORTAR FLORAL PATTERN (4TH LAYER)			KITCHEN WEST			
V5F 8	490					NORTH			
V5F 8	491					NORTH			
FBay 2	492	YELLOW	4" STYROFOAM BACK w/ SILICON MORTAR			KITCHEN SE	MF		
FBay 2	493					EAST			
FBay 2	494					N2			

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Order ID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 7 1 8

INSPECTOR(S): J. KOONER

CSST/CAC NO: 14-5288

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HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	LEVEL	AREA/LOCATION					
WSD										
1	495	WHITE	SPRAY ON SMOOTH	786 BALCONY	1			NF	6	N/A
ES										
1	496	BUIGE	STUCCO SKIM COAT							
25										
1	497									
25										
1	498									
RS										
1	499	BLACK / ORANGE	ROOFING SHIMBLES W/ VAPOR BARRIER	ROOF						
RS										
1	500									
RS										
1	501									
RPM										
1	502	GRAY / BLACK	ROOF PENETRATION MASTIC							
RPM										
1	503									
RPM										
1	504									
WPF										
1	505	WHITE	PLASTER	861 CHERRY	1					
WPF										
1	506									
WPF										
1	507									
WPF										
1	508									

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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 7 1 8

INSPECTOR(S): J. HOONKUR

CSST/CAC NO: 14-5288

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HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	BULK SAMPLE LOCATION		QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN		LEVEL	AREA/LOCATION					
W/F			WHITE	PLASTER CEILING	861	1	BATHRM NORTH			NF	6	N/A
12VPT	1	509	BROWN	12" FLOOR TILE w/ WHITE BROWN STREAKS w/ YELLOW MARBLE (TOP LAYER)			LIVING RM NW					
12VPT	2	510					BED ROOM 1 SW					
12VPT	2	511					BED RM 2 NE					
12VPT	2	512					LIVING RM NW					
12VPT	3	513	BROWN	9" FLOOR TILE w/ BROWN STREAKS w/ BLACK MARBLE + VENEER BRICKS (BOTTOM LAYER)			BED ROOM 1 NW					
12VPT	3	514					BED RM 2 NE					
12VPT	3	515					BATH RM NORTH			F		
V5F			WHITE	SHEET FLOORING w/ 6" SQUARES w/ YELLOW MARBLE								
V5F							NORTH					
V5F							SOUTH					
FBM	3	518	WHITE	4" BACK BASEBOARD w/ WHITE MARBLE			KITCHEN NE			NF		
FBM	3	519										
FBM	3	520					SWST					
FBM	3	521					SE					
ES	1	522	BROWN	STUCCO SKIM COAT			EXTERIOR SW					

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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 8 1 8

INSPECTOR(S): J. HOON/SR

CSST/CAC NO: 14-5288

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HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION					
IS		523	BEIGE	SMOOTH SKIM COAT	801 CHARLES	1	SATRIOR SE		MF	6	N/A	
IS		524					NE		↓			
VSF	2	525	WHITE GRAY	SHEET FLOORING w/ MIXED SQUARE/TRIANGLE PATTERN w/ WHITE MARBLE TOP LAYER			KITCHEN NW		F			
VSF	2	526					W		↓			
VSF	2	527					SOUTH		↓			
VSF	7	528	BROWN	SHEET FLOORING w/ BROWN SPOTS w/ MARBLE (TOP LAYER)			NW		↓			
VSF	7	529					W		↓			
VSF	7	530					SOUTH		↓			
VSF	3	531	WHITE YELLOW	SHEET FLOORING w/ PEBBLE PATTERN w/ MARBLE (TOP LAYER)			NW		↓			
VSF	3	532					W		↓			
VSF	3	533					SOUTH		↓			
VSF	10	534	BEIGE, YELLOW, BROWN	SHEET FLOORING w/ BLK PATTERN w/ BLK MARBLE TYPICAL BRICKS (5TH LAYER)			NW		↓			
VSF	10	535					W		↓			
VSF	10	536					SOUTH		↓			

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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 8 1 8		PAGE	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hoover		OF	
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288			
SITE ADDRESS: University of California Riverside					

HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
RS	1	537	<del>BLACK</del>	ROOFING SHINGLES w/ VAPOR BARRIER	861 CHERRY	ROOF	NW			MF	6	N/A
RS	1	538					NORTH					
RS	1	539					NE					
RPM	1	540	<del>GRAY</del>	PAVEMENT MATTC			NORTH					
RPM	1	541	<del>BLACK</del>									
RPM	1	542										
WS/J	1	543	WHITE	DRY WALL SMOOTH			KITCHEN SE					
WPF	2	544	WHITE	PLASTER w/ HEAVY TEXTURE	349 KENTUCKY		LIVING RM EAST			MF	6	N/A
WPF	2	545					HALLWAY NW					
WPF	2	546					Bed Room 1 EAST					
WPF	2	547					Bed Room 2 NORTH					
WPF	2	548		CEILING			BATH ROOM SW					
ES	1	549	BT62	STUCCO SKIM COAT			EXTERIOR NE					
ES	1	550										

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# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 8 1 8

INSPECTOR(S): J. HOONGUK

CSST/CAC NO: 14-5288

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OF



#3331816310

OrderID: 331816310

HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
ES										
1	551	BEIGE	STUCCO PLIM COAT	3H9 KSNUCKY	1	EXTERIOR SE		NF	6	N/A
WS/A										
2	552	WHITE	BRUNN/W/HEAVY TEXTURE			KITCHEN				
12VFT										
3	553	PAK BROWN	9" FLOOR TILE w/ BROWN SPRINKLES + BUZZE MASTIC + VARIABLE BEIGE (BOTTOM LAYER)			LIVING ROOM SOUTH				
12VFT										
3	554					BED ROOM 1 EAST				
12VFT										
3	555					BED RM 2 EAST				
V5F										
1	556	WHITE GRAY	SHEET FLOORING 6" SQUARES w/ YELLOW MASTIC			BATHROOM WEST		F		
V5F										
1	557					WEST				
V5F										
1	558					EAST				
12VFT										
2	559	BROWN	12" FLOOR TILE w/ WHITE * BROWN STRIPES w/ YELLOW MASTIC (TOP LAYER)			KITCHEN WEST		NF		
12VFT										
2	560					SOUTH				
12VFT										
2	561					EAST				
V5F										
12	562	BROWN, YELLOW, BLACK	SHEET FLOORING MIXED PATTERN WITH FLOWERS w/ YELLOW MASTIC (TOP LAYER)			KITCHEN WEST		F		
V5F										
12	563					SOUTH				
V5F										
12	564					EAST				

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 8 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOKER		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
VSF	565	BEIGE	SHEET FLOORING w/ BLUE & PINK SPECS w/ BLACK MASTIC TYPING BARRELS (3RD LAYER)	3419 KENTUCKY	1	KITCHEN WEST		F	N/A
VSF	566					SOUTH			
VSF	567					EAST			
VSF	568	RED	SHEET FLOORING w/ BLACK MASTIC TYPING BARRELS			KITCHEN WEST			
VSF	569					SOUTH			
VSF	570					EAST			
WPF	571	BLACK / GRAY	WINDOW PUTTY			EXT. DOOR EAST		MF	
WPF	572					SE			
WPF	573					NORTH			
RS	574	BLACK / ORANGE	ROOFING SAMPLES w/ WATER PAPER		ROOF	SE			
RS	575					EAST			
RS	576					NE			
RS	577			3434 KENTUCKY	ROOF	NE			
RS	578					EAST			



#331816310

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 0 9 1 8

INSPECTOR(S): J. HOONVER

CSST/CAC NO: 14-5288

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HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
KS 1	579	↓	↓	3434 KENTUCKY	ROOF	EAST	NF	6	N/A
RPW 1	580	GRAY BLACK	FOURATION MASTIC	↓	↓	EAST			
RPW 1	581	↓	↓	↓	↓	↓			
RPW 1	582	↓	↓	↓	↓	↓			
WPF 1	583	WHITE	PLASTER	↓	↓	LIVING RM SW			
WPF 1	584	↓	↓	↓	↓	KITCHEN NORTH HALL NW			
WPF 1	585	↓	↓	↓	↓	BEDROOM 2 EAST			
WPF 1	586	↓	↓	↓	↓	BATHROOM			
WPF 1	587	↓	CEILING	↓	↓	KITCHEN SE			
WS/I 1	588	WHITE	DRYWALL SMOOTH	↓	↓	KITCHEN SW			
ES 1	589	BEIGE	STUCCO SKIM COAT	↓	↓	GARAGE NW			
ES 1	590	↓	↓	↓	↓	NE			
ES 1	591	↓	↓	↓	↓	SE			
FBW 1	592	BEIGE	1/4" BLACK BASEBOARDS w/ BEIGE MASTIC	↓	↓	KITCHEN SW			

#331816310



# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 08 09 18

INSPECTOR(S): J. HOOPER

CSST/CAC NO: 14-5288

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HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.			
FBM	593	BEIGE	+	2434 KENTUCKY	1	KITCHEN SOUTH		NF	6	N/A
FBM	594	+	+			KITCHEN SE		+		
VSF	595	WHITE / GRAY	THIN FLOORING 6" SQUARES w/yellow MASTIC			BATH ROOM EAST		+		
VSF	596	+	+					+		
VSF	597	+	+					+		
WPF	598	WHITE	PLASTER	890 BUANE		LIVING RM NORTH		NF		
WPF	599					BED ROOM 1 WEST				
WPF	600					BED ROOM 2 EAST				
WPF	601					HALLWAY NW				
WPF	602		CEILING			BATH ROOM SE				
WP	603	BLACK / GRAY	WINDOW PUTTY			NORTH				
WP	604					WEST				
WP	605					SW				
ES	606	WHITE	STUCCO SKIM COAT			EXTERIOR NW		+		

#331816310

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside

DATE: 0 8 1 0 1 8

INSPECTOR(S): J. TORRES

CSST/CAC NO: 14-5288

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HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION					
ES	607		WHITE	STUCCO SKIM COAT	890 BUANE	1	EXTERIOR SW		NF	6	N/A	
ES	608		↓	↓	↓	↓	SOUTH		↓			
VSF	609		WHITE GRAY	SHEET FLOORING 6" SQUARES w/ BEISE MASTIC	↓	↓	BATH ROOM CENTRAL		F			
VSF	610		↓	↓	↓	↓	↓		↓			
VSF	611		↓	↓	↓	↓	↓		↓			
RFM	612		BLACK	ROOFING: BURSTAK w/ VAPOR BARRIERS w/ Kowal insulation & STUCCO FORM	↓	↓	SE		NF			
RFM	613		↓	↓	↓	↓	SOUTH		↓			
RFM	614		↓	↓	↓	↓	SW		↓			
WP	615		BLACK GRAY	WINDOWS PUTTY	3446 AVOCADO	1	EXTERIOR NW					
WP	616		↓	↓	↓	↓	WEST					
WP	617		↓	↓	↓	↓	SE					
FBM	618		BEISE	1/4" BLACK PASTERBOARD w/ BEISE MASTIC	↓	↓	KITCHEN WEST					
FBM	619		↓	↓	↓	↓	SE					
FBM	620		↓	↓	↓	↓	BATHRM NE					

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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 1 0 1 8		PAGE	
CLIENT:		Hailey & Aldrich		INSPECTOR(S):		J. Hoyle		OF			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		14-5288		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
ES	621		WHITE	STUCCO SKIM COAT	3446	1	STAIRWELL SW			NF	6 N/A
ES	622				AVOCADO		NW				
ES	623						SE				
WPF	624		WHITE	PLASTER HEAVY TEXTURE			LIVING RM SOUTH				
WPF	625						KITCHEN SE				
WPF	626						HALL WEST				
WPF	627						BEDROOM EAST				
WPF	628						BATHROOM NW				
RS	629		BLACK / ORANGE	ROOFING SHINGLES w/ VAPOR BARRIER		ROOF	SE				
RS	630						NW				
RS	631						N				
RPM	632		GRAY / BLACK	PENETRATION MORTAR			NORTH				
RPM	633										
RPM	634										

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# BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 1 0 1 8		PAGE	
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. HORNBY		OF		OF	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		14-5288		FRIABILITY		MATERIAL CONDITION	
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
VSF	2	635	WHITE	SHEET FLOORING - MIXED SOLID/TELENOVIC PATTERN w/ SPILL RESISTANT (TOP LAYER)	3446	1	BATH ROOM NORTH			F	6
VSF	2	636	GRAY								N/A
VSF	2	637									
12VFC	2	638	BROWN	12" FLOOR TILE w/ WHITE & BROWN STAINES w/ YELLOW MORTAR (2" x 2" LAYERS)						NE	
12VFC	2	639									
12VFC	2	640									
VSF	6	641	BEIGE	SHEET FLOORING BROWN FLOOR PATTERN w/ BLACK MORTAR						F	
VSF	6	642									
VSF	6	643									
WPF	1	644	WHITE	PURISTOR	3452		LIVING RM EAST			NE	6
WPF	1	645					BED ROOM 1 EAST				
WPF	1	646					HALLWAY NW				
WPF	1	647					KITCHEN NE				
WPF	1	648		CEILING			BATH ROOM SOUTH				

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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6		DATE: 0 8 / 3 / 1 8		PAGE					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HODNYK		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288							
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
RFM	649	BLACK	FLUX TAR w/ NIPAK BARRIER BROWN INSULATION + STYRO FOAM AVOCADO	3452	ROOF	WEST		NF	N/A
RFM	650								
RFM	651								
RFM	652	GRAY	PENETRATION MASTIC			WEST			
RFM	653	BLACK							
RFM	654								
ES	655	WHITE	STUCCO SKIM COAT			NW			
ES	656					SW			
ES	657					SOUTH			
12VFT	658	BELGE	12" FLOOR TILE w/ GRAY STRAIPS w/ 1/8" SILLS MASTIC (TOP LAYER)			BATH CENTRAL RM			
12VFT	659								
12VFT	660								
VSF	661	ORANGE	SHED FLOORING w/ BROWN SPECS w/ 1/8" SILLS MASTIC + NIPAK BARRIER (2ND LAYER)					F	
VSF	662								



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# BULK SAMPLE DATA FORM

PROJECT NO.:		7	0	7	6	DATE:		0	8	1	3	1	8	PAGE	
CLIENT:		Haley & Aldrich										OF			
PROJECT ID:		Canyon Crest Family Housing Survey										INSPECTOR(S):		J-HOOD/SJK	
SITE ADDRESS:		University of California Riverside										CSST/CAC NO.:		14-5288	
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE					
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				QUANTITY NO.	UNIT			
VSF	7	663	↓	↓	3452	1	BATH RM	F	6	N/A					
QVFT	2	664	BEIGE	9" FLOOR TILE w/SMALL BROWN SPEC PATTERN w/BLK MASTIC + VAPOR BARRIER + BROWN INSULATION (BOTTOM LAYER)	↓	↓	CENTRAL	↓	↓	↓					
QVFT	2	665	↓	↓	↓	↓	↓	↓	↓	↓					
QVFT	2	666	↓	↓	↓	↓	↓	↓	↓	↓					
FBM	1	667	BEIGE	4" BLACK BASEBOARD w/ BEIGE MASTIC	↓	↓	KITCHEN NE	NF	↓	↓					
FBM	1	668	↓	↓	↓	↓	SE	↓	↓	↓					
FBM	1	669	↓	↓	↓	↓	BATH RM SE	↓	↓	↓					
WS/J	1	670	WHITE	DRYWALL SMOOTH	↓	↓	KITCHEN NE	↓	↓	↓					
12VFT	2	671	BROWN	12" SHEET FLOORING w/ WHITE & BROWN STREAKS w/ YELLOW MASTIC (TOP LAYER)	810	↓	BATH RM CENTRAL	↓	↓	↓					
12VFT	2	672	↓	↓	↓	↓	↓	↓	↓	↓					
12VFT	2	673	↓	↓	↓	↓	SW	↓	↓	↓					
VSF	3	674	WHITE	SHEET FLOORING w/ PEBBLE PATTERN w/ BLACK MASTIC + VAPOR BARRIER	↓	↓	CENTRAL	F	↓	↓					
VSF	3	675	↓	↓	↓	↓	↓	↓	↓	↓					
VSF	3	676	↓	↓	↓	↓	SW	↓	↓	↓					



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OrderID: 331816310

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 3 1 8		PAGE	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOPER		OF	
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288			
SITE ADDRESS: University of California Riverside					

HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.			
WPF	1	677	white	plaster	810 porch	1			NF	6	N/A
WPF	1	678									
WPF	1	679									
WPF	1	680									
WPF	1	681		ceiling							
ES	1	682	beige	stucco skim coat							
ES	1	683									
ES	1	684									
FBM	1	685	beige	1/4" plasterboard back w/ beige mastic							
FBM	1	686									
FBM	1	687									
RS	1	688	black	roping shingles + vapor barrier	roof						
RS	1	689	orange								
RS	1	690									









331816743#

BULK SAMPLE DATA FORM



PROJECT NO:	7 0 7 6				DATE:	0 8 1 5 1 8			PAGE	OF	
	CLIENT:	Haley & Aldrich				INSPECTOR(S):	J. HOONSK				
PROJECT ID:	Canyon Crest Family Housing Survey				CSST/CAC NO:	14-5288					
SITE ADDRESS:	University of California Riverside				BULK SAMPLE LOCATION		QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT		
WPF			WHITE	PURPLE GRANULAR TEXTURE	860 GRAPE	1	KITCHEN WEST			MF	
WPF	2	694					BEDROOM 2 SOUTH				N/A
WPF	2	695					BEDROOM 1 EAST				
WPF	2	696					HALLWAY NW				
WPF	2	697					BATH ROOM SOUTH				
WPF	2	698		CEILING			BATH ROOM NW				
ES	1	699	WHITE	STUCCO SKIM COAT			EXTERIOR SW				
ES	1	700					SE				
ES	1	701									
RS	1	702	BLACK CORNERS	ROOFING STRANGLES + VAPOR BARRIER		ROOF	SOUTH				
RS	1	703									
RS	1	704									
FBM	1	705	BROWN	4" BLACK EPS BOARD W/ BETA MATHEIC			KITCHEN EAST				
FBM	1	706					SE				
FBM	1	707					BATHROOM SE				

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BULK SAMPLE DATA FORM



PROJECT NO:	7 0 7 6				PROJECT ID:	1 0 1 7 0				INSPECTOR(S):	DATE: 0 8 1 5 1 8		PAGE	OF	MATERIAL CONDITION	DAMAGE TYPE
	CLIENT:	Haley & Aldrich				PROJECT ID:	Canyon Crest Family Housing Survey				INSPECTOR(S):	J. Hoover				
SITE ADDRESS:	University of California Riverside															
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION		UNIT	LEVEL	BULK SAMPLE LOCATION		QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE				
HA NO.			TEXTURE/PATTERN	AREA/LOCATION	NO.	UNIT	NO.	UNIT								
WP	708	<del>BLUE</del> GRAY	WINDOW PUTTY	800 GARAGE	1	800 GARAGE	1	ENTRANCE NW		NF	6	N/A				
WP	709							SW								
WP	710							NE								
WSH	711	WHITE	DRYWALL					KITCHEN								
VSF	712	<del>WHITE</del> GRAY	SHEET FLOORING w/ MIXED SQUARE/TRIANGULAR PATTERNS WITH WHITE MASTIC (TOP LAYER)	3479 KENTUCKY	1	3479 KENTUCKY	1	BATHROOM EAST		F						
VSF	713	<del>WHITE</del> GRAY	SHEET FLOORING w/ RECTANGULAR PATTERNS w/ BROWN MASTIC (TOP LAYER)													
VSF	714	BEIGE	SHEET FLOORING w/ BROWN PATTERNS w/ SPECIES OF BULK MASTIC + WHITE MASTIC (BOTTOM LAYER)													
VSF	715	<del>WHITE</del> GRAY	SHEET FLOORING w/ 6" SQUARES w/ WHITE MASTIC	3400 KENTUCKY		3400 KENTUCKY		BATHROOM WEST								
VSF	716	WHITE	SHEET FLOORING w/ SQUARES w/ RECTANGULAR PATTERNS w/ WHITE MASTIC (TOP LAYER)													
VSF	717	BEIGE	SHEET FLOORING w/ BROWN PATTERNS w/ GOLD SPECIES + BULK MASTIC + var of BEIGE (BOTTOM LAYER)													
VSF	718															
VSE	719															
VSF	720	WHITE														
VSE	721															

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 6 1 8		PAGE						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. HOOPER		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288								
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
VSE#	7 2 2	WHITE	SHEET FLOORING w/ 6" SQUARES w/ WHITE MASTIC (TOP LAYER)	3415	1	BATH RM			F	G
VSE	7 2 3	GRAY	SHEET FLOORING RANDOMLY PATTERN w/ YELLOW MASTIC (2ND LAYER)	FLOORING						N/A
12VFC	7 2 4	BROWN	12" FLOOR TILE w/ WHITE & BROWN STRIPES w/ YELLOW MASTIC (2ND LAYER)						NF	
12VFC	7 2 5	BEIGE	12" FLOOR TILE w/ BROWN STRIPES + YELLOW MASTIC (2ND LAYER)							
VSE	7 2 6	ORANGE	SHEET FLOORING w/ BROWN STRIPES + YELLOW MASTIC (2ND LAYER)						F	
VSE	7 2 7	BEIGE	SHEET FLOORING w/ BROWN STRIPES + YELLOW MASTIC (2ND LAYER)							
VSE	7 2 8	WHITE	SHEET FLOORING w/ 6" SQUARES w/ WHITE MASTIC (TOP LAYER)	3403		BATH RM			F	
12VFC	7 2 9		12" FLOOR TILE w/ WHITE & BROWN STRIPES w/ YELLOW MASTIC (2ND LAYER)	FLOORING					NF	
VSE	7 3 0	BEIGE	SHEET FLOORING w/ BROWN STRIPES + YELLOW MASTIC (2ND LAYER)						F	
VSUM	7 3 1	WHITE	UNDER SINK MASTIC			KITCHEN			NF	
VSUM	7 3 2									
VSUM	7 3 3									
VSUM	7 3 4			3330	1					
VSUM	7 3 5			1DATHO		SOUTH				
VSUM				3360						
VSUM				1DATHO						

331816743#

BULK SAMPLE DATA FORM



PROJECT NO:	7 0 7 6				DATE:	0 8 1 6 1 8			PAGE	
	1 0 1 7 0					INSPECTOR(S):	J. Hoover			
CLIENT:	Haley & Aldrich				SITE ADDRESS:		University of California Riverside			
PROJECT ID:	Canyon Crest Family Housing Survey					BULK SAMPLE LOCATION	AREA/LOCATION		QUANTITY	FRIABILITY
HA TYPE	SAMPLE NO.		MATERIAL DESCRIPTION		UNIT		LEVEL	NO.		
HA NO.	HA NO.	HA NO.	HA NO.	HA NO.	HA NO.	HA NO.	HA NO.	HA NO.	DAMAGE TYPE	
12VFT	736	GRAY	12" FLOOR TILE w/ GRAY & BROWN STRIPES w/ YELLOW MASTIC	3340	1	HALLWAY CENTRAL		NF	6	N/A
12VFT	737									
12VFT	738									
VSF	739	WHITE	SHEET FLOORING PEBBLE PATTERN w/ BROWN MASTIC (BOTTOM LAYER)			BATH RM WEST		F		
VSF	740	YELLOW	SHEET FLOORING MIXED SQUARE PATTERN w/ WHITE MASTIC (2ND LAYER)	3374						
12VFT	741	WHITE	12" FLOOR TILE w/ WHITE & BROWN STRIPES w/ BROWN MASTIC (2ND LAYER)	10440				NF		
VSF	742	BROWN	SHEET FLOORING w/ BROWN STRIPES w/ BROWN MASTIC (2ND LAYER)					F		
VSF	743	ORANGE	SHEET FLOORING w/ BROWN STRIPES w/ BROWN MASTIC (2ND LAYER)							
VSF	744	BLACK	SHEET FLOORING w/ BROWN STRIPES w/ BLACK MASTIC (BOTTOM LAYER)							
VSF	745	WHITE	SHEET FLOORING PEBBLE PATTERN w/ BROWN MASTIC (2ND & BOTTOM LAYERS)	3380	1	BATH RM WEST				
VSF	746	YELLOW	UNDER SINK MASTIC	10440		KITCHEN SOUTH		NF		
VSM	747	GRAY								
VSM	748									
VSM	749									
VSF	748	WHITE	SHEET FLOORING PEBBLE PATTERN w/ BROWN MASTIC (2ND LAYER)	3318	1	BATH ROOM WEST		F		
VSF	749									



#511802585

**CHAIN OF CUSTODY**



CITADEL ENVIRONMENTAL SERVICES, INC.

**CITADEL LOCATION:**

<input type="checkbox"/> <b>GLENDALE</b>	<input checked="" type="checkbox"/> <b>ORANGE COUNTY</b>	<input type="checkbox"/> <b>VALENCIA</b>	<input type="checkbox"/> <b>TORRANCE OFFICE</b>
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201. Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone: (562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone: (661) 257-9009 Fax: (661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone: (310) 212-1714 Fax: (310) 212-1702

**PROJECT AND SAMPLE INFORMATION**

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 9 SAMPLE NUMBERS: 756-764

TYPE OF SAMPLES (CIRCLE ONE): AIR TAPE WATER WIFE  
ZEFON ANDERSEN  
BULK SOIL AIR-O-CELL PLATE OTHER

TYPE OF ANALYSIS:  
Asbestos Lead  
Phase Contrast Microscopy Flame Atomic Absorption  
X Polarized Light Microscopy TTLC STLC TCLP  
1st Positive Stop  
Point Count 400 Point Count 1000 Point Count

Transmission Electron Microscopy  
Qualitative Quantitative  
Culturable Air Culturable Samples  
Andersen Fungi (genus ID, Aspergillus) Quantitative Fungi-dust, bulk swab-1 medium  
Andersen Bacteria Quantitative Fungi-dust, bulk swab-3 media  
Non-Culturable Air Quantitative Bacteria-dust, bulk swab-1 medium  
Non-Viable Spore Trap Slide Quantitative Bacteria-dust, bulk, swab-3 media  
Surface Samples E.coli and Coliforms (MUG)  
Surface Sample (direct examination) Other

TURNAROUND TIME (CIRCLE ONE): Rush 12 HOURS 24 HOURS 48 HOURS  
3 DAYS 5 DAYS 5-10 DAYS OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY): PHONE FAX WRITTEN REPORT PDF

NOTES/COMMENTS: Special Project "JS" - Perform layered analysis and provide layered results.  
Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:  
Relinquished By: [Signature] Received By: [Signature]  
Date: 8/24/18 Time: 1400 Date: 8/27 Time: 1:30  
Relinquished By: \_\_\_\_\_ Received By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION: NAME: LA TESTING LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:  RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS  YEAR (S) \_\_\_\_\_

#511802585

BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 3 1 8		PAGE			
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Hovner		OF			
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 14-5288					
SITE ADDRESS: University of California Riverside		BULK SAMPLE LOCATION		MATERIAL CONDITION			
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREALOCATION	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN				
HA NO.							
RFM	756	BLACK	BLACK TAG W/ ROOF SAMPLE + VAPOR BARRIER + BROWN INSULATION + STYROFOAM	ROOF	NE	N	6 N/A
RFM	757				SE		
RFM	758				SOUTH		
RFM	759				NORTH		
RFM	760						
RFM	761						
MISC	762	WHITE	BLOWN-IN INSULATION	ATTIC	SOUTH		
MISC	763						
MISC	764						



#511802585



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL-Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL-Seattle	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation?*</b>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM		
<b>Date Received:</b>	8/27/18		
<b>Date Relinquished:</b>	8/28/18		
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out		
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
	8/28		
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement-</b> Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Claudia Maldiner		LA Testing	8/28
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

#331815085

CHAIN OF CUSTODY



CITADEL LOCATION:

<input type="checkbox"/> GLENDALE	<input checked="" type="checkbox"/> ORANGE COUNTY	<input type="checkbox"/> VALENCIA	<input type="checkbox"/> TORRANCE OFFICE
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone: (562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone: (661) 257-9009 Fax: (661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone: (310) 212-1714 Fax: (310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 54 SAMPLE NUMBERS: 1000-1053

TYPE OF SAMPLES (CIRCLE ONE): AIR TAPE WATER WIPE ZEFON ANDERSEN AIR-O-CELL PLATE OTHER BULK SOIL

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy Polarized Light Microscopy 1st Positive Stop Point Count 400 Point Count 1000 Point Count Transmission Electron Microscopy Qualitative Quantitative

Lead

Flame Atomic Absorption TTLC STLC TCLP

Culturable Air

Andersen Fungi (genue ID, Aspergillus) Andersen Bacteria

Non-Culturable Air

Non-Viable Spore Trap Slide

Surface Samples

Surface Sample (direct examination)

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium Quantitative Fungi-dust, bulk swab-3 media Quantitative Bacteria-dust, bulk swab-1 medium Quantitative Bacteria-dust, bulk, swab-3 media E.coli and Coliforms (MUG)

Other

TURNAROUND TIME (CIRCLE ONE): Rush 3 DAYS 12 HOURS 5 DAYS 24 HOURS 5-10 DAYS 48 HOURS OTHER If possible 3 Days is ok. & work

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY): PHONE FAX WRITTEN REPORT PDF

NOTES/COMMENTS: Special Project "JS" - Perform layered analysis and provide layered results. Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD: Relinquished By: [Signature] Date: 7-24-18 Time: 11:15 Received By: [Signature] Date: 7/24/18 Time: 11:15 Relinquished By: [Signature] Date: 7/25/18 Time: 6:00 am Received By: [Signature] Date: 7/25 Time: 8:00

LABORATORY INFORMATION: NAME: LA Testing LOCATION: HB

DISPOSITION OF SAMPLES: RETURN DAYS AFTER ANALYSIS OTHER RETAIN FOR DAYS YEAR (S)

#331815085

**BULK SAMPLE DATA FORM**

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 4 1 8		PAGE 1			
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S):		Juan Magallon			
PROJECT ID:		University of California Riverside - Plum Street		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY			
SITE ADDRESS:		University of California Riverside - Plum Street		TEXTURE/PATTERN		AREA/LOCATION		OF 4			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
WPF	50	1000	White	Plaster w/ Button Board	851	1st	N. Center-Living Room	6440	sq ft	GF	NA
WPF	50	1001					N.E. Corner of Bedroom 2				
WPF	50	1002					w. Ceiling of Bedroom 1				
WPF	50	1003			849		S. Center-Living Room				
WPF	50	1004					W. Center - Bath Room				
WPF	50	1005					S. Center - Bedroom 2				
WPF	50	1006			851		N.E. Corner of Bathroom				
WS/J	50	1007	White	Smooth Drywall	851		S.E. Corner of Kitchen			GF	NA
WS/J	50	1008		w/ Joint Compound	849		S.W. Corner of Kitchen				
12VFT	50	1009	Beige	12" Beige w/ Specs Tile, Beige Mastic	851		Top Layer Living Room			GF	NA
12VFT	51	1010	Brown	12" Brown Tile, Black Vapor Paper, Mastic			Bottom				
12VFT	50	1011	Beige	12" Beige w/ Specs Tile, Beige Mastic	851		Top Bedroom # 2				
12VFT	51	1012	Brown	12" Brown Plain Tile, Vapor Paper, Black Mastic			Bottom				
12VFT	50	1013	Beige	12" Beige w/ Specs Tile, Beige Mastic	851		Top Bedroom # 1				

#331815085

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 4 1 0		PAGE 2 OF 4		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Haley & Aldrich						INSPECTOR(S): Juan Magallon			
PROJECT ID:		Canyon Crest Family Housing Survey						CSST/CAC NO: 15-535B		MATERIAL CONDITION	DAMAGE TYPE
SITE ADDRESS:		University of California Riverside - Plum Street						FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
12VFT	S1	1014	Brown	12" Brown Tile, Black Vapor Paper	851	1st	Bedroom #1 Bottom			G	NA
12VFT	S0	1015	Beige	12" Beige w/Specs Tile, Beige Mastic	849		Top layer Living Room				
12VFT	S1	1016	Brown	12" Broken Plain, Black Black Vapor, Mastic			Bottom				
12VFT	S0	1017	Beige	12" Beige w/Specs Tile, Beige Mastic	849		Top layer Hall				
12VFT	S1	1018	Brown	12" Brown Tile, Black Vapor Paper, Mastic			Bottom				
VSF	S0	1019	White	White Sheet Flooring Squares, w/ Mastic	851		Bathroom			G	NA
VSF	S0	1020			849		Bathroom				
VSF	S0	1021					Top layer Kitchen	①			
VSF	S1	1022	White	Sheet Flooring Plain w/ Mastic	849		Mastic layer	②		G	NA
12VFT	S2	1023	Beige	12" Beige Tile, Beige Mastic			Bathroom	③			
VSF	S2	1024	Tan	Marble Sheet Flooring w/ Mastic				④			
VSF	S3	1025	Off white	Off White Sheet Flooring w/ Vapor Paper				⑤			
VSF	S1	1026	White	Sheet Flooring Plain w/ Mastic	849		Kitchen	②		G	NA
12VFT	S2	1027	Beige	12" Beige Tile, Beige Mastic				③			

#331815085

BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 4 1 8		PAGE 3 OF 4		CITADEL LABORATORY SERVICES, INC.			
CLIENT:		Halley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): Juan Magallon		CSST/CAC NO: 15-5358					
PROJECT ID:		University of California Riverside		Plum Street		BULK SAMPLE LOCATION		FRIABILITY		MATERIAL CONDITION		DAMAGE TYPE	
SITE ADDRESS:		University of California Riverside		Plum Street		AREA/LOCATION		QUANTITY		MATERIAL CONDITION		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE	
VSF	52	1028	Tan	Marble Sheet Flooring, w/ Mastic	849	1st	Kitchen	4		F	G	NA	
VSF	53	1029	off white	Sheet Flooring, w/ Vapor Paper	↓		↓	5		↓	↓	↓	
VSF	51	1030	white	Sheet Flooring Plain, w/ Mastic	849		Kitchen	2		F	G	NA	
12VFT	52	1031	Beige	12" Beige Tile, Beige Mastic	↓		↓	3		NF	↓	↓	
VSF	51	1032	Tan	Marble Sheet Flooring w/ Mastic	↓		↓	4		F	↓	↓	
VSF	53	1033	off white	Sheet Flooring w/ Vapor Paper	↓		↓	5		↓	↓	↓	
VSF	54	1034	Beige	Sheet Flooring Brown, w/ Mastic	851		Kitchen	1		F	G	NA	
12VFT	53	1035	Beige	12" Beige Tile, Beige Mastic	↓		↓	2		NF	↓	↓	
VSF	55	1036	Beige	Marble Sheet Flooring, w/ Mastic	↓		↓	3		F	↓	↓	
12VFT	54	1037	Tan	Red/Blue Tile, Black Vapor Paper, Mastic	↓		↓	4		NF	↓	↓	
VSF	54	1038	Beige	Sheet Flooring Brown, w/ Mastic	851		Kitchen	1		F	↓	↓	
12VFT	53	1039	Beige	12" Beige Tile, Beige Mastic	↓		↓	2		NF	↓	↓	
VSF	55	1040	beige	Marble Sheet Flooring w/ Mastic	↓		↓	3		F	↓	↓	
12VFT	54	1041	Tan	Red/Blue Tile, Black Vapor Paper, Mastic	↓		↓	4		NF	↓	↓	

#331815085

BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6		DATE: 0 7 2 4 1 8		PAGE 4 OF 4						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CITADEL SERVICES, INC.						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-9558		MATERIAL CONDITION						
SITE ADDRESS: University of California Riverside - Plum Street		BULK SAMPLE LOCATION		DAMAGE TYPE						
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY		
		COLOR	TEXTURE/PATTERN							
VSF	1042	Beige	Sheet Flooring Brown w/ Mastic	1st	Kitchen	1	851	F	G	NA
54										
12VFT	1043		12" Beige Tile, Beige Mastic			2		NF		
53										
VSF	1044		Marble Sheet Flooring w/ Mastic			3		F		
55										
12VFT	1045	Tan	Red/Blue Tile, Black Vapor Paper, Mastic			4		NF		
54										
ES	1046	White	Exterior Stucco	1st	Exterior S.W			NF	G	NA
50										
ES	1047				N.E.		849			
50										
ES	1048				N. Center		849			
50										
ES	1049				S. Center		849			
50										
ES	1050				N.W.		851			
50										
RS	1051	Red	Roof Shingles		S.E.		849			
50										
RS	1052									
50										
RS	1053									
50										

2

CHAIN OF CUSTODY



CITADEL LOCATION:

<input type="checkbox"/> GLENDALE	<input checked="" type="checkbox"/> ORANGE COUNTY	<input type="checkbox"/> VALENCIA	<input type="checkbox"/> TORRANCE OFFICE
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone:(562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone:(661) 257-9009 Fax:(661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone:(310) 212-1714 Fax:(310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 252 SAMPLE NUMBERS: 1054-1308

TYPE OF SAMPLES (CIRCLE ONE):

AIR	TAPE	WATER	WIPE
<u>BULK</u>	SOIL	ZEFON	ANDERSEN
		AIR-O-CELL	PLATE
			OTHER

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy \_\_\_\_\_  
 Polarized Light Microscopy \_\_\_\_\_  
 1st Positive Stop \_\_\_\_\_  
 Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count \_\_\_\_\_  
 Transmission Electron Microscopy \_\_\_\_\_  
 Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

Lead

Flame Atomic Absorption \_\_\_\_\_  
 TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TCLP \_\_\_\_\_

Culturable Air

Andersen Fungi (genue ID, Aspergillus) \_\_\_\_\_  
 Andersen Bacteria \_\_\_\_\_

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium \_\_\_\_\_  
 Quantitative Fungi-dust, bulk swab-3 media \_\_\_\_\_  
 Quantitative Bacteria-dust, bulk swab-1 medium \_\_\_\_\_  
 Quantitative Bacteria-dust, bulk, swab-3 media \_\_\_\_\_  
 E.coli and Coliforms (MUG) \_\_\_\_\_

Non-Culturable Air

Non-Viable Spore Trap Slide \_\_\_\_\_

Surface Samples

Surface Sample (direct examination) \_\_\_\_\_

Other

TURNAROUND TIME (CIRCLE ONE):

Rush	12 HOURS	24 HOURS	48 HOURS
3 DAYS	<u>5 DAYS</u>	5-10 DAYS	OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE	FAX	WRITTEN REPORT	<u>PDF</u>
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NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.  
 Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: [Signature]  
 Date: 7/30/18 Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
 Date: 7/30/18 Time: 1:20  
 Received By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: LA Testing LOCATION: Pasadena

DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS  YEAR (S) \_\_\_\_\_

# 331815325

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside • Peach Street

DATE: 0 7 2 5 1 8

INSPECTOR(S): Juan Magallon  
CSST/CAC NO: 15-5358

PAGE 1 OF 4



HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO. UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
WPF 50	1054	White	Plaster w/ Button	850	1st	Living Room	640 Ft <sup>2</sup>	NF	G	NA
WPF 50	1055					Kitchen				
WPF 50	1056					Bedroom 2				
WPF 50	1057					Bedroom 1				
WPF 50	1058			848		kitchen				
WPF 50	1059					Living Room				
WPF 50	1060					Bedroom 2				
WS/J 50	1061	White	Drywall w/ J.O.	850		kitchen		NF	G	NA
WS/J 50	1062			848						
12VFT 50	1063	Beige	Top layer: 12" Beige Floor Tile w/ Specs ; Beige Mastic	850		Living Room				
12VFT 50	1064					Bedroom 2				
12VFT 50	1065					Bedroom 1				
12VFT 50	1066			848		Living Room				
12VFT 50	1067					Bedroom 2				



#331815325

BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 7 - 2 5 1 8		PAGE 2	
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): Juan Magallon		OF 4	
PROJECT ID:		University of California Riverside - Peach Street		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	
SITE ADDRESS:		University of California Riverside - Peach Street		TEXTURE/PATTERN		AREA/LOCATION		DAMAGE TYPE	
HA TYPE	HA NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	MATERIAL CONDITION	DAMAGE TYPE
12VFT	1068	Brown	Bottom layer: 12" Brown Tile	850	1st	Living Room		G	NA
51			w/ Black Mastic ; Vapor Paper			Bedroom 2			
12VFT	1069					Bedroom 1			
51						Living Room			
12VFT	1070					Bedroom 2			
51						Kitchen			
VSF	1073	Beige	Middle Layer: Marble Sheet Floor ; Mastic	850				G	NA
55									
VSF	1075								
55									
VSF	1076	Beige	Bottom layer: 12" Beige Tile w/ Black Mastic ; vapor	850		Kitchen		G	NA
56									
VSF	1077								
56									
VSF	1078								
56									
VSF	1079	Beige	Square Sheet Floor ; Mastic	850		Bathroom		G	NA
56									
VSF	1080								
56									
VSF	1081								
56									

12VFT 54  
12VFT 54  
12VFT 54

#331815325

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Peach Street

DATE: 072518

PAGE 3

INSPECTOR(S): Juan Magallon

OF 4

CSST/CAC NO: 15-5358



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.			
VSF 57	1082	White	Triangle Sheet Floor & Mastic	848	1st	Bathroom		F	G	NA
VSF 57	1083	↓	↓	↓	↓	↓		↓	↓	↓
VSF 57	1084	↓	↓	↓	↓	↓		↓	↓	↓
VSF 58	1085	Yellow	Flower Sheet Floor w/ Mastic	848		Middle Layer Kitchen		F	G	NA
VSF 58	1086	↓	↓	↓	↓	↓		↓	↓	↓
VSF 58	1087	↓	↓	↓	↓	↓		↓	↓	↓
VSFT 54	1088	Tan	Red/Blue Spec 12" Tan Tile w/ Black Mastic & Vapor Paper	848		Bottom Layer: Kitchen		NF	↓	↓
VSFT 54	1089	↓	↓	↓	↓	↓		↓	↓	↓
VSFT 54	1090	↓	↓	↓	↓	↓		↓	↓	↓
ES 50	1091	White	Exterior Stucco	Exterior		N.W.		NF	G	NA
ES 50	1092	↓	↓	↓	↓	↓		↓	↓	↓
ES 50	1093	↓	↓	↓	↓	N.Center		↓	↓	↓
ES 50	1094	↓	↓	↓	↓	N.E.		↓	↓	↓
ES 50	1095	↓	↓	↓	↓	S.Center		↓	↓	↓
ES 50	1095	↓	↓	↓	↓	S.W.		↓	↓	↓

#331815325

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 5 1 8		PAGE 4			
CLIENT: Haley & Aldrich		INSPECTOR(S): Juan Magallon		OF 4			
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358					
SITE ADDRESS: University of California Riverside - Peach Street		BULK SAMPLE LOCATION AREA/LOCATION		MATERIAL CONDITION			
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		QUANTITY		FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	NO.		
PS 50	1096	Red	Roof Shingles	Roof		NF	G NA
PS 50	1097	↓	↓	↓		↓	↓
PS 50	1098	↓	↓	↓		↓	↓

27

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact:  
email:  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
email: jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact:  
email:  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact:  
email:  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 252

SAMPLE NUMBERS: 1054-1308

TYPE OF SAMPLES (CIRCLE ONE):

AIR TAPE WATER WIPE  
ZEFON ANDERSEN  
AIR-O-CELL PLATE OTHER  
BULK SOIL

TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop

Point Count  400 Point Count  1000 Point Count

Transmission Electron Microscopy

Qualitative  Quantitative

##### Lead

Flame Atomic Absorption  
 TTLC  STLC  TCLP

##### Culturable Air

Andersen Fungi (genue ID, Aspergillus)  
 Andersen Bacteria

##### Non-Culturable Air

Non-Viable Spore Trap Slide

##### Surface Samples

Surface Sample (direct examination)

##### Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium  
 Quantitative Fungi-dust, bulk swab-3 media  
 Quantitative Bacteria-dust, bulk swab-1 medium  
 Quantitative Bacteria-dust, bulk, swab-3 media  
 E.coli and Coliforms (MUG)

##### Other

TURNAROUND TIME (CIRCLE ONE):

Rush 12 HOURS 24 HOURS 48 HOURS  
3 DAYS 5 DAYS 5-10 DAYS OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE FAX WRITTEN REPORT PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy Jessica.Abram@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: [Signature]  
Date: 7/30/18 Time: [Signature]  
Relinquished By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
Date: 7/30/18 Time: 1:20  
Received By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: LA Testing

LOCATION: Pasadena

DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS

OTHER \_\_\_\_\_  
 YEAR (S) \_\_\_\_\_

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6	DATE: 0 7 2 5 / 8	PAGE 1
CLIENT: Haley & Aldrich	INSPECTOR(S): Juan Magallon	OF 4
PROJECT ID: Canyon Crest Family Housing Survey	CSST/CAC NO: 15-535B	
SITE ADDRESS: University of California Riverside - Cherry St. 821-823		

HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
WPF 50	1099	white	Plaster w/ Button	821	1st	living Room	6440	Ft <sup>2</sup>	NF	G	NA
WPF 50	1100					Bedroom 1					
WPF 50	1101					Bedroom 2					
WPF 50	1102					kitchen					
WPF 50	1103					Living Room					
WPF 50	1104					Hall					
WPF 50	1105					Bedroom 1					
WS/J 50	1106	white	Drywall w/ J.O.	821		kitchen					
WS/J 50	1107										
WS/J 50	1108	beige	Top layer: 1/2" Beige w/ Specs Tile w/ Beige Mastic	821		Living Room					
WS/J 50	1109					Hall					
WS/J 50	1110					Bedroom 2					
WS/J 50	1111					Living Room					
WS/J 50	1112					Bedroom 1					

BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Cherry St. 021-823

DATE: 07 25 18

INSPECTOR(S): Justin Magallon

CSST/CAC NO: 15-5350

PAGE 2

OF 4



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
12VFT S1	1113	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic, Vapor	021	1st	Living Room	NF	G	NA
12VFT S1	1114					Hall			
12VFT S1	1115					Bedroom 2			
12VFT S1	1116			023		LIVING RM.			
12VFT S1	1117					Bedrm. 1			
VSF S0	1118	White	Top layer: 1/6 Square Floor Sheet Top layer: w/ Mastic	021		Kitchen	F	G	NO
VSF S0	1119		Single Layer			Bathroom			
VSF S0	1120		Middle layer: Marble Sheet Floor w/ Mastic	021		Kitchen			
VSF S5	1121								
VSF S5	1122								
VSF S5	1123			023					
VSF S5	1124	Yellow	Bottom Middle layer: Flower Sheet Floor w/ Mastic	021		Kitchen			
VSF S0	1125			023					
VSF S0	1126								

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6				1 0 1 7 0				DATE: 0 7 2 5 1 8				PAGE 3 OF 4		CITADEL ANALYTICAL SERVICES, INC.
CLIENT:		Haley & Aldrich														
PROJECT ID:		Canyon Crest Family Housing Survey														
SITE ADDRESS:		University of California Riverside · Cherry St. 821-823														
INSPECTOR(S):		Juan Magallon														
C-SST/CAC NO.:		IS-5358														
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION	UNIT	LEVEL	AREA/LOCATION	QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE			
			COLOR	TEXTURE/PATTERN					NO.	UNIT						
12VFT	54	1127	Tan	Bottom layer: Blue & Red Specs Tile w/ Black Mastic, Vapor	821	1st	Kitchen			F	G	NA				
12VFT	54	1128			823											
12VFT	54	1129														
VSF	59	1130	Yellow	Bottom layer: Beige Sheet Floor w/ Vapor Paper	823		Bathroom									
VSF	59	1131														
VSF	59	1132														
VSF	59	1133														
ES	50	1134	White	Exterior Stucco	Exterior		S.E.			NF	G	NA				
ES	50	1135					S. Center									
ES	50	1136					S.W.									
ES	50	1137					N. Center									
ES	50	1138					N.E.									
RS	50	1139	Red	Roof Shingles	Roof	Roof	S.E.									
RS	50	1140					S. Center									
RS	50	1140					S.W									







#331815332

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 6 1 8		PAGE		1		OF		3	
CLIENT:		Haley & Aldrich															
PROJECT ID:		Canyon Crest Family Housing Survey															
SITE ADDRESS:		University of California Riverside · Cherry St. Unit 801/803															
INSPECTOR(S):		J. Magallon															
CSSTICAC NO.:		15-5358															
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION	UNIT	LEVEL	QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE					
			COLOR	TEXTURE/PATTERN				NO.	UNIT								
WPF	50	1144	white	Plaster w/ Button	801	1st	Living Rm.	6440	ft <sup>2</sup>	NF	G	NA					
WPF	50	1145					Bedrm. 1										
WPF	50	1146					Bedrm. 2										
WPF	50	1147					Kitchen										
WPF	50	1148			803		Kitchen										
WPF	50	1149					Bedrm. 2										
WPF	50	1150					Living Rm.										
12VFT	50	1151	Beige	Top layer: 12" Beige w/ Specs Tile w/ Beige Mastic	801		Living Rm.										
12VFT	50	1152					Bedrm. 3										
12VFT	50	1153					Bedrm. 1										
12VFT	50	1154					Bedrm. 2										
12VFT	50	1155			803		Living Rm.										
12VFT	50	1156	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic, Vapor	801		Living Rm.										
12VFT	50	1157					Bedrm. 3										

# BULK SAMPLE DATA FORM #331815332

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 1 8		PAGE 2 OF 3					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358							
SITE ADDRESS: University of California Riverside - Cherry St. Unit 801-803		BULK SAMPLE LOCATION		QUANTITY					
HA TYPE	SAMPLE NO.	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
12VFT	1158	801	1st	Bedrm. 1			NF	G	NA
51		803		Bedrm. 2			↓	↓	↓
12VFT	1159	↓	↓	Living Rm.			↓	↓	↓
51				kitchen			F	G	NA
VSF	1161	↓	↓	Bathrm.			↓	↓	↓
56		803		kitchen			↓	↓	↓
VSF	1162	↓	↓	Hall			↓	↓	↓
56							NF	G	NA
VSF	1163	↓	↓				↓	↓	↓
56							↓	↓	↓
12VFT	1164	↓	↓				↓	↓	↓
55							↓	↓	↓
12VFT	1165	↓	↓				↓	↓	↓
55							↓	↓	↓
12VFT	1166	↓	↓				↓	↓	↓
55							↓	↓	↓
USM	1167	801		Kitchen			↓	↓	↓
50		↓	↓	Sink			↓	↓	↓
USM	1168	803					↓	↓	↓
50							↓	↓	↓
USM	1169	External		S.E.			↓	↓	↓
50		↓	↓	S. Center			↓	↓	↓
ES	1170	↓	↓				↓	↓	↓
50							↓	↓	↓
ES	1171	↓	↓				↓	↓	↓
50							↓	↓	↓

PROJECT NO.: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Cherry St. Unit 801-803

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

PAGE 2 OF 3



#331815332

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 6 1 7		PAGE		3		OF		3	
CLIENT:		Halley & Aldrich															
PROJECT ID:		Canyon Crest Family Housing Survey															
SITE ADDRESS:		University of California Riverside - Cherry St. Unit 801-803															
INSPECTOR(S):		J. Magallon															
CSST/CAC NO.:		15-5358															
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE					
			COLOR	TEXTURE/PATTERN		LEVEL	AREA/LOCATION	NO.	UNIT								
ES	1172		White	Exterior Stucco	Exterior	1st	S.W.			NF	G	NA					
SO																	
ES	1173						N.W.										
SO							N.E.										
ES	1174																
SO																	
ES	1175		Red	Roof Shingles	Roof	Roof	S.E.										
SO																	
ES	1176						S.Center										
SO							S.W.										
ES	1177																
SO																	
ES	1178		White	Drywall w/ J.O.	801	1s	Kitchen										
SO																	
ES	1179				803												
SO																	

(2)

CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 252

SAMPLE NUMBERS: 1054-1308

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

BULK

SOIL

ZEFON

ANDERSEN

AIR-O-CELL

PLATE

OTHER

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy

Polarized Light Microscopy

1st Positive Stop

Point Count  400 Point Count  1000 Point Count

Transmission Electron Microscopy

Qualitative  Quantitative

Lead

Flame Atomic Absorption

TTLC

STLC

TCLP

Culturable Air

Andersen Fungi (genuine ID, Aspergillus)

Andersen Bacteria

Non-Culturable Air

Non-Viable Spore Trap Slide

Surface Samples

Surface Sample (direct examination)

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium

Quantitative Fungi-dust, bulk swab-3 media

Quantitative Bacteria-dust, bulk swab-1 medium

Quantitative Bacteria-dust, bulk, swab-3 media

E.coli and Coliforms (MUG)

Other

TURNAROUND TIME (CIRCLE ONE):

Rush

12 HOURS

24 HOURS

48 HOURS

3 DAYS

5 DAYS

5-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN REPORT

PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy Jessica Aguilar jaguilar@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: [Signature]

Date: 7/30/18

Time: \_\_\_\_\_

Received By: [Signature]

Date: 7/30/18

Time: 1:20

Relinquished By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: LA Testing

LOCATION: Pasadena

DISPOSITION OF SAMPLES:

RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

OTHER

RETAIN FOR

\_\_\_\_\_ DAYS

YEAR(S)

BULK SAMPLE DATA FORM #331815346

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 / 1 8		PAGE 1 OF 4				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon				CITADEL ENVIRONMENTAL SERVICES, INC.		
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-15358						
SITE ADDRESS: University of California Riverside - Florida St - Unit 3408/3416		BULK SAMPLE LOCATION		QUANTITY		MATERIAL CONDITION		
HA TYPE	SAMPLE NO.	UNIT	LEVEL	AREA/LOCATION	NO.		FRIABILITY	
HA NO.							DAMAGE TYPE	
WPF 50	1180	3416	1st	Living Rm.	6446	NF	G	N/A
WPF 50	1181			Bedrm. 2				
WPF 50	1182			Ceiling Bathroom				
WPF 50	1183			Bedrm 1				
WPF 50	1184	3408		Living Rm.				
WPF 50	1185			Kitchen				
WPF 50	1186			Bedrm 2				
WS/J 50	1187			Kitchen		NF	D	WA
WS/J 50	1188							
DNFT 50	1189			Living Rm.			G	N/A
DNFT 50	1190			Bedrm. 2				
DNFT 50	1191			Bedrm. 1				
DNFT 50	1192	3408		Living Rm.			D	W
DNFT 50	1193			Bedrm. 2				
SD								

#331815346

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 1 0		PAGE 2 OF 4						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon								
PROJECT ID: Canyon Crest Family Housing Survey		SST/CAC NO: 15-5358								
SITE ADDRESS: University of California Riverside - Florida St - Unit 3408-3416		FRIABILITY								
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
12VFT S1	1194	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic & Vapor	3416	1st	Living Rm.			G	NA
12VFT S1	1195					Bedrm. 2				
12VFT S1	1196					Bedrm 1				
12VFT S1	1197			3408		Living Rm.			D	W
12VFT S1	1198					Bedrm. 2			G	NA
VSF 20-60	1199	White	Top layer: Small Triangles Sheet Pl. w/ Mastic	3416		Bathroom			G	NA
VSF 20-60	1200									
VSF 20-60	1201			3408					D	W
VSF 20-60	1202	White	Top layer: Small Triangles Sheet Pl. w/ Mastic	3416		Kitchen			G	NA
VSF 57	1203									
VSF 57	1204			3408					D	W
VSF 57	1205	Beige	Middle layer: Marble Sheet Floor w/ Mastic	3416		Kitchen			G	NA
VSF 55	1206									
VSF 55	1207			3408					D	W



#331815346

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 1 8		PAGE 3 OF 4				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-9558						
SITE ADDRESS: University of California Riverside - Florida St. Unit - 3408 / 3416		BULK SAMPLE LOCATION AREA/LOCATION		MATERIAL CONDITION				
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	BULK SAMPLE LOCATION	FRIABILITY	DAMAGE TYPE			
HA NO.		COLOR	UNIT	NO.				
QVFT 54	208	Tan	3416	1st	Kitchen	F	G	NA
QVFT 54	209	↓	↓	↓	↓	↓	↓	↓
QVFT 54	210	↓	3408	↓	↓	↓	D	W
QVFT 50	211	Red	3408	↓	Kitchen	F	D	W
QVFT 50	212	↓	↓	↓	↓	↓	↓	↓
QVFT 50	213	↓	↓	↓	↓	↓	↓	↓
USM 51	214	Black	3416	↓	Kitchen	NF	G	NA
USM 51	215	↓	↓	↓	↓	↓	↓	↓
USM 51	216	↓	↓	↓	↓	↓	↓	↓
USM 52	217	White	3408	↓	↓	↓	↓	↓
USM 52	218	↓	↓	↓	↓	↓	↓	↓
USM 52	219	↓	↓	↓	↓	↓	↓	↓
ES 51	220	Orange	Ext	↓	S.W.	NF	G	NA
ES 51	221	↓	↓	↓	W. Center	↓	↓	↓
ES 51	221	↓	↓	↓	↓	↓	↓	↓



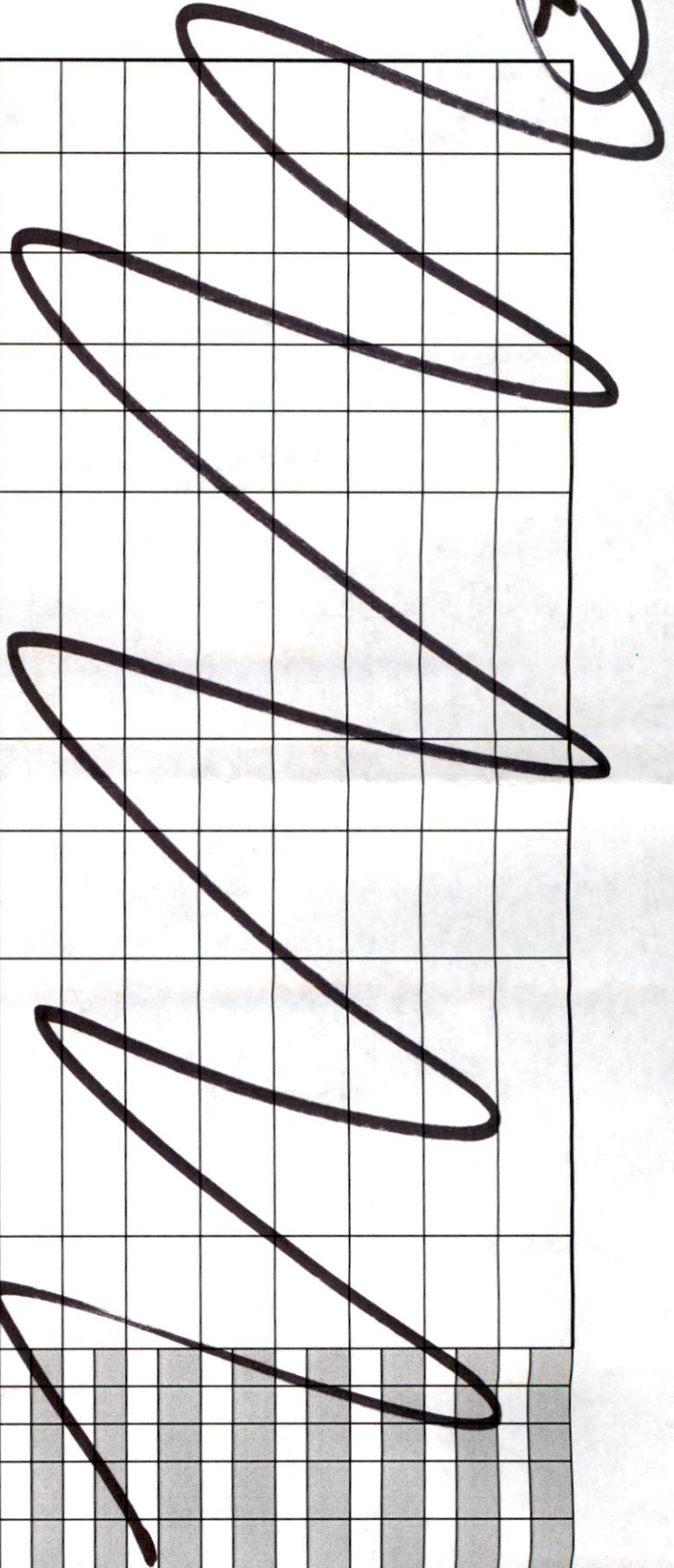
#331815346

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 6 1 8		PAGE 4	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 4	
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358			
SITE ADDRESS: University of California Riverside - Florida St - Unit 3408/3416					

HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL			
ES 1	222	Orange	Exterior Stucco	Ext.	1st	N.W.	↓	NA
ES 1	223	↓	↓	↓	↓	N.E.	↓	↓
ES 1	224	↓	↓	↓	↓	S.E.	↓	↓
RS 1	225	Red	Roof Shingles	Roof	Roof	S.W.	↓	↓
RS 1	226	↓	↓	↓	↓	W. Center	↓	↓
RS 1	227	↓	↓	↓	↓	N.W.	↓	↓



2

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

<input type="checkbox"/> <b>GLENDALE</b>	<input checked="" type="checkbox"/> <b>ORANGE COUNTY</b>	<input type="checkbox"/> <b>VALENCIA</b>	<input type="checkbox"/> <b>TORRANCE OFFICE</b>
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone: (562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone: (661) 257-9009 Fax: (661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone: (310) 212-1714 Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 252 SAMPLE NUMBERS: 1054-1308

TYPE OF SAMPLES (CIRCLE ONE):

<input type="radio"/> AIR	<input type="radio"/> TAPE	<input type="radio"/> WATER	<input type="radio"/> WIPE
<input checked="" type="radio"/> BULK	<input type="radio"/> SOIL	<input type="radio"/> ZEFON	<input type="radio"/> ANDERSEN
		<input type="radio"/> AIR-O-CELL	<input type="radio"/> PLATE
			<input type="radio"/> OTHER

#### TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop  
 Point Count     400 Point Count     1000 Point Count  
 Transmission Electron Microscopy  
 Qualitative     Quantitative

##### Lead

Flame Atomic Absorption  
 TTLC     STLC     TCLP

##### Culturable Air

Andersen Fungi (genuine ID, Aspergillus)  
 Andersen Bacteria

##### Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium  
 Quantitative Fungi-dust, bulk swab-3 media  
 Quantitative Bacteria-dust, bulk swab-1 medium  
 Quantitative Bacteria-dust, bulk, swab-3 media  
 E.coli and Coliforms (MUG)

##### Non-Culturable Air

Non-Viable Spore Trap Slide

##### Surface Samples

Surface Sample (direct examination)

##### Other

TURNAROUND TIME (CIRCLE ONE):

<input type="radio"/> Rush	<input checked="" type="radio"/> 12 HOURS	<input type="radio"/> 24 HOURS	<input type="radio"/> 48 HOURS
<input type="radio"/> 3 DAYS	<input type="radio"/> 5 DAYS	<input type="radio"/> 5-10 DAYS	<input type="radio"/> OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

<input type="checkbox"/> PHONE	<input type="checkbox"/> FAX	<input type="checkbox"/> WRITTEN REPORT	<input checked="" type="checkbox"/> PDF
--------------------------------	------------------------------	---	---

#### NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy Jessica Aguirre-jaguirre@citadelenvironmental.com on all confirmations and reports.

#### TRANSMITTAL RECORD:

Relinquished By: [Signature]  
Date: 7/30/18 Time: \_\_\_\_\_  
Relinquished By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
Date: 7/30/18 Time: 1:20  
Received By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

#### LABORATORY INFORMATION:

NAME: LA Testing LOCATION: Pasadena

#### DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS     OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS     YEAR (S) \_\_\_\_\_

#331815336

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 2 7 1 8		PAGE 1 OF 3								
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY								
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-03358		MATERIAL CONDITION								
SITE ADDRESS: University of California Riverside - Florida St. Units 3475		BULK SAMPLE LOCATION		DAMAGE TYPE								
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN									
WDF 50	1228	White	Plaster w/ Button	3475	1st	Living Rm.	6440	FI <sup>2</sup>		NF	G	NA
WDF 50	1229					Kitchen						
WDF 50	1230					Bathroom						
WDF 50	1231					Ceiling: Bedrm 1						
WDF 50	1232			3479		Living Rm.						
WDF 50	1233					Bedrm 2						
WDF 50	1234					Bedrm 1						
12VFT 50	1235	Beige	Top layer: 12" Beige w/ Spaced Tile w/ Beige Mastic	3475		Living Rm.						
12VFT 50	1236					Hall						
12VFT 50	1237					Bedrm 1						
12VFT 50	1238			3479		Living Rm.						
12VFT 50	1239					Hall						
VSE 56	1240	White	6" Square Sheet Floor w/ Mastic	3475		Bathroom				F		
VSE 56	1241			3479								

**BULK SAMPLE DATA FORM #331815336**



PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 0 7 2 7 1 8		PAGE 2				
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		OF 5				
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		15-8358						
SITE ADDRESS:		University of California Riverside - Florida St - Units 3475/3479		BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY				
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE	
VSF	56	1242	White	6" Square Sheet Floor w/ Mastic	3479	1st	Bathrm			F	G	NA
VSF	61	1243	Beige	Yellow Tint / Brown Despn Floor Sheet w/ Mast.	3475		Middle layer: Kitchen					
VSF	61	1244			3479							
VSF	61	1245										
VSF	58	1246	Yellow	Flower Floor Sheetng w/ Mastic	3475		Bottom Middle layer: Kitchen					
VSF	58	1247			3479		Bottom layer: Kitchen					
VSF	58	1248										
12VFT	56	1249	Grey	1/2" Grey Floor Tile w/ Black Mastic!	3475		Bottom layer: Kitchen			NF	G	NA
12VFT	56	1250		Vapor Paper								
12VFT	56	1251										
WS/J	50	1252	White	Drywall w/ J.C.	3475		Kitchen			NF	G	NA
WS/S	50	1253			3479							
ES	50	1254	White	Exterior Stucco	Exterior		N.E.					
ES	50	1255					E. Center					

# BULK SAMPLE DATA FORM #331815336

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 7 2 7 1 8		PAGE	
CLIENT:		Hailey & Aldrich				INSPECTOR(S):		J. Magallon		OF	
PROJECT ID:		Canyon Crest Family Housing Survey				CSST/CAC NO.:		15-5388		3	
SITE ADDRESS:		University of California Riverside - Florida St. Units 3475/3479				BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	TEXTURE/PATTERN	UNIT	LEVEL	QUANTITY	NO.	UNIT	DAMAGE TYPE
ES	50	1256	White	Exterior Stucco		Exterior	1st				NA
ES	50	1257									
ES	50	1258									
PS	50	1259	Red	Roof Shingles		Roof	Roof				
PS	50	1260									
PS	50	1261									
12VFT	51	1262	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic & Vapor		3475	1st				
12VFT	51	1263									
12VFT	51	1264									
12VFT	51	1265									
12VFT	51	1266									
SI											

(7)

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 252

SAMPLE NUMBERS: 1054-1308

TYPE OF SAMPLES (CIRCLE ONE):

- AIR
- BULK
- TAPE
- SOIL
- WATER
- ZEFON
- AIR-O-CELL
- WIPE
- ANDERSEN
- PLATE
- OTHER

TYPE OF ANALYSIS:

##### Asbestos

- Phase Contrast Microscopy
- Polarized Light Microscopy
- 1st Positive Stop
- Point Count
- 400 Point Count
- 1000 Point Count
- Transmission Electron Microscopy
- Qualitative
- Quantitative

##### Lead

- Flame Atomic Absorption
- TTLC
- STLC
- TCLP

##### Culturable Air

- Andersen Fungi (genue ID, Aspergillus)
- Andersen Bacteria

##### Culturable Samples

- Quantitative Fungi-dust, bulk swab-1 medium
- Quantitative Fungi-dust, bulk swab-3 media
- Quantitative Bacteria-dust, bulk swab-1 medium
- Quantitative Bacteria-dust, bulk, swab-3 media
- E.coli and Coliforms (MUG)

##### Non-Culturable Air

- Non-Viable Spore Trap Slide

##### Surface Samples

- Surface Sample (direct examination)

##### Other

TURNAROUND TIME (CIRCLE ONE):

- Rush
- 12 HOURS
- 24 HOURS
- 48 HOURS
- 3 DAYS
- 5 DAYS
- 5-10 DAYS
- OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

- PHONE
- FAX
- WRITTEN REPORT
- PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy this to [redacted]@citadelenv.com on all confirmations and reports.

TRANSMITTAL RECORD:

Relinquished By: [Signature]  
 Date: 7/30/18 Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
 Date: 7/30/18 Time: 1:20  
 Received By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: LA Testing

LOCATION: Pasadena

DISPOSITION OF SAMPLES:

- RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS
- RETAIN FOR \_\_\_\_\_ DAYS

- OTHER \_\_\_\_\_
- YEAR (S) \_\_\_\_\_

# BULK SAMPLE DATA FORM #331815341

PROJECT NO: 7 0 7 6		DATE: 0 7 3 0 1 8		PAGE 1								
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 3								
PROJECT ID: Canyon Crest Family Housing Survey		SST/CAC NO: 15-5358										
SITE ADDRESS: University of California Riverside 3480 / 3488 Kentucky		BULK SAMPLE LOCATION		MATERIAL CONDITION								
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
WPF	50	1 267	White	Plaster w/Button		3488	1st	living Rm.	6440	ft <sup>2</sup>	NF	G NA
WPF	50	1 268						Kitchen				
WPF	50	1 269						Bed Rm 1				
WPF	50	1 270						Bed Rm 2				
WPF	50	1 271				3480		living Rm.				
WPF	50	1 272						Bath room				
WPF	50	1 273						Bed Rm 1, Ceiling				
WS/J	50	1 274	White	Drywall w/S.C.		3488		Kitchen				
WS/J	50	1 275				3480						
12VFT	50	1 276	Beige	Top layer: 12" Beige w/speckle w/Beige mastic		3488		living Rm.				
12VFT	50	1 277						Hall				
12VFT	50	1 278						Bed Rm 2				
12VFT	50	1 279				3480		living Rm				
12VFT	50	1 280						Hall				

#331815341

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 0 7 3 0 1 8		PAGE 2 OF 3		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Manayallon				MATERIAL CONDITION	
PROJECT ID:		University of California Riverside		3480/3488		Kentucky St.		CSST/CAC NO: 15-5358		FRIABILITY	
SITE ADDRESS:		University of California Riverside		3480/3488		Kentucky St.		CSST/CAC NO: 15-5358		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	BULK SAMPLE LOCATION	AREA/LOCATION	QUANTITY	NO.	UNIT	
12VFT	51	1 2 8 1	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic; Vapor	3488	1st	living Rm				NE
12VFT	51	1 2 8 2					Hall				
12VFT	51	1 2 8 3					Bed Rm 2				
12VFT	51	1 2 8 4			3480		living Rm				
12VFT	51	1 2 8 5					Hall				
VSF	56	1 2 8 6	White	1st layer 6" Square Sheet Floor w/mastic	3488		Kitchen				
VSF	56	1 2 8 7									
VSF	56	1 2 8 8					Bathroom				
VSF	57	1 2 8 9	White	Small Triangles white; Beige w/ white mastic	3488		Kitchen				
VSF	57	1 2 9 0									
VSF	57	1 2 9 1					Bathroom				
VSF	57	1 2 9 2	White	Flower Pattern Yellow w/ Beige Mastic	3488		Kitchen				
VSF	58	1 2 9 3									
VSF	58	1 2 9 4			3480						
VSF	58										



# 331815341

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 0 1 8		PAGE 3					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Mergallan		OF 3					
PROJECT ID: Canyon Crest Family Housing Survey		INSPECTOR(S): J. Mergallan		OF 3					
SITE ADDRESS: University of California Riverside 3480/3488 Kentucky St		CSST/CAC NO: 15-5358							
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE	
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL				AREA/LOCATION
VSF	1295	Beige	(Marble) Pattern- Yellow Mastic	3488	1st	Kitchen	NF	G	N/A
VSF	1296								
VSF	1297			3480		Bathroom			
VSF	1298	Yellow	an Compact wood Boards, vapor paper			Kitchen			
VSF	1299								
VSF	1300								
ES	1301	White	Exterior Stucco	Exterior		S.E.			
ES	1302					S.W.			
ES	1303					N.W.			
ES	1304					N.W.			
ES	1305					W. Center			
RS	1306	Red	Roof Shingles	Roof		N.W.			
RS	1307					W. Center			
RS	1308					S.W.			
ES	50								

391808804

## CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

## CITADEL LOCATION:

 GLENDALE

Contact:

email:

1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

 ORANGE COUNTY

Contact: Jack Samuels

jsamuels@citadelenvironmental.com

151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

 VALENCIA

Contact:

email:

28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

 TORRANCE OFFICE

Contact:

email:

3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

## PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397

SAMPLE NUMBERS: 1309-1705

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

 BULK

SOIL

ZEFON  
AIR-O-CELLANDERSEN  
PLATE

OTHER

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy  
Polarized Light Microscopy  
1st Positive Stop

Lead

Flame Atomic Absorption  
TTLIC

STLC

TCLP

Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count \_\_\_\_\_

Transmission Electron Microscopy

Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

Culturable Air

Andersen Fungi (genue ID, Aspergillus)  
Andersen Bacteria

Non-Culturable Air

Non-Viable Spore Trap Slide

Surface Samples

Surface Sample (direct examination)

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium  
Quantitative Fungi-dust, bulk swab-3 media  
Quantitative Bacteria-dust, bulk swab-1 medium  
Quantitative Bacteria-dust, bulk, swab-3 media  
E.coli and Coliforms (MUG)

Other \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):

Rush

12 HOURS

24 HOURS

48 HOURS

3 DAYS

 5 DAYS

5-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN  
REPORT PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

TRANSMITTAL RECORD:

Relinquished By: *J. Myall*

Date: 08-13-18

Time: 12:15

Received By: *J. Myall*

Date: 8-13-18

Time: 12:15

Relinquished By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received By: *Anne (pu) 8/13/18*

Date: \_\_\_\_\_

Time: 2:55 PM

LABORATORY INFORMATION:

NAME: LA Testing

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

 RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

 OTHER RETAIN FOR

\_\_\_\_\_ DAYS

 YEAR (S)

Revised 9/29/06

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6		DATE: 0 7 3 0 1 8		CITADEL LABORATORIAL SERVICES, INC. <small>EST. 1987</small>			
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon				PAGE 1	OF 3
PROJECT ID: Canyon Crest Family Housing Survey		INSSTICAC NO: 15-5358		MATERIAL CONDITION DAMAGE TYPE			
SITE ADDRESS: University of California Riverside 3407/3401 Kentucky St		AREA/LOCATION				FRIABILITY	
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY	UNIT
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL		
WPF	1309	White	Plaster w/Button	3407	1st	6440	ft <sup>2</sup>
50							
WPF	1310						
50							
WPF	1311						
50							
WPF	1312						
50							
WPF	1313			3401			
50							
WPF	1314						
50							
WPF	1315						
50							
WS/T	1316	White	Dry wall w/JS	3407			
50							
WS/T	1317			3401			
50							
12VFT	1318	Beige	Top layer: 12" Beige w/specs w/ Beige Mastic	3407			
50							
12VFT	1319						
50							
12VFT	1320						
50							
12VFT	1321			3401			
50							
12VFT	1322						
50							

391808804

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 0 1 8		PAGE 2 OF 3		<b>CITADEL ENVIRONMENTAL SERVICES, INC.</b>
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY		
PROJECT ID: Canyon Crest Family Housing Survey		Kentucky SHCSSTICAC NO: 15-5258		QUANTITY		MATERIAL CONDITION
SITE ADDRESS: University of California Riverside		AREA/LOCATION		NO.		
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	LEVEL	UNIT	
12VFT	1 3 2 3	Brown	Bottom layer: 12" Brown tile w/ Black Mastic; topok	1st	living Rm	NA
51						
12VFT	1 3 2 4				Hall	
51						
12VFT	1 3 2 5				Bed Rm 2	
51						
12VFT	1 3 2 6				living Rm	
51						
12VFT	1 3 2 7				Hall	
51						
VSF	1 3 2 8	Beige	6" (Small Squares) Beige w/ Beige Mastic		Kitchen	
56						
VSF	1 3 2 9				Bathroom	
56						
VSF	1 3 3 0					
56						
VSF	1 3 3 1	Beige	w/ Brown Design beige Mastic		Kitchen	
61						
VSF	1 3 3 2					
61						
VSF	1 3 3 3					
61						
VSF	1 3 3 4	Beige	Plain			
54						
VSF	1 3 3 5					
54						
VSF	1 3 3 6					
54						

391808804

# BULK SAMPLE DATA FORM

PROJECT NO: 7 0 7 6		1 0 1 7 0		DATE: 0 7 3 0 1 8		PAGE 3	
CLIENT: Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Maygallon		OF 3	
PROJECT ID: University of California Riverside		3407 / 3401 Kentucky St		CSSTAC NO: 15-5358		3	
SITE ADDRESS: 3407 / 3401 Kentucky St		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY	
HA TYPE	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREALOCATION	NO.
USM	1 3 3 7	Gray		3407	1st	Kitchen	
USM	1 3 3 8	↓		↓	↓		
USM	1 3 3 9	↓		↓	↓		
RS	1 3 4 0	Red	Roof Shingles	Roof		N.W.	
RS	1 3 4 1	↓		↓		W.Center	
RS	1 3 4 2	↓		↓		S.W.	
ES	1 3 4 3	White	Exterior	Exterior		N.E.	
ES	1 3 4 4	↓		↓		N.W.	
ES	1 3 4 5	↓		↓		S.W.	
ES	1 3 4 6	↓		↓		S.E.	
ES	1 3 4 7	↓		↓		E.Center	
ES	1 3 4 8	↓		↓			
ES	1 3 4 9	↓		↓			
ES	1 3 5 0	↓		↓			
ES	1 3 5 1	↓		↓			
ES	1 3 5 2	↓		↓			
ES	1 3 5 3	↓		↓			
ES	1 3 5 4	↓		↓			
ES	1 3 5 5	↓		↓			
ES	1 3 5 6	↓		↓			
ES	1 3 5 7	↓		↓			
ES	1 3 5 8	↓		↓			
ES	1 3 5 9	↓		↓			
ES	1 3 6 0	↓		↓			
ES	1 3 6 1	↓		↓			
ES	1 3 6 2	↓		↓			
ES	1 3 6 3	↓		↓			
ES	1 3 6 4	↓		↓			
ES	1 3 6 5	↓		↓			
ES	1 3 6 6	↓		↓			
ES	1 3 6 7	↓		↓			
ES	1 3 6 8	↓		↓			
ES	1 3 6 9	↓		↓			
ES	1 3 7 0	↓		↓			
ES	1 3 7 1	↓		↓			
ES	1 3 7 2	↓		↓			
ES	1 3 7 3	↓		↓			
ES	1 3 7 4	↓		↓			
ES	1 3 7 5	↓		↓			
ES	1 3 7 6	↓		↓			
ES	1 3 7 7	↓		↓			
ES	1 3 7 8	↓		↓			
ES	1 3 7 9	↓		↓			
ES	1 3 8 0	↓		↓			
ES	1 3 8 1	↓		↓			
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ES	1 3 8 3	↓		↓			
ES	1 3 8 4	↓		↓			
ES	1 3 8 5	↓		↓			
ES	1 3 8 6	↓		↓			
ES	1 3 8 7	↓		↓			
ES	1 3 8 8	↓		↓			
ES	1 3 8 9	↓		↓			
ES	1 3 9 0	↓		↓			
ES	1 3 9 1	↓		↓			
ES	1 3 9 2	↓		↓			
ES	1 3 9 3	↓		↓			
ES	1 3 9 4	↓		↓			
ES	1 3 9 5	↓		↓			
ES	1 3 9 6	↓		↓			
ES	1 3 9 7	↓		↓			
ES	1 3 9 8	↓		↓			
ES	1 3 9 9	↓		↓			
ES	1 4 0 0	↓		↓			
ES	1 4 0 1	↓		↓			
ES	1 4 0 2	↓		↓			
ES	1 4 0 3	↓		↓			
ES	1 4 0 4	↓		↓			
ES	1 4 0 5	↓		↓			
ES	1 4 0 6	↓		↓			
ES	1 4 0 7	↓		↓			
ES	1 4 0 8	↓		↓			
ES	1 4 0 9	↓		↓			
ES	1 4 1 0	↓		↓			
ES	1 4 1 1	↓		↓			
ES	1 4 1 2	↓		↓			
ES	1 4 1 3	↓		↓			
ES	1 4 1 4	↓		↓			
ES	1 4 1 5	↓		↓			
ES	1 4 1 6	↓		↓			
ES	1 4 1 7	↓		↓			
ES	1 4 1 8	↓		↓			
ES	1 4 1 9	↓		↓			
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ES	1 4 2 1	↓		↓			
ES	1 4 2 2	↓		↓			
ES	1 4 2 3	↓		↓			
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ES	1 4 2 5	↓		↓			
ES	1 4 2 6	↓		↓			
ES	1 4 2 7	↓		↓			
ES	1 4 2 8	↓		↓			
ES	1 4 2 9	↓		↓			
ES	1 4 3 0	↓		↓			
ES	1 4 3 1	↓		↓			
ES	1 4 3 2	↓		↓			
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ES	1 4 3 4	↓		↓			
ES	1 4 3 5	↓		↓			
ES	1 4 3 6	↓		↓			
ES	1 4 3 7	↓		↓			
ES	1 4 3 8	↓		↓			
ES	1 4 3 9	↓		↓			
ES	1 4 4 0	↓		↓			
ES	1 4 4 1	↓		↓			
ES	1 4 4 2	↓		↓			
ES	1 4 4 3	↓		↓			
ES	1 4 4 4	↓		↓			
ES	1 4 4 5	↓		↓			
ES	1 4 4 6	↓		↓			
ES	1 4 4 7	↓		↓			
ES	1 4 4 8	↓		↓			
ES	1 4 4 9	↓		↓			
ES	1 4 5 0	↓		↓			
ES	1 4 5 1	↓		↓			
ES	1 4 5 2	↓		↓			
ES	1 4 5 3	↓		↓			
ES	1 4 5 4	↓		↓			
ES	1 4 5 5	↓		↓			
ES	1 4 5 6	↓		↓			
ES	1 4 5 7	↓		↓			
ES	1 4 5 8	↓		↓			
ES	1 4 5 9	↓		↓			
ES	1 4 6 0	↓		↓			
ES	1 4 6 1	↓		↓			
ES	1 4 6 2	↓		↓			
ES	1 4 6 3	↓		↓			
ES	1 4 6 4	↓		↓			
ES	1 4 6 5	↓		↓			
ES	1 4 6 6	↓		↓			
ES	1 4 6 7	↓		↓			
ES	1 4 6 8	↓		↓			
ES	1 4 6 9	↓		↓			
ES	1 4 7 0	↓		↓			
ES	1 4 7 1	↓		↓			
ES	1 4 7 2	↓		↓			
ES	1 4 7 3	↓		↓			
ES	1 4 7 4	↓		↓			
ES	1 4 7 5	↓		↓			
ES	1 4 7 6	↓		↓			
ES	1 4 7 7	↓		↓			
ES	1 4 7 8	↓		↓			
ES	1 4 7 9	↓		↓			
ES	1 4 8 0	↓		↓			
ES	1 4 8 1	↓		↓			
ES	1 4 8 2	↓		↓			
ES	1 4 8 3	↓		↓			
ES	1 4 8 4	↓		↓			
ES	1 4 8 5	↓		↓			
ES	1 4 8 6	↓		↓			
ES	1 4 8 7	↓		↓			
ES	1 4 8 8	↓		↓			
ES	1 4 8 9	↓		↓			
ES	1 4 9 0	↓		↓			
ES	1 4 9 1	↓		↓			
ES	1 4 9 2	↓		↓			
ES	1 4 9 3	↓		↓			
ES	1 4 9 4	↓		↓			
ES	1 4 9 5	↓		↓			
ES	1 4 9 6	↓		↓			
ES	1 4 9 7	↓		↓			
ES	1 4 9 8	↓		↓			
ES	1 4 9 9	↓		↓			
ES	1 5 0 0	↓		↓			
ES	1 5 0 1	↓		↓			
ES	1 5 0 2	↓		↓			
ES	1 5 0 3	↓		↓			
ES	1 5 0 4	↓		↓			
ES	1 5 0 5	↓		↓			
ES	1 5 0 6	↓		↓			
ES	1 5 0 7	↓		↓			
ES	1 5 0 8	↓		↓			
ES	1 5 0 9	↓		↓			
ES	1 5 1 0	↓		↓			
ES	1 5 1 1	↓		↓			
ES	1 5 1 2	↓		↓			
ES	1 5 1 3	↓		↓			
ES	1 5 1 4	↓		↓			
ES	1 5 1 5	↓		↓			
ES	1 5 1 6	↓		↓			
ES	1 5 1 7	↓		↓			
ES	1 5 1 8	↓		↓			
ES	1 5 1 9	↓		↓			
ES	1 5 2 0	↓		↓			
ES	1 5 2 1	↓		↓			
ES	1 5 2 2	↓		↓			
ES	1 5 2 3	↓		↓			
ES	1 5 2 4	↓		↓			
ES	1 5 2 5	↓		↓			
ES	1 5 2 6	↓		↓			
ES	1 5 2 7	↓		↓			
ES	1 5 2 8	↓		↓			
ES	1 5 2 9	↓		↓			
ES	1 5 3 0	↓		↓			
ES	1 5 3 1	↓		↓			



# BULK SAMPLE DATA FORM

151805613

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 1 1 8		PAGE 1	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF	
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5858		7	
SITE ADDRESS: University of California Riverside - Utah St. 3315 / 3317		BULK SAMPLE LOCATION		QUANTITY	
		AREA/LOCATION		NO. UNIT	
		LEVEL		NF	
		UNIT		6440 Ft <sup>2</sup>	
		MATERIAL DESCRIPTION		MATERIAL CONDITION	
		TEXTURE/PATTERN		DAMAGE TYPE	
		COLOR			
		UNIT			
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		AREA/LOCATION			
		UNIT			

# BULK SAMPLE DATA FORM

151805613

PROJECT NO.:		7 0 7 6				1 0 1 7 0				DATE: 073118				PAGE 2 OF 4					
CLIENT:		Haley & Aldrich										INSPECTOR(S):		J. Magallon					
PROJECT ID:		Canyon Crest Family Housing Survey										CSST/CAC NO.:		5-5388					
SITE ADDRESS:		University of California Riverside · Univ St · 3315 / 3317										AREA/LOCATION		QUANTITY		MATERIAL CONDITION		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION		UNIT	LEVEL	BULK SAMPLE LOCATION		UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE						
12VFT	S1	1362	Brown	Bottom Layer: 12" Brown Floor Tile		3315	1st	Bedrm 1			NF	G	NA						
12VFT	S1	1363	↓	w/ Black Mastic; Vapor		3317	↓	Living Rm			↓	↓	↓						
12VFT	S1	1364	↓	↓		↓	↓	Hall			↓	↓	↓						
WS/S	S0	1365	White	Drywall w/ J.C.		3315	↓	Kitchen			↓	↓	↓						
WS/S	S0	1366	↓	↓		3317	↓	↓			↓	↓	↓						
VSF	S6	1367	White	Top Layer: Small Rectangular Sheet Floor w/ Mastic		3315	↓	Kitchen			F	G	N						
VSF	S6	1368	↓	↓		↓	↓	Bathroom			↓	↓	↓						
VSF	S6	1369	↓	↓		↓	↓	↓			↓	↓	↓						
VSF	S6	1370	White	6" Square Sheet Floor w/ Mastic		3317	↓	Bathroom			↓	↓	↓						
VSF	S6	1371	↓	↓		↓	↓	↓			↓	↓	↓						
VSF	S6	1372	↓	↓		↓	↓	↓			↓	↓	↓						
VSF	S6	1373	Yellow	Middle Layer: Marble Sheet Floor w/ Mastic		3315	↓	Kitchen			↓	↓	↓						
VSF	S5	1374	↓	↓		3317	↓	↓			↓	↓	↓						
VSF	S5	1375	↓	↓		↓	↓	↓			↓	↓	↓						



# BULK SAMPLE DATA FORM

151805613

PROJECT NO.:		7 0 7 6		DATE:		0 7 3 1 1 8		PAGE		3	
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		OF		4	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		15-5858					
SITE ADDRESS:		University of California Riverside		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY		FRIABILITY	
		Van St. 6315/3317		UNIT		LEVEL		NO.			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN							
VSF	56	1376	yellow	Middle Bottom Layer: Fluxed Sheet Floor	3315	1st	Kitchen		F	G	NA
VSF	58	1377		Bottom layer: w/ Mastic	3317						
VSF	58	1378		Bottom layer:	↓						
12VFT	54	1379	Grey	Bottom layer: 12" Red/Blue Specs	3315		Kitchen				
12VFT	54	1380		Floor Tile w/ Black Mastic & Vapor	↓						
12VFT	54	1381			↓						
ES	50	1382	white	Exterior Stucco	Exterior		N.E.		NF	G	NA
ES	50	1383			↓		E. Center				
ES	50	1384			↓		S.E.				
ES	50	1385			↓		S.W.				
ES	50	1386			↓		N.W.				
VSF	57	1387	white	Top layer: Small Triangles Sheet Floor w/ Mastic	3317		Kitchen		F	G	NA
VSF	57	1388			↓						
VSF	57	1389			↓						



# BULK SAMPLE DATA FORM

151805613

PROJECT NO.: 7 0 7 6 1 0 1 7 0

DATE: 073118

PAGE 4 OF 4

CLIENT: Haley & Aldrich  
 PROJECT ID: Canyon Crest Family Housing Survey  
 SITE ADDRESS: University of California Riverside: Van St. 335-3217  
 INSPECTOR(S): J. Magallon  
 CSST/CAC NO.: S-535B



HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
RS 50	1390	Red	Red Shingles	Roof	1st	N.E.			NF	G	ND
RS 50	1391					E. Center					
RS 50	1392					S.E.					

(A)

151805612

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
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jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397 SAMPLE NUMBERS: 1309-1705

TYPE OF SAMPLES (CIRCLE ONE): AIR TAPE WATER WIPE  
ZEFON ANDERSEN  
BULK SOIL AIR-O-CELL PLATE OTHER

TYPE OF ANALYSIS:  
**Asbestos**  
Phase Contrast Microscopy  
✓ Polarized Light Microscopy *AZ 8/14/18*  
1st Positive Stop  
Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count \_\_\_\_\_  
Transmission Electron Microscopy  
Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

**Lead**  
Flame Atomic Absorption  
TTLc \_\_\_\_\_ STLC \_\_\_\_\_ TCLP \_\_\_\_\_

**Culturable Air**  
Andersen Fungi (genue ID, Aspergillus)  
Andersen Bacteria  
**Non-Culturable Air**  
Non-Viable Spore Trap Slide  
**Surface Samples**  
Surface Sample (direct examination)

**Culturable Samples**  
Quantitative Fungi-dust, bulk swab-1 medium  
Quantitative Fungi-dust, bulk swab-3 media  
Quantitative Bacteria-dust, bulk swab-1 medium  
Quantitative Bacteria-dust, bulk, swab-3 media  
E.coli and Coliforms (MUG)  
**Other** \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE): Rush 12 HOURS 24 HOURS 48 HOURS  
3 DAYS 5 DAYS 5-10 DAYS OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY): PHONE FAX WRITTEN REPORT PDF

NOTES/COMMENTS: Special Project "JS" - Perform layered analysis and provide layered results.  
Please copy Jessica Aburto-jaburto@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:  
Relinquished By: *J. M. [Signature]* Received By: *[Signature]*  
Date: 08-13-18 Time: 2:15 Date: 8-13-18 Time: 12:15  
Relinquished By: \_\_\_\_\_ Received By: *Ame (pu) 8/13/18*  
Date: \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_ Time: 2:55pm

LABORATORY INFORMATION: NAME: L.A. Testing LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:  RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS  YEAR (S) \_\_\_\_\_

# BULK SAMPLE DATA FORM

151805612

PROJECT NO.:		7 0 7 6		DATE:		0 7 3 1 1 8		PAGE		1	
CLIENT:		Hailey & Aldrich		INSPECTOR(S):		J. Magallon		OF		3	
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		15-5388		FRIABILITY		NF	
SITE ADDRESS:		University of California Riverside		AREA/LOCATION		LIVING RM.		MATERIAL CONDITION		G	
SITE ADDRESS:		Hwy 91 - 3342 / 3344		LEVEL		1st		DAMAGE TYPE		NA	
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	BULK SAMPLE LOCATION	QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE	
			COLOR	TEXTURE/PATTERN							
WDF	SG	<del>1393</del>	White	Plaster w/ Button	3342	Living Rm.	6440 Ft <sup>2</sup>	NF	G	NA	
WDF	SG	<del>1394</del>				Kitchen					
WDF	SG	<del>1395</del>				Bedrm 1					
WDF	SG	<del>1396</del>				Bedrm 2					
WDF	SG	<del>1397</del>			3344	Living Rm.					
WDF	SG	<del>1398</del>				Kitchen					
WDF	SG	<del>1399</del>				Bedrm 2					
WS/T	SG	<del>1400</del>	White	Drywall w/ J.C.	3342	Kitchen					
WS/T	SG	<del>1401</del>			3344						
12VFT	SG	<del>1402</del>	Beige	Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3342	Living Rm.					
12VFT	SG	<del>1403</del>				Bedrm 2					
12VFT	SG	<del>1404</del>				Bedrm 1					
12VFT	SG	<del>1405</del>			3344	Living Rm.					
12VFT	SG	<del>1406</del>				Bedrm 2					



# BULK SAMPLE DATA FORM

151805612

PROJECT NO.: 7 0 7 6		DATE: 07/31/18		PAGE 2					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Maggallon		OF 3					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5388							
SITE ADDRESS: University of California Riverside Utah St. 3342 / 3344		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
12VFT 51	<del>407</del> 407	Brown	Bottom layer: 12" Brown Floor Tile w/ Black Mastic & Vapor	3342	1st	Living Rm		G	NA
12VFT 51	<del>408</del> 408			↓		Bedrm 2			
12VFT 51	<del>409</del> 409			↓		Bedrm 1			
12VFT 51	<del>410</del> 410			↓		Living Rm			
12VFT 51	<del>411</del> 411			↓		Bedrm 2			
VSF 56	<del>412</del> 412	White	6" Square Sheet Floor w/ Mastic	3342		Bedrm		G	NA
VSF 56	<del>413</del> 413			↓					
VSF 56	<del>414</del> 414			↓					
VSF 59	<del>415</del> 415	Yellow	Middle layer: Yellow Sheet Floor w/ Beige Mastic	3342		Kitchen			
VSF 59	<del>416</del> 416			↓					
VSF 59	<del>417</del> 417			↓					
VSF 58	<del>418</del> 418	Yellow	Bottom Middle layer: Flower Sheet Floor	3342		Kitchen			
VSF 58	<del>419</del> 419			↓					
VSF 58	<del>420</del> 420			↓					



# BULK SAMPLE DATA FORM

151805612

PROJECT NO.: 7 0 7 6		DATE: 0 7 3 1 1 8		PAGE 3					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 3					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: K-5358							
SITE ADDRESS: University of California Riverside Utah St. 3342 / 3344		BULK SAMPLE LOCATION		FRIABILITY					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
12VFT	<del>3342</del>	Tan	Bottom layer: 12" Tan w/ Red/Blue w/ Black Mastic; Vapor	1st	Kitchen			F	NA
54	1421								
12VFT	<del>3342</del>								
54	1422								
12VFT	<del>3342</del>								
54	1423								
ES	<del>3342</del>	White	Exterior Stucco		S.W.			NF	NA
50	1424								
ES	<del>3342</del>				S.Center				
50	1425								
ES	<del>3342</del>				S.E.				
50	1426								
ES	<del>3342</del>				N.E.				
50	1427								
ES	<del>3342</del>				N.W.				
50	1428								

CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
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Fax: (818) 246-3145

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Fax: (714) 547-4647

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28212 Kelly Johnson Parkway  
Valencia, CA 91355  
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Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397 SAMPLE NUMBERS: 1309-1705

TYPE OF SAMPLES (CIRCLE ONE): AIR TAPE WATER WIPE  
BULK SOIL ZEFON ANDERSEN  
AIR-O-CELL PLATE OTHER

TYPE OF ANALYSIS:  
Asbestos: Phase Contrast Microscopy, Polarized Light Microscopy, 1st Positive Stop, Point Count, 400 Point Count, 1000 Point Count, Transmission Electron Microscopy, Qualitative, Quantitative  
Lead: Flame Atomic Absorption, TTLC, STLC, TCLP

Culturable Air: Andersen Fungi (genus ID, Aspergillus), Andersen Bacteria  
Non-Culturable Air: Non-Viable Spore Trap Slide  
Surface Samples: Surface Sample (direct examination)  
Culturable Samples: Quantitative Fungi-dust, bulk swab-1 medium, Quantitative Fungi-dust, bulk swab-3 media, Quantitative Bacteria-dust, bulk swab-1 medium, Quantitative Bactena-dust, bulk, swab-3 media, E.coli and Coliforms (MUG)  
Other

TURNAROUND TIME (CIRCLE ONE): Rush 12 HOURS 24 HOURS 48 HOURS  
3 DAYS 5 DAYS 5-10 DAYS OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY): PHONE FAX WRITTEN REPORT PDF

NOTES/COMMENTS: Special Project "JS" - Perform layered analysis and provide layered results.

TRANSMITTAL RECORD: Relinquished By: [Signature] Date: 08-13-18 Time: 1:15  
Received By: [Signature] Date: 8-13-18 Time: 12:15  
Relinquished By: [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received By: Ame (PU) 8/13/18 Date: \_\_\_\_\_ Time: 2:55pm

LABORATORY INFORMATION: NAME: L.A. Testing LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:  RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS  YEAR (S) \_\_\_\_\_

#091817654  
 BULK SAMPL ATA FORM #0918176238816

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 1 1 8		PAGE 1 OF		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Haley & Aldrich		INSPECTOR(S): J. Magallon		CSSTICAC NO: 15-5858					
PROJECT ID:		Canyon Crest Family Housing Survey		BULK SAMPLE LOCATION		QUANTITY		MATERIAL CONDITION		DAMAGE TYPE	
SITE ADDRESS:		University of California Riverside		AREA/LOCATION		NO.		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	LEVEL	UNIT	NO.	UNIT			
WDF	50	429	Plaster w/ Button	727	1st	727	6440	F4 <sup>2</sup>	NF	G	NA
WDF	50	430		↓							
WDF	50	431		↓							
WDF	50	432		725							
WDF	50	433		↓							
WDF	50	434		↓							
USJ	50	435	Drywall w/ J.O.	727		727					
USJ	50	436		↓		725					
12VFT	50	437	Top Layer: 12" Beige w/ Spacs w/ Beige Mastic	727		727					
12VFT	50	438		↓							
12VFT	50	439		725							
12VFT	50	440		↓							
12VFT	50	441		↓							
12VFT	50	442	Bottom Layer: 12" Brown w/ Black Mastic + Vapor	727		727					

NT - 8/16/16 - 9:00 am EPTI



BULK SAMPLING DATA FORM

#0019091817634

PROJECT NO.: 7 0 7 6 1 0 1 7 0

DATE: 0 8 0 1 1 1 8

PAGE 2 OF

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

INSPECTOR(S): J Magallon

SITE ADDRESS: University of California Riverside: Grape St. 725-727

CSST/CAC NO: 15-5858



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION		
12VFT 51	[REDACTED]	Brown	Bottom layer: 12" Brown Floor Tile w/ Black Mastic; Vapor	727	1st	Bedrm 1	GF	NA
12VFT 51	[REDACTED]	[REDACTED]	[REDACTED]	725	[REDACTED]	Living Rm.	[REDACTED]	[REDACTED]
12VFT 51	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Hall	[REDACTED]	[REDACTED]
12VFT 51	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Bedrm 1	[REDACTED]	[REDACTED]
VSF 60	[REDACTED]	White	Small Rectangles Sheet Flooring w/ Mastic	725	[REDACTED]	BATHRM.	GF	NA
VSF 60	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 60	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 56	[REDACTED]	White	6" Square Sheet Floor w/ Mastic	727	[REDACTED]	BATHRM	[REDACTED]	[REDACTED]
VSF 56	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 56	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 63	[REDACTED]	Beige	Green Flurry Sheet Fl. w/ Mastic	725	[REDACTED]	Middle Layer: Kitchen	[REDACTED]	[REDACTED]
VSF 63	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 63	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
VSF 54	[REDACTED]	Tan	Red/Blue Specs Sheet Floor w/ Black Mastic; Vapor	725	[REDACTED]	Bottom Layer: Kitchen	[REDACTED]	[REDACTED]

NT- 811618 - 7:00 am EFA ①

# BULK SAMPLING DATA FORM #091817654

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 08/01/10		PAGE 3 OF 4		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon					
PROJECT ID:		University of California Riverside		725/727		CSSTICAC NO: 15535B					
SITE ADDRESS:											
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
VSF	1457	Tan	Red/Blue Spec Sheet Fl. w/ Black Mastic & Vapor	725	1st	Bottom Layer: Kitchen			F	G	N/A
VSF	1458										
VSF	1459	Beige	Brown Design Sheet Fl. w/ Mastic	727		Middle Layer: Kitchen					
VSF	1460										
VSF	1461										
VSF	1462	Green	Green Sheet Flooring w/ Black Mastic & Vapor	727		Bottom Layer: Kitchen					
VSF	1463										
VSF	1464										
VSM	1465	Grey	Sink Mastic	727		Kitchen			NE	G	N/A
VSM	1466										
VSM	1467										
VSM	1468	White	Exterior Stucco	Exterior		S.E.					
VSM	1469										
VSM	1470					S.W.					

# BULK SAMPLING DATA FORM #091817654

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 1 1 8		PAGE 4				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 4				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358						
SITE ADDRESS: University of California Riverside, George St. 725/727		BULK SAMPLE LOCATION		MATERIAL CONDITION				
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY	FRIABILITY	DAMAGE TYPE
HA NO.		COLOR	TEXTURE/PATTERN			NO.		
RS 50	[redacted]	White	Exterior	Exterior	1st		NF	G WA
RS 50	[redacted]	Stucco	↓	↓	↓			
RS 50	[redacted]	Red	Roof Shingles	Roof	Roof			
RS 50	[redacted]	↓	↓	↓	↓			
RS 50	[redacted]	White	Plaster w/ Button	725	1st			
WDF 50	[redacted]							

27

11804506

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

<input type="checkbox"/> <b>GLENDALE</b>	<input checked="" type="checkbox"/> <b>ORANGE COUNTY</b>	<input type="checkbox"/> <b>VALENCIA</b>	<input type="checkbox"/> <b>TORRANCE OFFICE</b>
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone:(562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone:(661) 257-9009 Fax:(661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone:(310) 212-1714 Fax:(310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397 SAMPLE NUMBERS: 1309 - 1705

TYPE OF SAMPLES (CIRCLE ONE):

AIR	TAPE	WATER	WIPE
<input checked="" type="radio"/> BULK	SOIL	ZEFON	ANDERSEN
		AIR-O-CELL	PLATE
			OTHER

#### TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop  
 Point Count     400 Point Count     1000 Point Count  
 Transmission Electron Microscopy  
 Qualitative     Quantitative

##### Lead

Flame Atomic Absorption  
 TTLC     STLC     TCLP

##### Culturable Air

Andersen Fungi (genue ID, Aspergillus)  
 Andersen Bacteria

##### Non-Culturable Air

Non-Viable Spore Trap Slide

##### Surface Samples

Surface Sample (direct examination)

##### Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium  
 Quantitative Fungi-dust, bulk swab-3 media  
 Quantitative Bacteria-dust, bulk swab-1 medium  
 Quantitative Bacteria-dust, bulk, swab-3 media  
 E.coli and Coliforms (MUG)

##### Other

RECEIVED  
AUG 17 2018  
BY: NEW Fed-X

TURNAROUND TIME (CIRCLE ONE):

Rush	12 HOURS	24 HOURS	48 HOURS
3 DAYS	<input checked="" type="radio"/> 5 DAYS	5-10 DAYS	OTHER

9:59am

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

<input type="checkbox"/> PHONE	<input type="checkbox"/> FAX	<input type="checkbox"/> WRITTEN REPORT	<input checked="" type="checkbox"/> PDF
--------------------------------	------------------------------	---	---

#### NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

#### TRANSMITTAL RECORD:

Relinquished By: [Signature]  
Date: 08-13-18 Time: 12:15  
Relinquished By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
Date: 8-13-18 Time: 12:15  
Received By: Anne (pu) 8/13/18  
Date: \_\_\_\_\_ Time: 2:55pm

#### LABORATORY INFORMATION:

NAME: L.A. Testing

LOCATION: \_\_\_\_\_

#### DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS     OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS     YEAR (S) \_\_\_\_\_

BULK SAMPLE DATA FORM

141804506

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 2 1 8		PAGE 1 OF 3		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CSST/CAC NO: 15-5858		MATERIAL CONDITION	
PROJECT ID: Canyon Crest Family Housing Survey		AREA/LOCATION		QUANTITY		DAMAGE TYPE	
SITE ADDRESS: University of California Riverside Grape St. 813/815		LEVEL		NO.		FRIABILITY	
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	AREA/LOCATION	NO.	FRIABILITY	DAMAGE TYPE
WDF 50	1477	white Plaster w/ Button	815	Living Rm	6440	NF	NA
WDF 50	1478		↓	Kitchen			
WDF 50	1479		↓	Bedrm 1			
WDF 50	1480		↓	Bedrm 2			
WDF 50	1481		813	Living Rm			
WDF 50	1482		↓	Bathroom			
WDF 50	1483		↓	Bedrm 2			
WS/J 50	1484	Drywall w/ J.C.	815	Kitchen			
WS/J 50	1485		813	↓			
12VFT 50	1486	Beige Top layer: 12" Beige w/ Spres w/ Beige Mastic	815	Living Rm			
12VFT 50	1487		↓	Hall			
12VFT 50	1488		↓	Bedrm 1			
12VFT 50	1489		813	Living Rm			
12VFT 50	1490		↓	Bedrm 2			

BULK SAMPLE DATA FORM

141804506

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 2 1 8		PAGE 2 OF 3							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CSST/CAC NO: 15-5358							
PROJECT ID: Canyon Crest Family Housing Survey		BULK SAMPLE LOCATION		MATERIAL CONDITION							
SITE ADDRESS: University of California Riverside		UNIT	LEVEL	AREA/LOCATION	FRIABILITY	DAMAGE TYPE					
HA TYPE	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE	
12VFT S1	1491	Brown	Bottom layer: 12" Brown floor tile w/ BackMastic + Vapor	815	1st	Living Rm			NF	G	NA
12VFT S1	1492					Hall					
12VFT S1	1493					Bedrm 1					
12VFT S1	1494					Living Rm					
12VFT S1	1495					Bedrm 2					
VSF S6	1496	white	6" Square Sheet Floor w/ Mastic + Vapor	813		Kitchen			F		
VSF S6	1497										
VSF S6	1498					Bathrm					
VSF S9	1499	Yellow	Bottom layer: Yellow Floor Sheet w/ Mastic	813		Bathrm					
VSF S9	1500										
VSF S9	1501										
VSF S7	1502	white	Small Triangle Sheet Flooring	815		Kitchen					
VSF S7	1503										
VSF S7	1504										



BULK SAMPLE DATA FORM

141804506

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 08 02 18		PAGE 3 OF 3			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		CSST/CAC NO: 15358			
PROJECT ID:		Canyon Crest Family Housing Survey		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY			
SITE ADDRESS:		University of California Riverside		UNIT		LEVEL		NO.			
		Carpenter St. 813/015									
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN								
VSF 60	1505	white	Rectangular Sheet Floor w/ Mastic	815	1st	Bathroom			F	G	NA
VSF 60	1506										
VSF 60	1507										
ES 50	1508	white	Exterior Stucco	Exterior		S.W.			NF		
ES 50	1509					W. Center					
ES 50	1510					N.W.					
ES 50	1511					N.E.					
ES 50	1512					S.E.					
PS 50	1513	Red	Roof Shingles	Roof		S.W.					
PS 50	1514										
PS 50	1515					S.E.					

2





# BULK SAMPLE DATA FORM # 9 18 17 9 67

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 0 2 1 1 8		PAGE 1 OF 3						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION						
SITE ADDRESS: University of California Riverside - Maple St. 840/842		BULK SAMPLE LOCATION		DAMAGE TYPE						
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY	NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
HA NO.		COLOR								
WJPF	1516	white	842	1st	Living Rm	6440	FT	NF	G	NA
SO										
WJPF	1517				Hall					
SO					Bedrm 2					
WJPF	1518				Kitchen					
SO					Living Rm					
WJPF	1519				Bedrm 1					
SO					Bedrm 2					
WJPF	1520									
SO										
WJPF	1521									
SO										
WJPF	1522									
SO										
WJPF	1523	white	842		Kitchen					
SO										
WJPF	1524									
SO										
WJPF	1525	Beige	842		Living Rm					
SO					Bedrm 1					
WJPF	1526				Bedrm 2					
SO					Living Rm					
WJPF	1527				Bedrm 1					
SO					Bedrm 2					
WJPF	1528				Living Rm					
SO					Bedrm 1					
WJPF	1529									
SO										

TR 08/15/18 9:15AM EFX (3)

# BULK SAMPLE DATA FORM #091817967

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 2 1 8		PAGE 2 OF 3		
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.		
PROJECT ID:		University of California Riverside		Grape St - 840/842		CSST/CAC NO: 15-5358				
SITE ADDRESS:										
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
12VFT	51	1530	Brown	Bottom Layer: 12" Brown Floor Tile w/ Black Mastic; Vapor	842	1st	Living Rm	NF	G	N/A
12VFT	51	1531					Bedrm 1			
12VFT	51	1532					Bedrm 2			
12VFT	51	1533			840		Living Rm			
12VFT	51	1534					Bedrm 1			
VSF	G	1535	White	Top Layer: Small Triangles Sheet Floor w/ Mastic	840		Kitchen	F	G	NA
VSF	57	1536								
VSF	57	1537								
VSF	57	1538	Yellow	Brown Sheet Floor w/ Mastic	842		Kitchen			
VSF	58	1539		Bottom Layer	840					
VSF	58	1540					Bathrm			
VSF	58	1541					Bathrm			
VSF	56	1542	White	6" Square Sheet Floor w/ Mastic	842					
VSF	56	1543								
VSF	56	1544								

BULK SAMPLING DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 2 1 8		PAGE 3 OF 3			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		15-5358		MATERIAL CONDITION			
SITE ADDRESS:		University of California Riverside - Grand St. - 840 / 842		BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY NO.	UNIT	DAMAGE TYPE		
			COLOR	TEXTURE/PATTERN							
VBF	60	1544	White	Top Layer: Small Rectangular Sheet Floor w/ Mastic	840	1st			F	G	NA
VBF	60	1545	✓	✓	✓	✓			✓	✓	✓
VBF	60	1546	✓	✓	✓	✓			✓	✓	✓
BS	50	1547	White	Exterior Stucco	Exterior		N.W.		NF	G	NA
BS	50	1548	✓	✓	✓	✓	<del>W</del> S.W.		✓	✓	✓
BS	50	1549	✓	✓	✓	✓	S. Center		✓	✓	✓
BS	50	1550	✓	✓	✓	✓	S.E.		✓	✓	✓
BS	50	1551	✓	✓	✓	✓	N.E.		✓	✓	✓
BS	50	1552	Red	Roof Shingles	Roof		N.W.		✓	✓	✓
BS	50	1553	✓	✓	✓	✓	N.Center		✓	✓	✓
BS	50	1554	✓	✓	✓	✓	N.E.		✓	✓	✓
BS	50	1555	✓	✓	✓	✓			✓	✓	✓

2

141804507

BULK SAMPLING DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 7 1 8		PAGE 1 OF 3		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon		FRIABILITY			
PROJECT ID:		University of California Riverside		Blaine Alley 876/878		CSST/CAC NO: 15-5358				MATERIAL CONDITION	
SITE ADDRESS:										DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
WPF	50	1555	White	Plaster w/ Button	876	1st	Living Rm	6440	sq ft	NA	NA
WPF	50	1556					Kitchen				
WPF	50	1557					Bedrm 1				
WPF	50	1558					Bedrm 2				
WPF	50	1559			878		Living Rm.				
WPF	50	1560					Bedrm 1				
WPF	50	1561					Bedrm 2				
WS/J	50	1562	White	Drywall w/ Joint C.	876		Kitchen			NA	NA
WS/J	50	1563			878						
12VFT	50	1564	Beige	Top layer: 1/2" Beige w/ Specs Tile w/ Black Mastic	876		Living Rm.			NA	NA
12VFT	50	1565					Hall				
12VFT	50	1566					Bedrm 2				
12VFT	50	1567		Top layer: 1/2" Beige w/ Specs Tile w/ Beige Mastic	878		Living Rm			D	w
12VFT	50	1568					Bedrm 2				

141804507

BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 0 7 1 8		PAGE 2 OF 3						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION						
SITE ADDRESS: University of California Riverside • Blaine Alley • 876-878		BULK SAMPLE LOCATION		DAMAGE TYPE						
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
12VFT	1569	Brown	Bottom Layer: 12" Brown Tile w/ Black Mastic; Vapor	876	1st	Living Rm			NA	NA
12VFT	1570					Hall				
12VFT	1571					Bedrm 2				
12VFT	1572					Living Rm.				
12VFT	1573					Bedrm 2				
VSF	1574	White	Top Layer: 6" Square Sheet Pl. Single Layer: w/ Mastic	876		Kitchen				
VSF	1575					Bathrm				
VSF	1576		Single Layer	878		Kitchen				
VSF	1577	White	Small Triangles Sheet Flooring w/ Mastic	878		Bathrm				
VSF	1578									
VSF	1579									
VSF	1580	White	Middle Layer: Brown Floor Sheet	876		Kitchen				
VSF	1581		Flooring w/ Mastic							
VSF	1582					Bathrm				

PROJECT NO.:

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside • Blaine Alley • 876-878

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

PAGE

2

OF

3



141804507

BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 8 0 7 1 0		PAGE		3		OF		3	
CLIENT:		Hailey & Aldrich		PROJECT ID:		Canyon Crest Family Housing Survey		INSPECTOR(S):		J. Magallon		CSST/CAC NO:		15-5358		CITADEL ENVIRONMENTAL SERVICES, INC.	
SITE ADDRESS:		University of California Riverside - Blaine Alley - 876/878		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY		FRIABILITY		MATERIAL CONDITION		DAMAGE TYPE	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE					
	34	1583	Tan	Both top layer Peel/Blue Spics 17" Floor Tile w/ Black Mastic Vapor	876	1st	Kitchen			F	G						
	54	1584															
	54	1585															
	50	1586	white	Exterior	Exterior		N.E.			NF							
	50	1587		Stucco			S.E.										
	50	1588					S.W.										
	50	1589					N.W.										
	50	1590					N.Center										
	50	1591	Red	Roof Shingles	Roof		N.E.										
	50	1592															
	50	1593					N.W										

2

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397

SAMPLE NUMBERS: 1309-1705

TYPE OF SAMPLES (CIRCLE ONE):

- AIR
- BULK
- TAPE
- SOIL
- WATER
- ZEFON
- AIR-O-CELL
- WIPE
- ANDERSEN
- PLATE
- OTHER

TYPE OF ANALYSIS:

##### Asbestos

- Phase Contrast Microscopy
- Polarized Light Microscopy
- 1st Positive Stop
- Point Count
- 400 Point Count
- 1000 Point Count
- Transmission Electron Microscopy
- Qualitative
- Quantitative

##### Lead

- Flame Atomic Absorption
- TTLC
- STLC
- TCLP

##### Culturable Air

- Andersen Fungi (genus ID, Aspergillus)
- Andersen Bacteria

##### Non-Culturable Air

- Non-Viable Spore Trap Slide

##### Surface Samples

- Surface Sample (direct examination)

##### Culturable Samples

- Quantitative Fungi-dust, bulk swab-1 medium
- Quantitative Fungi-dust, bulk swab-3 media
- Quantitative Bactera-dust, bulk swab-1 medium
- Quantitative Bactera-dust, bulk, swab-3 media
- E.coli and Coliforms (MUG)

##### Other

TURNAROUND TIME (CIRCLE ONE):

- Rush
- 12 HOURS
- 24 HOURS
- 48 HOURS
- 3 DAYS
- 5 DAYS
- 5-10 DAYS
- OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

- PHONE
- FAX
- WRITTEN REPORT
- PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results:

TRANSMITTAL RECORD:

Relinquished By: *J. Myall*  
 Date: 08-13-19 Time: 12:15  
 Relinquished By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: *[Signature]*  
 Date: 8-13-19 Time: 12:15  
 Received By: *Anne (pu) 8/13/19*  
 Date: \_\_\_\_\_ Time: 2:55 PM

LABORATORY INFORMATION:

NAME: L.A. Testing

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

- RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS
- OTHER \_\_\_\_\_
- RETAIN FOR \_\_\_\_\_ DAYS
- YEAR (S) \_\_\_\_\_

391808805

BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 0 8 1 8		PAGE		1		OF		3	
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S):		J. Magallon		FRIABILITY		MATERIAL CONDITION		DAMAGE TYPE			
PROJECT ID:		University of California Riverside		Blaine Alley - 758/760		CSST/CAC NO.:		15-5358		QUANTITY		NO.		UNIT			
SITE ADDRESS:		Blaine Alley - 758/760		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		AREA/LOCATION		NO.		UNIT		DAMAGE TYPE			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE					
WPF	50	1594	white	Plaster w/ Butten	758	1st	Living Rm	6440	ft <sup>2</sup>	NF	G	NA					
WPF	50	1595					Bathroom										
WPF	50	1596					Bedrm 2										
WPF	50	1597					Ceiling: Bedrm 1										
WPF	50	1598			760		living Rm										
WPF	50	1599					Kitchen										
WPF	50	1600					Bedrm 1										
WSI	50	1601	white	Drywall w/ Joints	758		Kitchen										
WSI	50	1602			760												
12VPT	50	1603	Beige	Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	758		Living Rm.										
12VPT	50	1604					Bedrm 1										
12VPT	50	1605					Bedrm 2										
12VPT	50	1606			760		Living Rm										
12VPT	50	1607					Bedrm 1										



391808805

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 - 1 0 1 7 0		DATE: 0 8 0 8 1 1 8		PAGE 2 OF 3		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		MATERIAL CONDITION		DAMAGE TYPE	
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		FRIABILITY			
SITE ADDRESS: University of California Riverside - Blaine Alley - 658/660		AREA/LOCATION		QUANTITY			
HA TYPE	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	BULK SAMPLE LOCATION	
HA NO.			TEXTURE/PATTERN				
12VFT 51	1608	Brown	Bottom layer: 12" Brown Tile w/ Black Mastic & Vapor	758	1st	Living Rm.	NF
12VFT 51	1609					Bedrm 1	
12VFT 51	1610					Bedrm 2	
12VFT 51	1611			760		Living Rm.	
12VFT 51	1612					Bedrm 1	
12VFT 57	1613	White	Top layer: 12" White w/ Specs Tile w/ Beige Mastic	758		Living Rm.	
12VFT 57	1614						
12VFT 57	1615					Hall	
VSF 57	1616	White	Top layer: Small Triaxial Sheet Flooring w/ Mastic	750		Kitchen	F
VSF 57	1617						
VSF 57	1618						
VSF 57	1619						
VSF 57	1620		Bottom layer: Plain White Sheet Flooring w/ Mastic & Vapor				
VSF 57	1621						
VSF 57	1622						

391808805

BULK SAMPLE DATA FORM

PROJECT NO.: 7076		DATE: 080818		PAGE 3				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 3				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		3				
SITE ADDRESS: University of California Riverside - Blaine Alley - 758/760		BULK SAMPLE LOCATION		FRIABILITY				
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN					
VSF 36	1622	White	Top layer: 6" Square Sheet Floor w/ Mastic	1st	Kitchen		F	NA
VSF 56	1623				Bathym			
VSF 56	1624							
BS 51	1625	Orange	Exterior Stucco	Exterior	N.E.		NF	
BS 51	1626				S.E.			
BS 51	1627				S.Center			
BS 51	1628				S.W			
BS 51	1629				N.W			
RS 50	1630	Red	Roof Shingles	Roof	N.E.			
RS 80	1631							
RS 50	1632				N.Center			

2



BULK SAMPLE DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 9 1 8		PAGE 1 OF 3	
CLIENT:		Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.	
PROJECT ID:		University of California Riverside - Alamogordo St. 3321/3323		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		MATERIAL CONDITION	
SITE ADDRESS:		Alamogordo St. 3321/3323		TEXTURE/PATTERN		AREA/LOCATION		FRIABILITY	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	UNIT	LEVEL	QUANTITY NO.	UNIT	DAMAGE TYPE	
WDF	1633		white	3321	1st	6440		NA	
so									
WDF	1634								
so									
WDF	1635								
so									
WDF	1636								
so									
WDF	1637			3323					
so									
WDF	1638								
so									
WDF	1639								
so									
WST	1640			3321					
51									
WST	1641			3323					
51									
VSF	1642		white	3321					
56									
VSF	1643								
56									
VSP	1644								
56									
VSF	1645		white	3323					
57			yellow						
VSP	1646			3321					
57									

BULK SAMPLE DATA FORM

# 091817059

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 0 9 1 1 8		PAGE 2 OF 3			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.			
PROJECT ID:		Canyon Crest Family Housing Survey		CSSTICAC NO:		15-3358					
SITE ADDRESS:		University of California Riverside - Urban 3321/3323		BULK SAMPLE LOCATION		AREA/LOCATION		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
VSF	57	1647	White	Middle Layer: Small Dimple Floor Sheet Flooring	3321	1st	BATHRM			F	NA
VSF		1648	Yellow	Bottom Middle Layer: Floor Sheet Floor w/ Mastic	3321		BATHRM				
VSF		1649									
VSF		1650									
VSF		1651	Green	Bottom Layer: Green Sheet Flooring w/ Black Mastic & Vapor	3321		BATHRM				
VSF		1652									
VSF		1653									
BS		1654	White	Exterior Stucco	Exterior		S.E.			NF	NA
BS		1655									
BS		1656					S.W.				
BS		1657					w. Center				
BS		1658					N.W.				
BS		1659					N.E.				
BS		1660	Grey	Window Putty	Exterior		N.E.			F	
MISC		50									
MISC		50									

TR 08/15/18 9:15AM EFX(3)

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - (Hain St) - 3321/3323

DATE: 08 09 18

INSPECTOR(S): J. Magallon

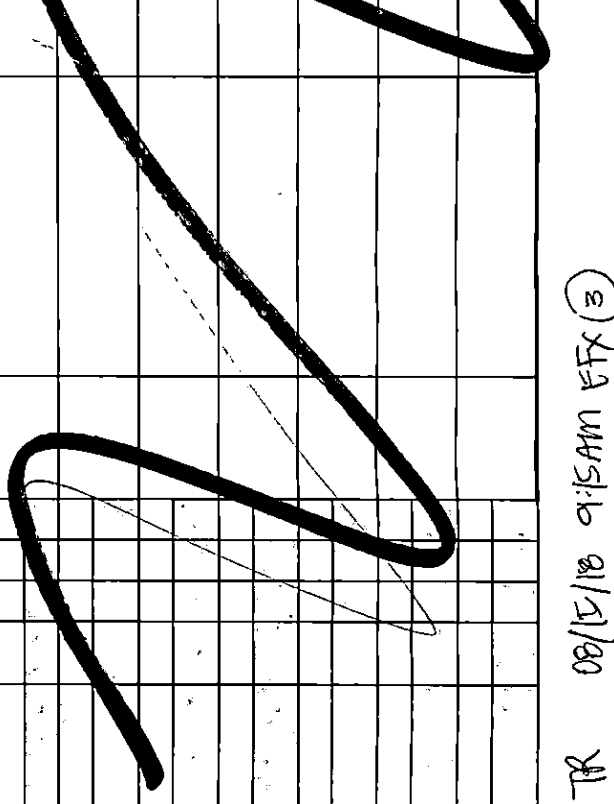
CSSTICAC NO: 15-5358U

PAGE 3

OF 3



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION			
MISC	1 6 6 1	Grey	Window Frame Putty	Exterior	1st	S.E.		F	NA
RS	1 6 6 2	Red	Roof Shingles	Roof		N.E.		NF	NA
RS	1 6 6 3								
RS	1 6 6 4					S.E.			
FBM	1 6 6 5	Beige	Baseboard Mastic	3323		Kitchen		NF	NA
FBM	1 6 6 6								
FBM	1 6 6 7								



TR 08/15/18 9:15AM EFX (3)

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 1725 Victory Blvd.  
 Glendale, CA 91201  
 Phone: (818) 246-2707  
 Fax: (818) 246-3145

Contact Jack Samuels  
 jsamuels@citadelenvironmental.com  
 151 Kalmus Drive, Suite F-4  
 Costa Mesa, CA 92626  
 Phone: (562) 599-9918  
 Fax: (714) 547-4647

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 28212 Kelly Johnson Parkway  
 Valencia, CA 91355  
 Phone: (661) 257-9009  
 Fax: (661) 257-9019

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 3700 West 190th Street  
 Torrance, CA 90509  
 Phone: (310) 212-1714  
 Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 397

SAMPLE NUMBERS: 1309-1705

TYPE OF SAMPLES (CIRCLE ONE):

AIR \_\_\_\_\_ TAPE \_\_\_\_\_ WATER \_\_\_\_\_ WIPE \_\_\_\_\_  
 ZEFON \_\_\_\_\_ ANDERSEN \_\_\_\_\_  
 SOIL \_\_\_\_\_ AIR-O-CELL \_\_\_\_\_ PLATE \_\_\_\_\_ OTHER \_\_\_\_\_  
**BULK** \_\_\_\_\_

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy \_\_\_\_\_  
 Polarized Light Microscopy \_\_\_\_\_  
 1st Positive Stop \_\_\_\_\_  
 Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count \_\_\_\_\_  
 Transmission Electron Microscopy \_\_\_\_\_  
 Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

Lead

Flame Atomic Absorption \_\_\_\_\_  
 TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TPLC \_\_\_\_\_

Culturable Air

Andersen Fungi (genus ID, Aspergillus) \_\_\_\_\_  
 Andersen Bacteria \_\_\_\_\_

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium \_\_\_\_\_  
 Quantitative Fungi-dust, bulk swab-3 media \_\_\_\_\_  
 Quantitative Bacteria-dust, bulk swab-1 medium \_\_\_\_\_  
 Quantitative Bacteria-dust, bulk, swab-3 media \_\_\_\_\_  
 E.coli and Coliforms (MUG) \_\_\_\_\_

Non-Culturable Air

Non-Viable Spore Trap Slide \_\_\_\_\_

Surface Samples

Surface Sample (direct examination) \_\_\_\_\_

Other \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):

Rush \_\_\_\_\_ 12 HOURS \_\_\_\_\_ 24 HOURS \_\_\_\_\_ 48 HOURS \_\_\_\_\_  
 3 DAYS \_\_\_\_\_ **5 DAYS** \_\_\_\_\_ 5-10 DAYS \_\_\_\_\_ OTHER \_\_\_\_\_

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE \_\_\_\_\_ FAX \_\_\_\_\_ WRITTEN REPORT \_\_\_\_\_ **PDF** \_\_\_\_\_

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results:

~~Please copy to the Abuse/Privacy Office if you are a customer of Citadel Environmental Services, Inc. and report~~

TRANSMITTAL RECORD:

Relinquished By: *J. Myall*  
 Date: 08-13-18 Time: 12:15  
 Relinquished By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: *J. Myall*  
 Date: 8-13-18 Time: 12:15  
 Received By: *Ame (pu) 8/13/18*  
 Date: \_\_\_\_\_ Time: 2:55 PM

Received: TR 08/15/18 9:55AM EFX (3)

LABORATORY INFORMATION:

NAME: L.A. Testing

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS

OTHER \_\_\_\_\_  
 YEAR(S) \_\_\_\_\_

BULK SAMPLE DATA FORM

# 091817946

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE:		0 8 1 0 1 8		PAGE	
CLIENT:		Haley & Aldrich				INSPECTOR(S):		J. Magallon		OF	
PROJECT ID:		Canyon Crest Family Housing Survey				CSST/CAC NO:		13-5358		3	
SITE ADDRESS:		University of California Riverside - IDAHO ST		3323 / 3325		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY	
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	DAMAGE TYPE
WPF	SO	1 0 6 8	White	Plaster w/ Button	3323	1st	Living Rm.	6440	FT <sup>2</sup>	NF	NA
WPF	SO	1 6 6 9					Kitchen				
WPF	SO	1 6 7 0					Bedrm 2				
WPF	SO	1 6 7 1					Bathroom				
WPF	SO	1 6 7 2			3325		Living Rm				
WPF	SO	1 6 7 3					Bedrm 2				
WPF	SO	1 6 7 4					Bedrm 1				
WS/J	SO	1 6 7 5	White	Drywall w/ Joint C.	3323		Kitchen				
WS/J	SO	1 6 7 6									
12VFT	SO	1 6 7 7	Beige	Top Layer: 12" Beige w/ Specs Tile w/ Beige Mastic	3325		Bathroom				
12VFT	SO	1 6 7 8									
12VFT	SO	1 6 7 9									
VSF	SS	1 6 8 0	Yellow	Middle Layer: Marble Sheet Flooring w/ Mastic						F	
VSF	SS	1 6 8 1									



TR 08/15/18 9:15 AM BFX ③



BULK SAMPLE DATA FORM

# 091817946

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 1 0 1 8		PAGE		2	
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S):		J. Magallon		OF		3	
PROJECT ID:		University of California Riverside		IDAHO ST. 3323 / 3325		CSST/CAC NO.:		15-5358		FRIABILITY		F	
SITE ADDRESS:		IDAHO ST. 3323 / 3325		BULK SAMPLE LOCATION		AREA/LOCATION		BATHRM		MATERIAL CONDITION		G	
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY		DAMAGE TYPE					
		COLOR	TEXTURE/PATTERN			NO.	UNIT						
VSF	1682	Yellow	Middle Layer: Marble Sheet Flooring w/ Mastic	3325	1st			G	NA				
VSF	1683	White	Top Layer: Small Triangular Sheet Pl w/ Mastic	3323									
VSF	1684												
VSF	1685												
VSF	1686	Yellow	Bottom Middle Layer: Brown Floor Sheet Floor w/ Mastic	3323									
VSF	1687												
VSF	1688												
VSF	1689	Tan	Bottom Layer: Red/Blue Spots w/ Black Mastic; Vapor	3323									
VSF	1690												
VSF	1691												
VSF	1692												
USM	1692	Grey	Sink Mastic	8325				NA	NA				
USM	1693												
USM	1694												
USM	1695												
MISC	1695	Grey	Exterior Window Frame Putty	Exterior									

# BULK SAMPLE DATA FORM #091817946

PROJECT NO: 7 0 7 6		DATE: 0 8 1 0 1 8		PAGE 3					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Macallon		OF					
PROJECT ID: Canyon Crest Family Housing Survey		CSSTICAC NO: 15-5358		3					
SITE ADDRESS: University of California Riverside - DAHO ST. 3323 / 3325		BULK/SAMPLE LOCATION		MATERIAL CONDITION					
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
MISC	1696	Grey	Exterior Window Frame	Exterior	1st	S.E.		F	G
SO			Puffy						
MISC	1697					N.			
SO									
ES	1698	White	Exterior Stucco	Exterior		N.E.		NF	
SO									
ES	1699					S.E.			
SO									
ES	1700					S. Center			
SO									
ES	1701					S.W.			
SO									
ES	1702					N.W.			
SO									
RS	1703	Red	Roof Shingles	Roof		N.E.		NF	
SO									
RS	1704					S.E.			
SO									
RS	1705								
SO									

TR 00/15/10 9:15AM EFX ③



### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):

AIR  TAPE  WATER  WIPE   
ZEFON  ANDERSEN   
AIR-O-CELL  PLATE  OTHER   
**BULK**  SOIL

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy *Jp 8-23-18*  
 Polarized Light Microscopy  
 1st Positive Stop

Lead

\_\_\_\_\_ Flame Atomic Absorption  
\_\_\_\_\_ TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TCLP

\_\_\_\_\_ Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count

\_\_\_\_\_ Transmission Electron Microscopy  
\_\_\_\_\_ Qualitative \_\_\_\_\_ Quantitative

Culturable Air

\_\_\_\_\_ Andersen Fungi (genus ID, Aspergillus)  
\_\_\_\_\_ Andersen Bacteria

Culturable Samples

\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-3 media  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk, swab-3 media  
\_\_\_\_\_ E.coli and Coliforms (MUG)

Non-Culturable Air

\_\_\_\_\_ Non-Viable Spore Trap Slide

Surface Samples

\_\_\_\_\_ Surface Sample (direct examination)

Other \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):

Rush  12 HOURS  24 HOURS  48 HOURS  
3 DAYS  **5 DAYS**  5-10 DAYS  OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE  FAX  WRITTEN REPORT  PDF

NOTES/COMMENTS:

Special Project JS - Perform layered analysis and provide layered results.

TRANSMITTAL RECORD:

Relinquished By: *[Signature]*  
Date: **8-20-18** Time: \_\_\_\_\_

Received By: *[Signature]*  
Date: **8/20/18** Time: **12:30 PM**

Relinquished By: *[Signature]*  
Date: **8/22/18** Time: **2:00 PM**

Received By: *[Signature]*  
Date: **8/22/18** Time: **8:23 AM**

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS

OTHER \_\_\_\_\_  
 YEAR (S) \_\_\_\_\_

# BULK SAMPLE DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 1 0 1 1 8		PAGE 4			
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		OF 2			
PROJECT ID:		Canyon Crest Family Housing Survey		CSSTICAC NO:		15-5358		FRIABILITY			
SITE ADDRESS:		University of California Riverside - INLAND ST 3359 / 3361		BULK SAMPLE LOCATION		AREA/LOCATION		MATERIAL CONDITION			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY	NO.	UNIT	DAMAGE TYPE	
			COLOR	TEXTURE/PATTERN							
WDF	50	1706	white	Plaster w/ Button	3359	1st	6440	ft <sup>2</sup>	NF	G	NA
WDF	50	1707									
WDF	50	1708									
WDF	50	1709									
WDF	50	1710			3361						
WDF	50	1711									
WDF	50	1712									
WDF	50	1713	white	Drywall w/ Joint C.	3359						
WDF	50	1714			3361						
WDF	50	1715	white	6" Square Sheet Flooring w/ Mastic	3359				F		
WDF	50	1716									
WDF	50	1717			3361						
FBM	51	1718	white	Baseboard Mastic	3361				NF		
FBM	51	1719									

151805582  
5782  
822318

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside · IDAHO ST. 3359 / 3361

DATE: 0 8 1 0 1 8

INSPECTOR(S): J. Magallon

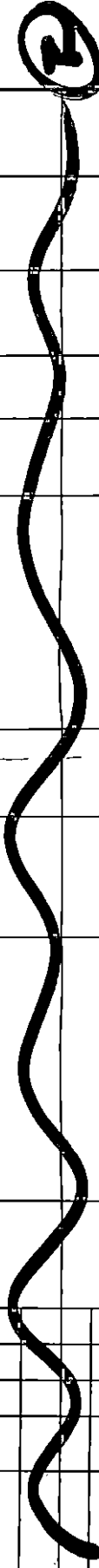
CSST/CAC NO: 15-5358

PAGE 2

OF 2



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
FBM	1720	White	Baseband Mastic	3361	1st	Kitchen		NF	G	NA
51										
MISC	1721	Grey	Exterior Window Frame Putty	exterior		N.E.				
50										
MISC	1722					E. Center				
50						S.E.				
MISC	1723					N.E.				
50										
ES	1724	White	Exterior Stucco	exterior						
50										
ES	1725					E. Center				
50						S.E.				
ES	1726									
50						S.W.				
ES	1727									
50						N.W.				
ES	1728									
50										
DS	1729	Red	Roof Shingles	Roof		N.W.				
50										
DS	1730									
50										
DS	1731					N.E.				
50										



### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 1725 Victory Blvd.  
 Glendale, CA 91201  
 Phone: (818) 246-2707  
 Fax: (818) 246-3145

Contact: Jack Samuels  
 jsamuels@citadelenvironmental.com  
 151 Kalmus Drive, Suite F-4  
 Costa Mesa, CA 92626  
 Phone: (562) 599-9918  
 Fax: (714) 547-4647

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 28212 Kelly Johnson Parkway  
 Valencia, CA 91355  
 Phone: (661) 257-9009  
 Fax: (661) 257-9019

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 3700 West 190th Street  
 Torrance, CA 90509  
 Phone: (310) 212-1714  
 Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):  
 AIR       TAPE       WATER       WIPE  
 BULK       SOIL       ZEFON       ANDERSEN  
 AIR-O-CELL       PLATE       OTHER

#### TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop

##### Lead

\_\_\_\_\_ Flame Atomic Absorption  
 \_\_\_\_\_ TTLC      \_\_\_\_\_ STLC      \_\_\_\_\_ TCLP

\_\_\_\_\_ Point Count      \_\_\_\_\_ 400 Point Count      \_\_\_\_\_ 1000 Point Count  
 \_\_\_\_\_ Transmission Electron Microscopy  
 \_\_\_\_\_ Qualitative      \_\_\_\_\_ Quantitative

##### Culturable Air

\_\_\_\_\_ Andersen Fungi (genue ID, Aspergillus)  
 \_\_\_\_\_ Andersen Bacteria

##### Culturable Samples

\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-1 medium  
 \_\_\_\_\_ Quantitative Fungi-dust, bulk swab-3 media  
 \_\_\_\_\_ Quantitative Bacteria-dust, bulk swab-1 medium  
 \_\_\_\_\_ Quantitative Bacteria-dust, bulk, swab-3 media  
 \_\_\_\_\_ E.coli and Coliforms (MUG)

##### Non-Culturable Air

\_\_\_\_\_ Non-Viable Spore Trap Slide

##### Surface Samples

\_\_\_\_\_ Surface Sample (direct examination)

##### Other

TURNAROUND TIME (CIRCLE ONE):  
 Rush       12 HOURS       24 HOURS       48 HOURS  
 3 DAYS       5 DAYS       5-10 DAYS       OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):  
 PHONE       FAX       WRITTEN REPORT       PDF

NOTES/COMMENTS: Special Project "JS" - Perform layered analysis and provide layered results.  
 Please copy Jessica Abirach@citadelenvironmental.com on all confirmations and reports.

TRANSMITTAL RECORD:  
 Relinquished By: *[Signature]*      Received By: *[Signature]*  
 Date: **8-20-10**      Time: \_\_\_\_\_      Date: **8/20/10**      Time: **12:30 PM**  
 Relinquished By: *[Signature]*      Received By: \_\_\_\_\_  
 Date: **8/20/10**      Time: **2:00p**      Date: \_\_\_\_\_      Time: \_\_\_\_\_

LABORATORY INFORMATION:      NAME: \_\_\_\_\_      LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:  
 RETURN      \_\_\_\_\_ DAYS AFTER ANALYSIS       OTHER  
 RETAIN FOR      \_\_\_\_\_ DAYS       YEAR(S)

*ETX(2) NT - 8/23/10 9:00 AM*

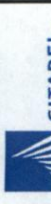
BULK SAMPLE DATA FORM

PROJECT NO:		7 6 0 7 6		1 0 1 7 0		DATE: 08/14/18		PAGE 1 OF 3					
CLIENT:		Hailey & Aldrich		INSPECTOR(S):		J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.					
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		15-5358							
SITE ADDRESS:		University of California Riverside - Linden St. 747-749		BULK SAMPLE LOCATION		AREA/LOCATION		QUANTITY					
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
WPF	50	1732	white	Plaster w/ Button		747	1st	Living Rm.	6446	FT <sup>2</sup>	NF	G	NA
WPF	50	1733						Bathroom					
WPF	56	1734						Bedrm 1					
WPF	50	1735						Bedrm 2					
WPF	50	1736				749		Living Rm.					
WPF	50	1737						Bedrm 1					
WPF	50	1738						Hall					
WSJ	50	1739	white	Drywall w/ Joint C		747		Kitchen					
WSJ	50	1740				749							
VSF	56	1741	white	Top layer: 6" Square Sheet Flooring w/ Mastic		747		Bathroom			F	G	NA
VSF	56	1742											
VSF	56	1743				749							
VSF	57	1744	white	Middle layer: Small Triangle Sheet Pl. w/ Mastic		747		Bathroom					
VSF	57	1745											

EFX 2 18-8/23/18 - 9:00 AM

BULK SAMPLE DATA FORM #091818573

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE: 08 14 18		PAGE 2			
CLIENT:		Halley & Aldrich		INSPECTOR(S):		J. Magallon		OF			
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO.:		15-5358		3			
SITE ADDRESS:		University of California Riverside		Linden St. 747-749		BULK SAMPLE LOCATION		FRIABILITY			
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY	DAMAGE TYPE		
			COLOR	TEXTURE/PATTERN						NO.	UNIT
VSF	57	1746	white	Middle layer: Small Triangle Sheet Floor	747	1st	Bathroom		F	G	NA
FLC	50	1747	Grey	Bottom layer: Leveling Compound w/ Vapor Paper	747		Bathroom		NF	G	NA
FLC	50	1748									
FLC	50	1749									
FBM	50	1750	white	Baseboard Mastic	749		Kitchen		NF	G	NA
FBM	50	1751									
FBM	50	1752									
MISC	50	1753	white	Exterior window frame putty	Exterior		N.E.		F	G	NA
MISC	50	1754					N.W.				
MISC	50	1755					S.E.				
ES	50	1756	white	Exterior Stucco	exterior		S.E.		NF	G	NA
ES	50	1757					S. Center				
ES	50	1758					s.w.				
ES	50	1759					N.W.				



EPHE NT- 8/23/18 - 9:00 Am





### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):  
AIR TAPE WATER WIPE  
ZEFON ANDERSEN  
**BULK** SOIL AIR-O-CELL PLATE OTHER

#### TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop

##### Lead

Flame Atomic Absorption  
 TTLC  STLC  TCLP

Point Count  400 Point Count  1000 Point Count

Transmission Electron Microscopy

Qualitative  Quantitative

##### Culturable Air

Andersen Fungi (genue ID, Aspergillus)  
 Andersen Bacteria

##### Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium  
 Quantitative Fungi-dust, bulk swab-3 media  
 Quantitative Bacteria-dust, bulk swab-1 medium  
 Quantitative Bacteria-dust, bulk, swab-3 media  
 E.coli and Coliforms (MUG)

##### Non-Culturable Air

Non-Viable Spore Trap Slide

##### Surface Samples

Surface Sample (direct examination)

##### Other

TURNAROUND TIME (CIRCLE ONE):  
Rush 12 HOURS 24 HOURS 48 HOURS  
3 DAYS **5 DAYS** 5-10 DAYS OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):  
 PHONE  FAX  WRITTEN REPORT  PDF

NOTES/COMMENTS: **Special Project "JS" - Perform layered analysis and provide layered results.**  
Please copy Jessica Aburto (j.aburto@citadelenvironmental.com) on all confirmations and reports.

TRANSMITTAL RECORD:  
Relinquished By: *[Signature]* Received By: *[Signature]*  
Date: **8.20.18** Time: \_\_\_\_\_ Date: **8/20/18** Time: **12:30PM**  
Relinquished By: *[Signature]* Received By: \_\_\_\_\_  
Date: **8/23/18** Time: **2:00pm** Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION: NAME: \_\_\_\_\_ LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:  
 RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  OTHER \_\_\_\_\_  
 RETAIN FOR \_\_\_\_\_ DAYS  YEAR (S) \_\_\_\_\_

*NT-8/23/18 - gwan EFAO*

**BULK SAMPLE DATA FORM**

#091818572

PROJECT NO: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Avenida St. 3411 3413

DATE: 08 14 18

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

PAGE 1

OF 3



HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO. UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
VSF 50	1764	white	Plaster w/ Button	3413	1st	Living Rm.	640	FF2	G	NA
VSF 50	1765					Hall				
VSF 50	1766					Bedrm 1				
VSF 50	1767					Bedrm 2				
VSF 50	1768					Living Rm.				
VSF 50	1769					Bedrm 1				
VSF 50	1770					Bedrm 2				
VSF 50	1771					Kitchen				
VSF 50	1772									
VSF 50	1773	white	Drywall w/ Joint C.	3413						
VSF 50	1774					Bathroom				
VSF 50	1775		Top Layer: 6" Square Sheet Flooring w/ Mastic							
VSF 50	1776					Bathroom				
VSF 50	1777	yellow	Middle Layer: Plaster Sheet Flooring w/ Mastic							
VSF 50	1777					Bathroom				

NT - 8/23/18 - 9:16 AM  
EPX 2

**BULK SAMPLE DATA FORM**

#091818572

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 4 1 8		PAGE 2 OF 3							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon									
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358									
SITE ADDRESS: University of California Riverside - Avocado St - 3411 3413		BULK SAMPLE LOCATION		QUANTITY							
HA TYPE	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
VSF	1778	Yellow	Middle Layer	3413	1st	Bathroom			F	G	NA
SB			Flower Sheet Flooring								
VSF	1779	Green	Bottom Layer	3413		Bathroom					
62			Green Sheet Flooring								
VSF	1780		w/ Black Mastic ; Vapor								
62											
VSF	1781										
62											
FBM	1782	White	Baseboard Mastic	3413		Kitchen			NF	G	NA
50 51											
FBM	1783										
50 51											
FBM	1784										
50 51											
MISC	1785	White	Exterior Window Frame	Exterior		N. Center			F	G	NA
50			Putty								
MISC	1786										
50											
MISC	1787										
50											
ES	1788	White	Exterior Stucco	Exterior		N.E.					
50											
ES	1789					N.W.					
50											
ES	1790					N.W.					
50											
ES	1791					N.E.					
50						E. Center					
						S.E.					

EXPD NT- 8/23/18 9:00 AM

**BULK SAMPLE DATA FORM**

#091818572

PROJECT NO: 7 0 7 6		1 0 1 7 0		DATE: 08 14 10		PAGE 3 OF 3		CITADEL ANALYTICAL SERVICES, INC.			
CLIENT: Haley & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon							
PROJECT ID: University of California Riverside - Avenida 24 - 2411 / 2413		BULK SAMPLE LOCATION		CSST/CAC NO: 15358		FRIABILITY		DAMAGE TYPE			
HA TYPE	HA NO.	SAMPLE NO.	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
ES	30	1792	White	Exterior Stucco	Exterior	1st	S.E.			NF	NA
PS	30	1793	Red	Roof Shingles	Roof		N.W.				
PS	30	1794									
PS	30	1795					N.E.				

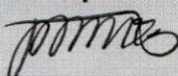
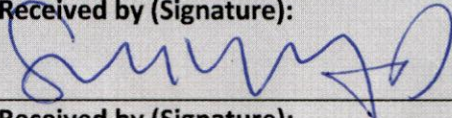
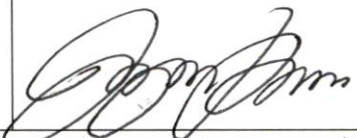
2

Page 4 of 4  
 EPO NT-8/23/8- 9:0 Am

111801316



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Dallas	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM EPA 600		
<b>Date Received:</b>	8/20/18		
<b>Date Relinquished:</b>	8/22/18		
<b>Date Due:</b>	8/27/18 12:30PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Samples have been counted and verified by HB admin* Per Jack - Okay to ship out - JR 8/20/18 Please input special Project ID "JS"		
<b>Relinquished by (Signature):</b> 	<b>Date:</b> 8/22/18	<b>Received by (Signature):</b> 	<b>Date:</b> 8/23/18
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement-</b> Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Jarmin Romero		LAB TESTING	8/22/18
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

111801316

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

**BULK**

SOIL

ZEFON

ANDERSEN

AIR-O-CELL

PLATE

OTHER

TYPE OF ANALYSIS:

Asbestos

Lead



Phase Contrast Microscopy

Polarized Light Microscopy

1st Positive Stop

Point Count

400 Point Count

1000 Point Count

Transmission Electron Microscopy

Qualitative

Quantitative

Culturable Air

Andersen Fungi (genus ID, Aspergillus)

Andersen Bacteria

Non-Culturable Air

Non-Viable Spore Trap Slide

Surface Samples

Surface Sample (direct examination)

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium

Quantitative Fungi-dust, bulk swab-3 media

Quantitative Bacteria-dust, bulk swab-1 medium

Quantitative Bacteria-dust, bulk, swab-3 media

E.coli and Coliforms (MUG)

Other

TURNAROUND TIME (CIRCLE ONE):

Rush

**5 HOURS**

24 HOURS

48 HOURS

3 DAYS

**5 DAYS**

5-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN REPORT

PDF

NOTES/COMMENTS:

Special Project JS: Perform layered analysis and provide layered results.

TRANSMITTAL RECORD:

Relinquished By: *[Signature]*

Date: **8.20.10**

Time: \_\_\_\_\_

Received By: *[Signature]*

Date: **8/20/10**

Time: **12:30 PM**

Relinquished By: *[Signature]*

Date: **8/10/10**

Time: **2:00 PM**

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

OTHER

RETAIN FOR

\_\_\_\_\_ DAYS

YEAR (S)

# BULK SAMPLING DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 1 5 1 8		PAGE 2 OF 3		
CLIENT:		Haley & Aldrich		INSPECTOR(S):		J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.		
PROJECT ID:		Canyon Crest Family Housing Survey		CSST/CAC NO:		15-5358				
SITE ADDRESS:		University of California Riverside		Avocado St. 3422/3424		BULK SAMPLE LOCATION		MATERIAL CONDITION		
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	LEVEL	AREA/LOCATION	QUANTITY	FRIABILITY	DAMAGE TYPE
				TEXTURE/PATTERN				NO.		
12VET	40	1810	Beige	Middle layer: Beige w/ Spics Tile	3424	1st	Bathroom		NF	NA
MISC	51	1811	Pink	Floor Vapor Barrier Paper	3424		Bathroom		F	
MISC	51	1812								
MISC	51	1813								
FBM	51	1814	White	Baseboard Mastic	3424		Kitchen		NF	NA
FBM	51	1815								
FBM	51	1816								
ES	50	1817	White	Exterior Stucco	exterior		S.E.		NF	NA
ES	50	1818								
ES	50	1819					E. Center			
ES	50	1820					N.E.			
ES	50	1821					N.W.			
ES	50						S.W.			



# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 08 15 18		PAGE 1						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		3						
SITE ADDRESS: University of California Riverside - Avocado Ct. 3424/3424		BULK SAMPLE LOCATION		FRIABILITY						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY		MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN				NO.	UNIT		
WPF 50	1796	white	Plaster w/ Button	3424	1st	Living Rm	6440	sq ft	G	NA
WPF 56	1797					Bathroom				
WPF 58	1798					Bedrm 1				
WPF 59	1799					Bedrm 2				
WPF 50	1800			3422		Living Rm				
WPF 50	1801					Bedrm 1				
WPF 50	1802					Bedrm 2				
WSJT 50	1803	white	Drywall w/ Joint C.	3424		Kitchen				
WSJT 50	1804			3422						
VSF 57	1805	white	Top Layer: Small Triangle Sheet	3424		Bathroom			F	G NA
VSF 57	1806		Floor w/ Mastic							
VSF 57	1807			3422						
12VFT 50	1808	Beige	Middle layer: Beige w/ Specs Tile	3424		Bathroom				
12VFT 56	1809		w/ Beige Mastic							



ORIGIN ID: APVA (714) 828-4999  
CONTACT NAME:  
LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA 92649  
UNITED STATES US

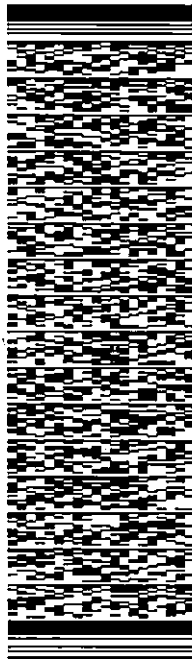
SHIP DATE: 22AUG18  
ACTWGT: 1.00 LB  
CAD: 102509583MWSX12500

TO SAMPLE RECEIVING

EMSL ANALYTICAL, INC.  
2307 SPRINGLAKE ROAD  
SUITE 510  
DALLAS TX 75234

REF: ARLWEB/A  
RMA 33LATEST  
DEPT:  
PO:  
INV:  
(972) 892-9928

552J11/0309/DCA5



TRK# 7955 5050 1361  
0221

RETURNS MON-FRI  
PRIORITY OVERNIGHT

TX-US

75234



**Disclaimer**

Use of this FedEx shipping label is subject to the following restrictions and conditions:

**IMPORTANT! Do not duplicate this label. Each package must contain a unique tracking number in order to maintain tracking and billing integrity.**

1. The shipment must be via FedEx packaging (FedEx envelope pack or FedEx box); this free shipping label is not valid for use on non-standard FedEx packages nor coolers or other large boxes.
2. Valid for shipment of the following samples only: Lead analysis of paint chips, air samples, or wipe samples; Asbestos testing of bulk material samples, wipe/dust samples, or air sample cassettes; Microbiology air samples or bulk samples, tape lift samples, and/or swab samples. This label and shipping is not valid for shipment of any sample that requires a cooler or any other sample type not specifically described herein.
3. The package shipment must exceed a minimum of \$100 in analytical fees. If this minimum is not met, a minimum shipping fee of \$15 will be added to the analysis invoice.
4. Not valid for the shipping of any hazardous materials or items prohibited to be shipped by these means.
5. Valid for only those accounts pre-approved to use this service. This courtesy shipping service may be terminated at any time by EMSL for any customer accounts that are not in good standing due to late payment /COD Status, or any other reason in the sole determination of EMSL.
6. Any additional fees, including, but not limited to, custom pickup fees from FedEx, excessive weight fees, and any surcharge items added by FedEx, associated with this label/package will be back-charged to the customer that made the shipment.
7. This label is not valid for weekend or holiday deliveries.
8. Excludes Summa Canisters, Equipment Rental and Loaner Returns.
9. Valid in the Continental United States and within Canada.
10. For Metals (Air, Chips & Wipes), IH Organics (Formaldehyde, Methamphetamine, Isocyanates, BTEX, etc.), Combustion By-Products (Soot)/Material Identification, and Silica, Respirable Dust/Total Dust: Based on the method you are choosing, please confirm with the lab or your sales rep to determine they can perform the specific method you require, prior to shipping samples.

1118013145



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Dallas	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM EPA 600		
<b>Date Received:</b>	8/20/18		
<b>Date Relinquished:</b>	8/22/18		
<b>Date Due:</b>	8/27/18 12:30PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Samples have been counted and verified by HB admin* Per Jack - Okay to ship out - JR 8/20/18 Please input special Project ID "JS"		
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
	8/22/18		8/23/18
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement-</b> Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Jaemin Romero		LA TESTING	8/22/18
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

# CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

### CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 1725 Victory Blvd.  
 Glendale, CA 91201  
 Phone: (818) 246-2707  
 Fax: (818) 246-3145

Contact: Jack Samuels  
 jsamuels@citadelenvironmental.com  
 151 Kalmus Drive, Suite F-4  
 Costa Mesa, CA 92626  
 Phone: (562) 599-9918  
 Fax: (714) 547-4647

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 28212 Kelly Johnson Parkway  
 Valencia, CA 91355  
 Phone: (661) 257-9009  
 Fax: (661) 257-9019

Contact: \_\_\_\_\_  
 email: \_\_\_\_\_  
 3700 West 190th Street  
 Torrance, CA 90509  
 Phone: (310) 212-1714  
 Fax: (310) 212-1702

### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

**BULK**

SOIL

ZEFON

ANDERSEN

AIR-O-CELL

PLATE

OTHER

TYPE OF ANALYSIS:

Asbestos

Lead

Phase Contrast Microscopy

Flame Atomic Absorption

Polarized Light Microscopy

TTLIC

STLC

TCLP

1st Positive Stop

Point Count  400 Point Count  1000 Point Count

Transmission Electron Microscopy

Qualitative  Quantitative

Culturable Air

Culturable Samples

Andersen Fungi (genue ID, Aspergillus)

Quantitative Fungi-dust, bulk swab-1 medium

Andersen Bacteria

Quantitative Fungi-dust, bulk swab-3 media

Non-Culturable Air

Quantitative Bacteria-dust, bulk swab-1 medium

Non-Viable Spore Trap Slide

Quantitative Bacteria-dust, bulk, swab-3 media

Surface Samples

E.coli and Coliforms (MUG)

Surface Sample (direct examination)

Other

TURNAROUND TIME (CIRCLE ONE):

Rush

**5 HOURS**

24 HOURS

48 HOURS

3 DAYS

**5 DAYS**

6-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN REPORT

PDF

NOTES/COMMENTS:

Special Project JS - Perform layered analysis and provide layered results

TRANSMITTAL RECORD:

Relinquished By: *[Signature]*

Received By: *[Signature]*

Date: **8-20-10**

Time: \_\_\_\_\_

Date: **8/20/10**

Time: **12:30 PM**

Relinquished By: *[Signature]*

Received By: \_\_\_\_\_

Date: **8/20/10**

Time: **2:00 pm**

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

OTHER

RETAIN FOR

\_\_\_\_\_ DAYS

YEAR (S)

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 08 15 10		PAGE 2						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 8						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		CITADEL ENVIRONMENTAL SERVICES, INC. <small>AN ISO 9001:2008 REGISTERED COMPANY</small>						
SITE ADDRESS: University of California Riverside - Avenida 9 3459 / 3461		AREA/LOCATION								
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE		
HA NO.		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	NO.	UNIT			
FRAY SO	1836	white	Baseboard Mastic	5461	1st			NF	G	N/A
MISC SO	1837	white	Exterior Window Frame putty	Exterior				F	G	N/A
MISC SO	1838									
MISC SO	1839									
ES SO	1840	white	Exterior Stucco	Exterior				NF	G	N/A
ES SO	1841									
ES SO	1842									
ES SO	1843									
ES SO	1844									
PS SO	1845	red	Roof Shingles	Roof						
PS SO	1846									
PS SO	1847									

①

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 5 1 8		PAGE 1 OF 2							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION							
SITE ADDRESS: University of California Riverside - Avocado St - 3459 / 3461		BULK SAMPLE LOCATION		DAMAGE TYPE							
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN								
WPF 22	1822	white	Plaster w/ Button	3459	1st	living Rm.	6440	ft <sup>2</sup>	NF	G	NA
WPF 23	1823					kitchen					
WPF 24	1824					Bedroom 1					
WPF 25	1825					Ceiling: Bedroom 2					
WPF 26	1826					Living Rm.					
WPF 27	1827					Bedroom 1					
WPF 28	1828					Bathroom					
WSJS 29	1829	white	Drywall w/ Joint C.	3459		Kitchen					
WSJS 30	1830			3461							
VSF 31	1831	white	6" Square Sheet Flooring w/ Mastic	3459		Bathroom					
VSF 32	1832										
NSF 33	1833			3461							
FBM 34	1834	white	Baseboard Mastic	3459		Kitchen					
FBM 35	1835			3461							

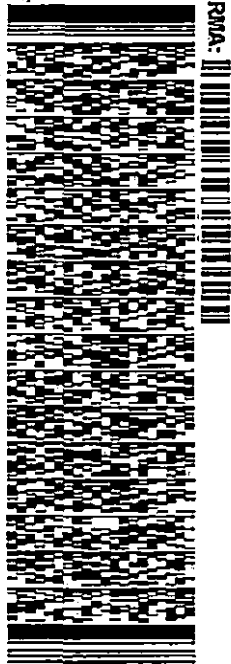


ORIGIN ID: APVA (714) 828-4989  
CONTACT NAME:  
LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA 92649  
UNITED STATES US

SHIP DATE: 22AUG18  
ACTWGT: 1.00 LB  
CAD: 102509585WWSX12500

TO **SAMPLE RECEIVING**  
**EMSL ANALYTICAL, INC.**  
**2307 SPRINGLAKE ROAD**  
**SUITE 510**  
**DALLAS TX 75234**

REF: ARL-MEBA  
RMA: 33LATEST  
DEPT:



552J16309/DCA5

TRK# 7955 5050 1361  
0221

RETURNS MON-FRI  
PRIORITY OVERNIGHT

75234

TX-US



**Disclaimer**

Use of this FedEx shipping label is subject to the following restrictions and conditions:

**IMPORTANT! Do not duplicate this label. Each package must contain a unique tracking number in order to maintain tracking and billing integrity.**

1. The shipment must be via FedEx packaging (FedEx envelope pack or FedEx box); this free shipping label is not valid for use on non-standard FedEx packages nor coolers or other large boxes.
2. Valid for shipment of the following samples only: Lead analysis of paint chips, air samples, or wipe samples; Asbestos testing of bulk material samples, wipe/dust samples, or air sample cassettes; Microbiology air samples or bulk samples, tape lift samples, and/or swab samples. This label and shipping is not valid for shipment of any sample that requires a cooler or any other sample type not specifically described herein.
3. The package shipment must exceed a minimum of \$100 in analytical fees. If this minimum is not met, a minimum shipping fee of \$15 will be added to the analysis invoice.
4. Not valid for the shipping of any hazardous materials or items prohibited to be shipped by these means.
5. Valid for only those accounts pre-approved to use this service. This courtesy shipping service may be terminated at any time by EMSL for any customer accounts that are not in good standing due to late payment /COD Status, or any other reason in the sole determination of EMSL.
6. Any additional fees, including, but not limited to, custom pickup fees from FedEx, excessive weight fees, and any surcharge items added by FedEx, associated with this label/package will be back-charged to the customer that made the shipment.
7. This label is not valid for weekend or holiday deliveries.
8. Excludes Summa Canisters, Equipment Rental and Loaner Returns.
9. Valid in the Continental United States and within Canada.
10. For Metals (Air, Chips & Wipes), IH Organics (Formaldehyde, Methamphetamine, Isocyanates, BTEX, etc.), Combustion By-Products (Soot)/Material Identification, and Silica, Respirable Dust/Total Dust: Based on the method you are choosing, please confirm with the lab or your sales rep to determine they can perform the specific method you require, prior to shipping samples.

1118013145



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Dallas	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM EPA 600		
<b>Date Received:</b>	8/20/18		
<b>Date Relinquished:</b>	8/22/18		
<b>Date Due:</b>	8/27/18 12:30PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Samples have been counted and verified by HB admin* Per Jack - Okay to ship out - JR 8/20/18 Please input special Project ID "JS"		
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
	8/22/18		8/23/18
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement-</b> Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Jaemin Romero		LA TESTING	8/22/18
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.



# CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

## CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

## PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):

AIR \_\_\_\_\_  
**BULK** \_\_\_\_\_  
TAPE \_\_\_\_\_  
SOIL \_\_\_\_\_

WATER \_\_\_\_\_  
ZEFON \_\_\_\_\_  
AIR-O-CELL \_\_\_\_\_  
WIPE ANDERSEN PLATE \_\_\_\_\_  
OTHER \_\_\_\_\_

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop

Lead

\_\_\_\_\_ Flame Atomic Absorption  
\_\_\_\_\_ TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TCLP

\_\_\_\_\_ Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count

\_\_\_\_\_ Transmission Electron Microscopy

\_\_\_\_\_ Qualitative \_\_\_\_\_ Quantitative

Culturable Air

\_\_\_\_\_ Andersen Fungi (genue ID, Aspergillus)  
\_\_\_\_\_ Andersen Bacteria

Culturable Samples

\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-3 media  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk, swab-3 media  
\_\_\_\_\_ E.coli and Coliforms (MUG)

Non-Culturable Air

\_\_\_\_\_ Non-Viable Spore Trap Slide

Surface Samples

\_\_\_\_\_ Surface Sample (direct examination)

Other \_\_\_\_\_

TURNAROUND TIME (CIRCLE ONE):

Rush \_\_\_\_\_ 12 HOURS \_\_\_\_\_ 24 HOURS \_\_\_\_\_ 48 HOURS \_\_\_\_\_  
3 DAYS \_\_\_\_\_ **5 DAYS** \_\_\_\_\_ 5-10 DAYS \_\_\_\_\_ OTHER \_\_\_\_\_

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE \_\_\_\_\_ FAX \_\_\_\_\_ WRITTEN REPORT \_\_\_\_\_ PDF \_\_\_\_\_

NOTES/COMMENTS:

Special Project JS - Perform layered analysis and provide layered results

TRANSMITTAL RECORD:

Relinquished By: *[Signature]*  
Date: **8-20-10** Time: \_\_\_\_\_  
Relinquished By: *[Signature]*  
Date: **8/22/10** Time: **2:00pm**

Received By: *[Signature]*  
Date: **8/20/10** Time: **12:30PM**  
Received By: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS

OTHER \_\_\_\_\_  
 YEAR (S) \_\_\_\_\_

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 08 15 10		PAGE 2						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 8						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION DAMAGE TYPE						
SITE ADDRESS: University of California Riverside - Avenida 9 3459 / 3461		AREA/LOCATION								
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		FRIABILITY	DAMAGE TYPE			
HA NO.		COLOR	TEXTURE/PATTERN	UNIT	LEVEL			QUANTITY NO.	UNIT	
FRAY SO	1836	white	Baseboard Mastic	5461	1st			NF	G	N/A
MISC SO	1837	white	Exterior Window Frame putty	Exterior				F	G	N/A
MISC SO	1838									
MISC SO	1839									
ES SO	1840	white	Exterior Stucco	Exterior				NF	G	N/A
ES SO	1841									
ES SO	1842									
ES SO	1843									
ES SO	1844									
PS SO	1845	red	Roof Shingles	Roof						
PS SO	1846									
PS SO	1847									

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BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 5 1 8		PAGE 1 OF 2							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		FRIABILITY							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION							
SITE ADDRESS: University of California Riverside - Avocado St - 3459 / 3461		BULK SAMPLE LOCATION		DAMAGE TYPE							
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN								
WPF 22	1822	white	Plaster w/ Button	3459	1st	living Rm.	6440	ft <sup>2</sup>	NF	G	NA
WPF 23	1823					kitchen					
WPF 24	1824					Bedroom 1					
WPF 25	1825					Ceiling: Bedroom 2					
WPF 26	1826			3461		Living Rm.					
WPF 27	1827					Bedroom 1					
WPF 28	1828					Bathroom					
WS/S 29	1829	white	Drywall w/ Joint C.	3459		Kitchen					
WS/S 30	1830			3461							
VSF 31	1831	white	6" Square Sheet Flooring w/ Mastic	3459		Bathroom					
VSF 32	1832										
NSF 33	1833			3461							
FBM 34	1834	white	Baseboard Mastic	3459		Kitchen					
FBM 35	1835			3461							

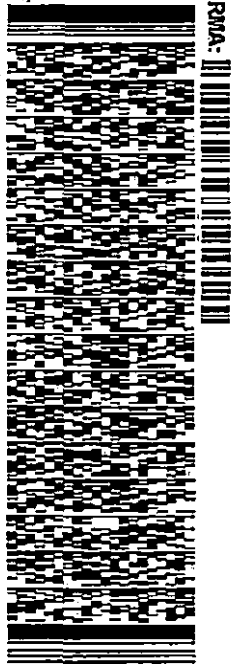


ORIGIN ID: APVA (714) 828-4999  
CONTACT NAME:  
LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA 92649  
UNITED STATES US

SHIP DATE: 22AUG18  
ACTWGT: 1.00 LB  
CAD: 102509585WWSX12500

TO **SAMPLE RECEIVING**  
**EMSL ANALYTICAL, INC.**  
**2307 SPRINGLAKE ROAD**  
**SUITE 510**  
**DALLAS TX 75234**

REF: ARL-MEBA  
RMA: 33LATEST  
DEPT:



TRK# 7955 5050 1361  
0221

RETURNS MON-FRI  
PRIORITY OVERNIGHT

75234

TX-US



552113309/DCA5



**Disclaimer**

Use of this FedEx shipping label is subject to the following restrictions and conditions:

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1. The shipment must be via FedEx packaging (FedEx envelope pack or FedEx box); this free shipping label is not valid for use on non-standard FedEx packages nor coolers or other large boxes.
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3. The package shipment must exceed a minimum of \$100 in analytical fees. If this minimum is not met, a minimum shipping fee of \$15 will be added to the analysis invoice.
4. Not valid for the shipping of any hazardous materials or items prohibited to be shipped by these means.
5. Valid for only those accounts pre-approved to use this service. This courtesy shipping service may be terminated at any time by EMSL for any customer accounts that are not in good standing due to late payment /COD Status, or any other reason in the sole determination of EMSL.
6. Any additional fees, including, but not limited to, custom pickup fees from FedEx, excessive weight fees, and any surcharge items added by FedEx, associated with this label/package will be back-charged to the customer that made the shipment.
7. This label is not valid for weekend or holiday deliveries.
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9. Valid in the Continental United States and within Canada.
10. For Metals (Air, Chips & Wipes), IH Organics (Formaldehyde, Methamphetamine, Isocyanates, BTEX, etc.), Combustion By-Products (Soot)/Material Identification, and Silica, Respirable Dust/Total Dust: Based on the method you are choosing, please confirm with the lab or your sales rep to determine they can perform the specific method you require, prior to shipping samples.

151805791

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone:(562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone:(661) 257-9009  
Fax:(661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone:(310) 212-1714  
Fax:(310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: **203**

SAMPLE NUMBERS: **1706-1908**

TYPE OF SAMPLES (CIRCLE ONE):  
AIR \_\_\_\_\_ TAPE \_\_\_\_\_ WATER \_\_\_\_\_ WIPE \_\_\_\_\_  
ZEFON \_\_\_\_\_ ANDERSEN \_\_\_\_\_  
**BULK** \_\_\_\_\_ SOIL \_\_\_\_\_ AIR-O-CELL \_\_\_\_\_ PLATE \_\_\_\_\_ OTHER \_\_\_\_\_

#### TYPE OF ANALYSIS:

##### Asbestos

Phase Contrast Microscopy  
 Polarized Light Microscopy  
 1st Positive Stop  
 Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count  
 Transmission Electron Microscopy  
 Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

##### Lead

\_\_\_\_\_ Flame Atomic Absorption  
\_\_\_\_\_ TTLC \_\_\_\_\_ STLC \_\_\_\_\_ TCLP \_\_\_\_\_

##### Culturable Air

\_\_\_\_\_ Andersen Fungi (genue ID, Aspergillus)  
\_\_\_\_\_ Andersen Bacteria

##### Culturable Samples

\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Fungi-dust, bulk swab-3 media  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk swab-1 medium  
\_\_\_\_\_ Quantitative Bacteria-dust, bulk, swab-3 media  
\_\_\_\_\_ E.coli and Coliforms (MUG)

##### Non-Culturable Air

\_\_\_\_\_ Non-Viable Spore Trap Slide

##### Surface Samples

\_\_\_\_\_ Surface Sample (direct examination)

##### Other

TURNAROUND TIME (CIRCLE ONE):  
Rush \_\_\_\_\_ 12 HOURS \_\_\_\_\_ 24 HOURS \_\_\_\_\_ 48 HOURS \_\_\_\_\_  
3 DAYS \_\_\_\_\_ **5 DAYS** \_\_\_\_\_ 5-10 DAYS \_\_\_\_\_ OTHER \_\_\_\_\_

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):  
PHONE \_\_\_\_\_ FAX \_\_\_\_\_ WRITTEN REPORT \_\_\_\_\_ PDF \_\_\_\_\_

#### NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.  
Please copy Jessica Aburto jahurto@citadelenvironmental.com on all confirmations and reports.

#### TRANSMITTAL RECORD:

Relinquished By: *[Signature]*  
Date: **8.20.18** Time: \_\_\_\_\_  
Relinquished By: *[Signature]*  
Date: **8/22/18** Time: **2:10p**

Received By: *[Signature]*  
Date: **8/20/18** Time: **12:30PM**  
Received By: *[Signature]*  
Date: **8.23/18** Time: **10:25**

#### LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

#### DISPOSITION OF SAMPLES:

RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS  
 RETAIN FOR \_\_\_\_\_ DAYS

OTHER \_\_\_\_\_  
 YEAR (S) \_\_\_\_\_

# BULK SAMPLE DATA FORM

151805791

PROJECT NO.: 7 0 7 6		DATE: 0 8 1 5 1 8		PAGE 1 OF 3							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION							
SITE ADDRESS: University of California Riverside - Avenida St - 3489 / 3491		BULK SAMPLE LOCATION		FRIABILITY							
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	DAMAGE TYPE		
		COLOR	TEXTURE/PATTERN								
WPF 50	1848	white	Plaster w/ Button	3489	1st	living Rm			NF	G	NA
WPF 50	1849					Kitchen					
WPF 50	1850					Bedrm 1					
WPF 50	1851					Bedrm 2					
WPF 50	1852			3491		living Rm					
WPF 50	1853					Bathroom					
WPF 50	1854					Bedrm 2					
WS/T 50	1855	white	Drywall w/ Joint C.	3489		Kitchen					
WS/T 50	1856			3491							
VSF 56	1857	white	Top layer: 6" Square Sheet Floor w/ Mastic	3489		Bathroom			F		
VSF 56	1858										
VSF 56	1859			Button							
VSF 57	1860	white	Top layer: Small Triangle Sheet Fl. w/ Mastic	3491		Bathroom					
VSF 57	1861										

# BULK SAMPLE DATA FORM

151805791

PROJECT NO:	7	0	7	6	1	0	1	7	0		
CLIENT:	Haley & Aldrich										
PROJECT ID:	Canyon Crest Family Housing Survey										
SITE ADDRESS:	University of California Riverside-Arcade St- 3489 / 3491										
DATE:	08	15	18								
INSPECTOR(S):	J. Magallon										
CSST/CAC NO:	15-535B										
HA TYPE	SAMPLE NO.		MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
HA NO.	VSF	1862	COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT		
	57		White	Top layer: Small Travertine Sheet Fl	3491	1st	Bathroom			F	G
	12VFT	1863	Beige	Middle layer: Beige w/ Spaced Tile w/ Beige Mastic			Bathroom			WF	G
	12VFT	1864									
	12VFT	1863									
	VSF	1866	Beige	Bottom Middle layer: Present Design Sheet Fl w/ Mastic			Bathroom			F	G
	VSF	1867									
	VSF	1868									
	VSF	1869	Yellow	Bottom layer: Yellow Sheet Floor w/ Mastic) ; Vapor			Bathroom			F	G
	VSF	1870									
	VSF	1871									
	VSF	1871									
	MISC	1872	White	Exterior Window Frame Putty	Exterior		N. Center			F	G
	SO										
	MISC	1873									
	SO										
	MISC	1874									
	SO										
	ES	1875	White	Exterior Stucco	Exterior		N.W.				
	SO										



# BULK SAMPLE DATA FORM

151805791

PROJECT NO.: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Arcado St. 2409 / 3411

DATE: 08 | 15 | 18

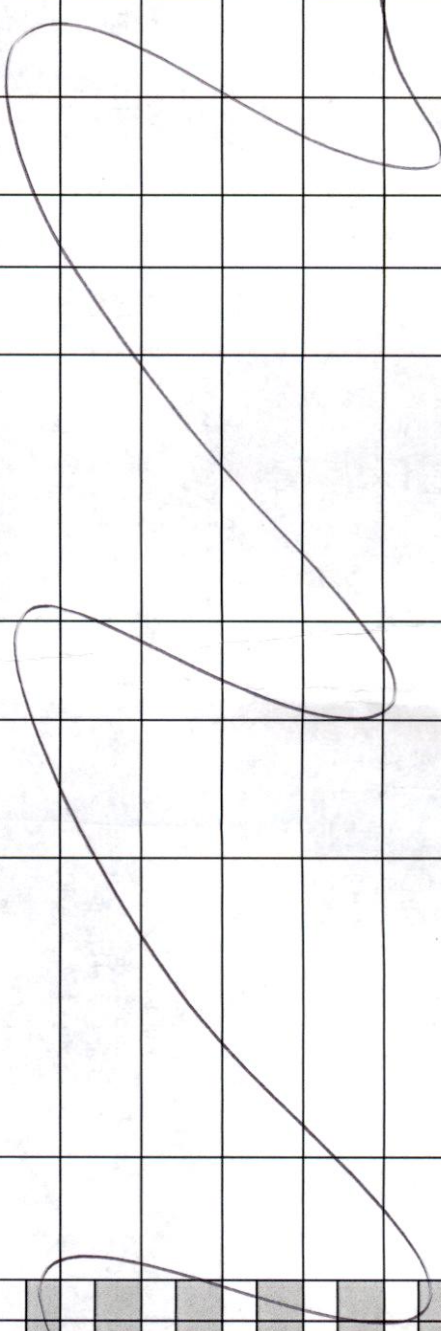
PAGE 3

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5958



HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
ES 50	1876	White	Exterior Stucco	Exterior	1st	N.E.			NF	G	NA
ES 50	1877					E. Corner					
ES 50	1878					S.E.					
ES 50	1879					S.W.					
ES 50	1880	Red	Roof Shingles	Roof		N.W.					
ES 50	1881										
ES 50	1882					N.E.					



2





BULK SAMPI DATA FORM

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 1 5 1 8		PAGE 1 OF 2		CITADEL MUNICIPAL SERVICES INC.	
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon				MATERIAL CONDITION	
PROJECT ID:		University of California Riverside		Angaldo St. 3472 / 3474		CSSTICAC NO: 15-5358				DAMAGE TYPE	
SITE ADDRESS:											
HA TYPE	HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
			COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
WDF	50	1883	white	Plaster w/ Pattern	3472	1st	living Rm	6440	FT <sup>2</sup>	NF	G NA
WDF	50	1884					Hall				
WDF	50	1885					Bedrm 2				
WDF	50	1886					Bedrm 1				
WDF	50	1887			3474		Living Rm				
WDF	50	1888					Bedrm 1				
WDF	50	1889					Bedrm 2				
WSI	50	1890	white	Drywall w/ Joint C.	3472		Kitchen				
WSI	50	1891			3474						
VSF	56	1892	white	6" Square Sheet Flooring w/ Mastic	3474		Bathroom			F	
VSF	56	1893									
VSF	56	1894									
VSF	60	1895	white	Small Rectangle Sheet Flooring w/ Mastic	3472		Bathroom				
VSF	60	1896	Brown								





# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Avenida St. 3401/3403

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

DATE: 0 8 2 3 1 8

PAGE 1 OF 1



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION					
RPM 54	2118	Black	Roof Membrane	Roof	Roof	N.E.			NF	G	NA
RPM 54	2119					W. Center					
RPM 54	2120					S.E.					
RP 50	2121	Black	Roof Parapet			N. Center					
RP 50	2122					E. Center					
RP 50	2123					W. Center					
RPM 53	2124	Black	Painted white: Roof Penetration			Billboard N.W.					
RPM 53	2125					N. Center					
RPM 53	2126					S. Center					
RPM 54	2127	Grey	Roof Penetration			W. Area					
RPM 54	2128										
RPM 54	2129										
RPM 54	2130										

#511802584

#511802584



**EMSL Analytical, Inc.**  
**Sample Transfer Form**

Receiving Lab:	EMSL- Huntington Beach	Phone Number:	
		Fax Number:	
Relinquished to:	EMSL- Seattle	Phone Number:	
		Fax Number:	

Does new lab hold equivalent or additional accreditation? \*  Yes  No

EMSL Customer ID # (if known):	32CITASOD
Client Name:	Citadel Environmental Services
Client Project:	Various
Tests to be Performed:	PLM
Date Received:	8/27/18
Date Relinquished:	8/28/18
Date Due:	1 week TAT Due 9/4/18 1:30 PM
Special Instructions: (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out

Relinquished by (Signature): 	Date: 8/28	Received by (Signature): 	Date: 8/29/18 9:00 AM
Relinquished by (Signature):	Date:	Received by (Signature):	Date:

**Customer Agreement-** Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications\* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.

Name (please print): Claudia Maldiner	Signature: 	Agent of: LA Testing	Date: 8/28
--	----------------	-------------------------	---------------

If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.  
Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

## *SUPPORT BUILDINGS*



*CITADEL ENVIRONMENTAL SERVICES, INC.*



# EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789

<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

EMSL Order: 511802583

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/05/2018

**Collected Date:**

**Project:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1909 <small>511802583-0001</small>	Drywall Panels - Unit D, S.E.Area	Brown/White Fibrous Homogeneous	25% Cellulose	60% Gypsum 15% Non-fibrous (Other)	None Detected
1910 <small>511802583-0002</small>	Drywall Panels - Unit E, E. Center	Brown/White Fibrous Homogeneous	25% Cellulose	60% Gypsum 15% Non-fibrous (Other)	None Detected
1911 <small>511802583-0003</small>	Drywall Panels - Unit G, S.E. Area	Brown/White Fibrous Homogeneous	25% Cellulose	60% Gypsum 15% Non-fibrous (Other)	None Detected
1912 <small>511802583-0004</small>	Drywall Panels - Unit D, Ceiling S.W.	Brown/White Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
1913 <small>511802583-0005</small>	Drywall Panels - Unit D, N.W.	Brown/White/Black Fibrous Homogeneous	30% Cellulose	60% Gypsum 10% Non-fibrous (Other)	None Detected
1914 <small>511802583-0006</small>	Plaster - Unit F, S.W.	White Non-Fibrous Homogeneous	10% Cellulose	70% Gypsum 20% Non-fibrous (Other)	None Detected
1915 <small>511802583-0007</small>	Plaster - Unit F, S.E.	White Non-Fibrous Homogeneous	5% Cellulose	50% Gypsum 45% Non-fibrous (Other)	None Detected
1916 <small>511802583-0008</small>	Plaster - Unit F, N.E.	White Non-Fibrous Homogeneous	3% Cellulose	40% Gypsum 57% Non-fibrous (Other)	None Detected
1917-Fiberboard <small>511802583-0009</small>	Compact Wood Boards - Unit F, N. Center	Tan Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
1917-Joint Compound <small>511802583-0009A</small>	Compact Wood Boards - Unit F, N. Center	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
1917-Tape <small>511802583-0009B</small>	Compact Wood Boards - Unit F, N. Center	White Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
1917-Texture <small>511802583-0009C</small>	Compact Wood Boards - Unit F, N. Center	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
1918-Fiberboard <small>511802583-0010</small>	Compact Wood Boards - Unit F, E. Center	Tan Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
1918-Texture <small>511802583-0010A</small>	Compact Wood Boards - Unit F, E. Center	White Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
1919-Fiberboard <small>511802583-0011</small>	Compact Wood Boards - Unit D, S.E.	Tan Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1919-Texture <small>511802583-0011A</small>	Compact Wood Boards - Unit D, S.E.	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected

*Inseparable paint / coating layer included in analysis*

Initial report from: 09/05/2018 13:53:38





# EMSL Analytical, Inc.

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Tel/Fax: (206) 269-6310 / (206) 900-8789

<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

EMSL Order: 511802583

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1920 <i>511802583-0012</i>	Drywall - Unit E, S. Center	Brown/White Fibrous Homogeneous	25% Cellulose 10% Glass	55% Gypsum 10% Non-fibrous (Other)	None Detected
1921 <i>511802583-0013</i>	Drywall - Unit E, S.E.	Brown/White Fibrous Homogeneous	25% Cellulose	65% Gypsum 10% Non-fibrous (Other)	None Detected
1922 <i>511802583-0014</i>	Drywall - Unit E, N. Center	White Non-Fibrous Homogeneous	5% Cellulose	70% Gypsum 25% Non-fibrous (Other)	None Detected
1923-Floor Tile <i>511802583-0015</i>	Beige Floor Tile w/ Beige Mastic - Unit E, N.W.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1923-Mastic <i>511802583-0015A</i>	Beige Floor Tile w/ Beige Mastic - Unit E, N.W.	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1924-Floor Tile <i>511802583-0016</i>	Beige Floor Tile w/ Beige Mastic - Unit E, S. Center	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1924-Mastic <i>511802583-0016A</i>	Beige Floor Tile w/ Beige Mastic - Unit E, S. Center	Gray/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
1925-Floor Tile <i>511802583-0017</i>	Beige Floor Tile w/ Beige Mastic - Unit E, E. Center	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1925-Mastic <i>511802583-0017A</i>	Beige Floor Tile w/ Beige Mastic - Unit E, E. Center	Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1926 <i>511802583-0018</i>	Sub Floor Vapor Bar. - Unit D, E. Center	Brown/Black Fibrous Homogeneous	60% Cellulose 15% Synthetic	25% Non-fibrous (Other)	None Detected
1927 <i>511802583-0019</i>	Sub Floor Vapor Bar. - Unit D, S.W.	Brown/Black Fibrous Homogeneous	65% Cellulose 10% Synthetic	25% Non-fibrous (Other)	None Detected
1928 <i>511802583-0020</i>	Sub Floor Vapor Bar. - Unit A, S.W.	Brown/Black Fibrous Homogeneous	60% Cellulose 15% Synthetic	25% Non-fibrous (Other)	None Detected
1929 <i>511802583-0021</i>	Window Putty - Exterior, Garage: N.W.	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1930 <i>511802583-0022</i>	Window Putty - Exterior, E. of Rm. G	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1931 <i>511802583-0023</i>	Window Putty - Exterior, E. of Rm. D	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1932 <i>511802583-0024</i>	Exterior Transite 1x2 Panels - Exterior, N.W.	Gray Non-Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1933 <i>511802583-0025</i>	Exterior Transite 1x2 Panels - Exterior, N.	Gray Non-Fibrous Homogeneous		83% Non-fibrous (Other)	17% Chrysotile
1934-Transite <i>511802583-0026</i>	Exterior Transite 1x2 Panels - Exterior, E.	Gray/White Non-Fibrous Homogeneous		83% Non-fibrous (Other)	17% Chrysotile
<i>Result includes a small amount of inseparable attached material</i>					

Initial report from: 09/05/2018 13:53:38



# EMSL Analytical, Inc.

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Tel/Fax: (206) 269-6310 / (206) 900-8789

<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

**EMSL Order:** 511802583  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1934-Tar Felt <small>511802583-0026A</small>	Exterior Transite 1x2 Panels - Exterior, E.	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
1935-Transite <small>511802583-0027</small> <i>Result includes a small amount of inseparable attached material</i>	Exterior Transite 1x2 Panels - Exterior, S.E.	Gray/White Non-Fibrous Homogeneous		83% Non-fibrous (Other)	17% Chrysotile
1935-Tar Felt <small>511802583-0027A</small>	Exterior Transite 1x2 Panels - Exterior, S.E.	Brown/Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
1936 <small>511802583-0028</small>	Exterior Transite 1x2 Panels - Exterior, S.W.	Gray Non-Fibrous Homogeneous		83% Non-fibrous (Other)	17% Chrysotile
1937 <small>511802583-0029</small>	Roof Shingles - Roof, E. Center	Gray/Red/Black Non-Fibrous Homogeneous	50% Cellulose	5% Quartz 45% Non-fibrous (Other)	None Detected
1938 <small>511802583-0030</small>	Roof Shingles - Roof, N.E.	Gray/Red/Black Fibrous Homogeneous	55% Cellulose	5% Quartz 40% Non-fibrous (Other)	None Detected
1939 <small>511802583-0031</small>	Roof Shingles - Roof, N.W.	Gray/Red/Black Fibrous Homogeneous	50% Cellulose	5% Quartz 45% Non-fibrous (Other)	None Detected
1940 <small>511802583-0032</small>	Roof Shingles - Roof, S.E.	Gray/Red/Black Fibrous Homogeneous	55% Cellulose	5% Quartz 40% Non-fibrous (Other)	None Detected
1941 <small>511802583-0033</small>	Roof Shingles - Roof, S.W.	Gray/Red/Black Fibrous Homogeneous	60% Glass	10% Quartz 30% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Ehrin Baul (43)

Lauren Kerber, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/05/2018 13:53:38



# EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789

<http://www.emsl.com> / [seattlelab@emsl.com](mailto:seattlelab@emsl.com)

EMSL Order: 511802587

Customer ID: 32CITA50D

Customer PO:

Project ID:

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/04/2018

**Collected Date:**

**Project:** 7076.1017.0, Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1942-Shingle <small>511802587-0001</small>	Roof Shingles - Roof, S.E.	Brown/Black Non-Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1942-Shingle <small>511802587-0001A</small>	Roof Shingles - Roof, S.E.	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1942-Shingle <small>511802587-0001B</small>	Roof Shingles - Roof, S.E.	Brown/Black Fibrous Homogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
1943-Shingle <small>511802587-0002</small>	Roof Shingles - Roof, N.E.	Tan/Black Fibrous Homogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
1943-Shingle <small>511802587-0002A</small>	Roof Shingles - Roof, N.E.	Brown/Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1943-Shingle <small>511802587-0002B</small>	Roof Shingles - Roof, N.E.	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1944-Shingle <small>511802587-0003</small>	Roof Shingles - Roof, N. Center	Tan/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1944-Shingle <small>511802587-0003A</small>	Roof Shingles - Roof, N. Center	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1944-Shingle <small>511802587-0003B</small>	Roof Shingles - Roof, N. Center	Brown/Red/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1945-Shingle <small>511802587-0004</small>	Roof Shingles - Roof, S. Center	Brown/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1945-Shingle <small>511802587-0004A</small>	Roof Shingles - Roof, S. Center	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1946-Shingle <small>511802587-0005</small>	Roof Shingles - Roof, W. Center	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1946-Shingle <small>511802587-0005A</small>	Roof Shingles - Roof, W. Center	Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
1946-Shingle <small>511802587-0005B</small>	Roof Shingles - Roof, W. Center	Gray/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected

Initial report from: 09/04/2018 13:38:08



# EMSL Analytical, Inc.

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EMSL Order: 511802587

Customer ID: 32CITA50D

Customer PO:

Project ID:

Analyst(s)

Jason Stuhr (14)

Lauren Kerber, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/04/2018 13:38:08



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EMSL Order: 111801352

Customer ID: 32CITA50D

Customer PO:

Project ID: JS

**Attention:** Jack Samuels  
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**Received Date:** 08/27/2018 1:30 PM

**Analysis Date:** 08/29/2018 - 09/04/2018

**Collected Date:**

**Project:** 7076.1017.0 Canyon Crest Family Housing Survey (JS)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1947-Plaster <small>111801352-0001</small>	SE-Unit E - White Plaster with Button	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1947-Drywall <small>111801352-0001A</small>	SE-Unit E - White Plaster with Button	Tan/White Fibrous Homogeneous	15% Cellulose	80% Gypsum 5% Non-fibrous (Other)	None Detected
1948-Plaster <small>111801352-0002</small>	E. Center- Unit H - White Plaster with Button	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1948-Drywall <small>111801352-0002A</small>	E. Center- Unit H - White Plaster with Button	Tan/White Fibrous Homogeneous	25% Cellulose	70% Gypsum 5% Non-fibrous (Other)	None Detected
1949-Plaster <small>111801352-0003</small>	NW-Unit D - White Plaster with Button	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1949-Drywall <small>111801352-0003A</small>	NW-Unit D - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose	85% Gypsum 5% Non-fibrous (Other)	None Detected
1950-Plaster <small>111801352-0004</small>	S Center-Unit B - White Plaster with Button	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
1950-Drywall <small>111801352-0004A</small>	S Center-Unit B - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose	85% Gypsum 5% Non-fibrous (Other)	None Detected
1951-Plaster <small>111801352-0005</small>	W Center- Unit A - White Plaster with Button	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
1951-Drywall <small>111801352-0005A</small>	W Center- Unit A - White Plaster with Button	Tan/Pink Fibrous Homogeneous	12% Cellulose	88% Gypsum	None Detected
1952-Finish Coat <small>111801352-0006</small>	NW-Unit I - White Plaster with Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1952-Plaster <small>111801352-0006A</small>	NW-Unit I - White Plaster with Button	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1953-Finish Coat <small>111801352-0007</small>	N. Center- Unit H - White Plaster with Button	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1953-Plaster <small>111801352-0007A</small>	N. Center- Unit H - White Plaster with Button	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
1953-Drywall <small>111801352-0007B</small>	N. Center- Unit H - White Plaster with Button	Tan/White Fibrous Homogeneous	10% Cellulose 5% Glass	85% Gypsum	None Detected
1954-Joint Compound <small>111801352-0008</small>	SE-Unit E - Drywall with Joint	White Non-Fibrous Homogeneous		85% Ca Carbonate 15% Non-fibrous (Other)	None Detected

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EMSL Order: 111801352

Customer ID: 32CITA50D

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Project ID: JS

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1954-Drywall <small>111801352-0008A</small>	SE-Unit E - Drywall with Joint	Tan/White Fibrous Homogeneous	20% Cellulose	80% Gypsum	None Detected
1955-Joint Compound <small>111801352-0009</small>	NE-Unit D - Drywall with Joint	White Non-Fibrous Homogeneous		85% Ca Carbonate 15% Non-fibrous (Other)	None Detected
1955-Drywall <small>111801352-0009A</small>	NE-Unit D - Drywall with Joint	Tan/White Fibrous Homogeneous	15% Cellulose	85% Gypsum	None Detected
1956-Joint Compound <small>111801352-0010</small>	NE-Unit B - Drywall with Joint	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1956-Drywall <small>111801352-0010A</small>	NE-Unit B - Drywall with Joint	Tan/White Fibrous Homogeneous	20% Cellulose	80% Gypsum	None Detected
1957-Sheet Flooring <small>111801352-0011</small>	NE-Unit H - Top Layer:6" Square Sheet Floor with Mastic	Beige Fibrous Homogeneous	12% Cellulose 1% Glass	87% Non-fibrous (Other)	None Detected
1957-Mastic <small>111801352-0011A</small>	NE-Unit H - Top Layer:6" Square Sheet Floor with Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1958-Sheet Flooring <small>111801352-0012</small>	S Center- Unit C - Top Layer:6" Square Sheet Floor with Mastic	Beige Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
1958-Mastic <small>111801352-0012A</small>	S Center- Unit C - Top Layer:6" Square Sheet Floor with Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1959-Sheet Flooring <small>111801352-0013</small>	NE-Unit A - Top Layer:6" Square Sheet Floor with Mastic	Beige Fibrous Homogeneous	23% Cellulose 2% Glass	75% Non-fibrous (Other)	None Detected
1959-Mastic <small>111801352-0013A</small>	NE-Unit A - Top Layer:6" Square Sheet Floor with Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1960-Floor Tile <small>111801352-0014</small>	NE-Unit E - Middle Layer: Beige Floor Tile with Black Mastic	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1960-Mastic <small>111801352-0014A</small>	NE-Unit E - Middle Layer: Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1961-Floor Tile <small>111801352-0015</small>	NE-Unit H - Middle Layer: Beige Floor Tile with Black Mastic	Beige Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
1961-Mastic <small>111801352-0015A</small>	NE-Unit H - Middle Layer: Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1962-Floor Tile <small>111801352-0016</small>	NE-Unit I - Middle Layer: Beige Floor Tile with Black Mastic	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1962-Mastic <small>111801352-0016A</small>	NE-Unit I - Middle Layer: Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1963-Floor Tile <i>111801352-0017</i>	NE-Unit A - Middle Layer: Beige Floor Tile with Black Mastic	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1963-Mastic <i>111801352-0017A</i>	NE-Unit A - Middle Layer: Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1964-Floor Tile <i>111801352-0018</i>	NW-Unit B - Middle Layer: Beige Floor Tile with Black Mastic	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1964-Mastic <i>111801352-0018A</i>	NW-Unit B - Middle Layer: Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1965-Floor Tile <i>111801352-0019</i>	NE-Unit E - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
1965-Mastic <i>111801352-0019A</i>	NE-Unit E - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Insufficient amount of material submitted</i>					
1965-Vapor Paper <i>111801352-0019B</i>	NE-Unit E - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown/Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1966-Floor Tile <i>111801352-0020</i>	NE-Unit H - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
1966-Mastic <i>111801352-0020A</i>	NE-Unit H - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1966-Vapor Paper <i>111801352-0020B</i>	NE-Unit H - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown/Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1967-Floor Tile <i>111801352-0021</i>	NE-Unit I - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1967-Mastic <i>111801352-0021A</i>	NE-Unit I - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
<i>Result includes a small amount of inseparable attached flooring material</i>					
1967-Vapor Paper <i>111801352-0021B</i>	NE-Unit I - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1968-Floor Tile <i>111801352-0022</i>	NE-Unit A - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1968-Mastic <i>111801352-0022A</i>	NE-Unit A - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1968-Vapor Paper <i>111801352-0022B</i>	NE-Unit A - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1969-Floor Tile <i>111801352-0023</i>	NW-Unit B - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Brown Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1969-Mastic <i>111801352-0023A</i>	NW-Unit B - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1969-Vapor Paper <i>111801352-0023B</i>	NW-Unit B - Bottom Layer: Brown Floor Tile with Black Mastic and Vapor Paper	Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1970-Sheet Flooring <i>111801352-0024</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Yellow Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
1970-Mastic <i>111801352-0024A</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper <i>Insufficient amount of material submitted</i>	Gray Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
1970-Barrier Paper <i>111801352-0024B</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Gray Fibrous Homogeneous	95% Cellulose 5% Synthetic		None Detected
1971-Sheet Flooring <i>111801352-0025</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Yellow Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
1971-Mastic <i>111801352-0025A</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper <i>Insufficient amount of material submitted</i>	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1971-Barrier Paper <i>111801352-0025B</i>	NE-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Gray Fibrous Homogeneous	95% Cellulose 5% Synthetic		None Detected
1972-Sheet Flooring <i>111801352-0026</i>	NW-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Yellow Fibrous Homogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
1972-Mastic <i>111801352-0026A</i>	NW-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper <i>Insufficient amount of material submitted.</i>	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
1972-Barrier Paper <i>111801352-0026B</i>	NW-Unit G - Bottom Layer: Yellow Sheet Floor with Mastic and Barrier Paper	Gray Fibrous Homogeneous	95% Cellulose 4% Synthetic	1% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1973-Mastic <small>111801352-0027</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
1973-Floor Tile <small>111801352-0027A</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Beige Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1973-Vapor Paper <small>111801352-0027B</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Gray Fibrous Homogeneous	95% Cellulose 5% Synthetic		None Detected
1973-Leveler <small>111801352-0027C</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Gray Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
1974-Mastic <small>111801352-0028</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1974-Floor Tile <small>111801352-0028A</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Beige Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1974-Vapor Paper <small>111801352-0028B</small>	NW-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Gray Fibrous Homogeneous	95% Cellulose 5% Synthetic		None Detected
1975-Mastic <small>111801352-0029</small>	N Center-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
1975-Floor Tile <small>111801352-0029A</small>	N Center-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Beige Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
1975-Vapor Paper <small>111801352-0029B</small>	N Center-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Gray Fibrous Homogeneous	95% Cellulose 4% Synthetic	1% Non-fibrous (Other)	None Detected
1975-Leveler <small>111801352-0029C</small>	N Center-Unit F - Bottom Layer: Beige with Specs Sheet Floor with Black Mastic and Vapor Paper	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1976 <small>111801352-0030</small>	NW-Unit E - Carpet Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1977 <small>111801352-0031</small>	NW-Unit F - Carpet Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1978 <small>111801352-0032</small>	SW-Unit B - Carpet Mastic	Beige Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
1979 <small>111801352-0033</small>	SE-Unit D - Grey Baseboard Vinyl Mastic	Gray/White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
1980 <small>111801352-0034</small>	S Center-Unit H - Grey Baseboard Vinyl Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1981 <small>111801352-0035</small>	NW-Unit B - Grey Baseboard Vinyl Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1982 <small>111801352-0036</small>	NE-Exterior - Window Putty	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1983 <small>111801352-0037</small>	S Center-Exterior - Window Putty	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1984 <small>111801352-0038</small>	S Cente-Exteriorr - Window Putty	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1985 <small>111801352-0039</small>	E Center-Exterior - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1986 <small>111801352-0040</small>	E Center-Exterior - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1987 <small>111801352-0041</small>	E Center-Exterior - Sink Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1988-Coating <small>111801352-0042</small>	N Center-Exterior - Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1988-Stucco <small>111801352-0042A</small>	N Center-Exterior - Stucco	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1989-Coating <small>111801352-0043</small>	NE-Exterior - Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1989-Stucco <small>111801352-0043A</small>	NE-Exterior - Stucco	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1989-Base Coat <small>111801352-0043B</small>	NE-Exterior - Stucco	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1990-Coating <small>111801352-0044</small>	SE-Exterior - Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1990-Stucco <small>111801352-0044A</small>	SE-Exterior - Stucco	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1991-Coating <i>111801352-0045</i>	SW-Exterior - Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1991-Stucco <i>111801352-0045A</i>	SW-Exterior - Stucco	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1992-Coating <i>111801352-0046</i>	W Center-Exterior - Stucco	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1992-Stucco <i>111801352-0046A</i>	W Center-Exterior - Stucco	Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1993-Shingle 1 <i>111801352-0047</i>	NW-Roof - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1993-Shingle 2 <i>111801352-0047A</i>	NW-Roof - Roof Shingles	White/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1994-Shingle 1 <i>111801352-0048</i>	NW-Roof - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1994-Shingle 2 <i>111801352-0048A</i>	NW-Roof - Roof Shingles	White/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1995-Shingle 1 <i>111801352-0049</i>	NE-Roof - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1995-Shingle 2 <i>111801352-0049A</i>	NE-Roof - Roof Shingles	White/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1996-Roof Shingle 1 <i>111801352-0050</i>	NE-Roof - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1996-Roof Shingle 2 <i>111801352-0050A</i>	NE-Roof - Roof Shingles	White/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1997-Roof Shingle 1 <i>111801352-0051</i>	NE-Roof - Roof Shingles	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
1997-Roof Shingle 2 <i>111801352-0051A</i>	NE-Roof - Roof Shingles	White/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected

Analyst(s)

Anna Somsavath (64)

Michael Kinney (41)

Cindy Nguyen, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Dallas, TX NVLAP Lab Code 600111-0, TX 300456

Initial report from: 09/04/2018 13:13:16



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EMSL Order: 511802576

Customer ID: 32CITA50D

Customer PO:

Project ID:

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**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/05/2018

**Collected Date:**

**Project:** 7076.1017.0, Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1998-Drywall <small>511802576-0001</small>	Drywall w/ Joint C. - Unit A, 1st Level, S.E.	Brown/White Fibrous Heterogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
1998-Joint Compound <small>511802576-0001A</small>	Drywall w/ Joint C. - Unit A, 1st Level, S.E.	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
1999-Drywall <small>511802576-0002</small>	Drywall w/ Joint C. - Unit B, 1st Level, S.W.	Brown/White Fibrous Heterogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
1999-Joint Compound <small>511802576-0002A</small>	Drywall w/ Joint C. - Unit B, 1st Level, S.W.	White Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2000-Drywall <small>511802576-0003</small>	Drywall w/ Joint C. - Unit F, 1st Level, S.E.	Brown/White Fibrous Heterogeneous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
2000-Joint Compound <small>511802576-0003A</small>	Drywall w/ Joint C. - Unit F, 1st Level, S.E.	White Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2000-Tape <small>511802576-0003B</small>	Drywall w/ Joint C. - Unit F, 1st Level, S.E.	White Fibrous Heterogeneous	40% Cellulose	40% Ca Carbonate 20% Non-fibrous (Other)	None Detected
2001-Drywall <small>511802576-0004</small>	Drywall w/ Joint C. - Unit A, 1st Level, Ceiling: W. Center	Brown/White Fibrous Homogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
2001-Joint Compound <small>511802576-0004A</small>	Drywall w/ Joint C. - Unit A, 1st Level, Ceiling: W. Center	White Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2002-Drywall <small>511802576-0005</small>	Drywall w/ Joint C. - Unit D, 1st Level, S.E.	Brown/White Fibrous Homogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
2002-Joint Compound <small>511802576-0005A</small>	Drywall w/ Joint C. - Unit D, 1st Level, S.E.	White Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2003-Floor Tile <small>511802576-0006</small>	Beige Floor Tile w/ Beige Mastic - Unit A, 1st Level, S.E.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2003-Mastic <small>511802576-0006A</small>	Beige Floor Tile w/ Beige Mastic - Unit A, 1st Level, S.E.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2004-Floor Tile <small>511802576-0007</small>	Beige Floor Tile w/ Beige Mastic - Unit A, 1st Level, N.W.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2004-Mastic <small>511802576-0007A</small>	Beige Floor Tile w/ Beige Mastic - Unit A, 1st Level, N.W.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2005-Floor Tile <small>511802576-0008</small>	Beige Floor Tile w/ Beige Mastic - Unit B, 1st Level, S.Center	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 09/05/2018 13:39:35



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EMSL Order: 511802576

Customer ID: 32CITA50D

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2005-Mastic <i>511802576-0008A</i>	Beige Floor Tile w/ Beige Mastic - Unit B, 1st Level, S.Center	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2006-Vinyl Sheet Flooring <i>511802576-0009</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, N.E.	White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
2006-Mastic <i>511802576-0009A</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, N.E.	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2006-Leveler <i>511802576-0009B</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, N.E.	Gray Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2007-Vinyl Sheet Flooring <i>511802576-0010</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.E.	White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
2007-Mastic <i>511802576-0010A</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.E.	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2007-Leveler <i>511802576-0010B</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.E.	Gray Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2008-Vinyl Sheet Flooring <i>511802576-0011</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.W.	White Non-Fibrous Homogeneous	5% Cellulose 3% Glass	92% Non-fibrous (Other)	None Detected
2008-Mastic <i>511802576-0011A</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.W.	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2008-Leveler <i>511802576-0011B</i>	Small Triangle Sheet Floor w/ Mastic - Unit F, 1st Floor, S.W.	Gray Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2009 <i>511802576-0012</i> <i>Inseparable paint / coating layer included in analysis</i>	Window Putty - Exterior, 1st Level, S.W. Window	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2010 <i>511802576-0013</i> <i>Inseparable paint / coating layer included in analysis</i>	Window Putty - Exterior, 1st Level, S.W. Window	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2011 <i>511802576-0014</i> <i>Inseparable paint / coating layer included in analysis</i>	Window Putty - Exterior, 1st Level, S.W. Window	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2012 <i>511802576-0015</i>	Exterior Stucco - Exterior, 1st Level, S.W.	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2013 <i>511802576-0016</i>	Exterior Stucco - Exterior, 1st Level, N.Center	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2014 <i>511802576-0017</i>	Exterior Stucco - Exterior, 1st Level, W.Center	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2015-Shingle <i>511802576-0018</i>	Roof Membrane - Roof, N.Center	White/Black Fibrous Heterogeneous	25% Glass	75% Non-fibrous (Other)	None Detected

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**EMSL Order:** 511802576  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2015-Built Up Roofing <i>511802576-0018A</i>	Roof Membrane - Roof, N.Center	Black Fibrous Heterogeneous	35% Glass	65% Non-fibrous (Other)	None Detected
2016-Shingle <i>511802576-0019</i>	Roof Membrane - Roof, E.Center	White/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
2016-Built Up Roofing <i>511802576-0019A</i>	Roof Membrane - Roof, E.Center	Black Fibrous Heterogeneous	30% Glass	70% Non-fibrous (Other)	None Detected
2017-Shingle <i>511802576-0020</i>	Roof Membrane - Roof, W.Center	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
2017-Built Up Roofing <i>511802576-0020A</i>	Roof Membrane - Roof, W.Center	Black Fibrous Homogeneous	30% Glass	70% Non-fibrous (Other)	None Detected
2018 <i>511802576-0021</i>	Roof Penetration - Roof, N.E.	Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2019 <i>511802576-0022</i>	Roof Penetration - Roof, E.Center	Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2020 <i>511802576-0023</i>	Roof Penetration - Roof, N.W.	Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2021 <i>511802576-0024</i>	Pitch Pocket Mastic - Roof, N.E.	Gray/Black Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
2022 <i>511802576-0025</i>	Pitch Pocket Mastic - Roof, E.Center	Black Non-Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
2023 <i>511802576-0026</i>	Pitch Pocket Mastic - Roof, N.E.	Black Non-Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Jason Stuhr (29)

Rudy Baum (15)

Lauren Kerber, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/05/2018 13:39:35



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EMSL Order: 511802577

Customer ID: 32CITA50D

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Project ID:

**Attention:** Jack Samuels  
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**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

**Received Date:** 08/29/2018 9:00 AM

**Analysis Date:** 09/04/2018 - 09/05/2018

**Collected Date:**

**Project:** 7076.1017.0, Canyon Crest Family Housing Survey

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2024-Drywall <i>511802577-0001</i>	Drywall w/ Joint - Unit E, 1st Level, N.W.	Brown/White Fibrous Homogeneous	20% Cellulose	60% Gypsum 20% Non-fibrous (Other)	None Detected
2024-Joint Compound <i>511802577-0001A</i>	Drywall w/ Joint - Unit E, 1st Level, N.W.	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2025-Drywall <i>511802577-0002</i>	Drywall w/ Joint - Unit E, 1st Level, S.W.	Brown/White Fibrous Homogeneous	20% Cellulose	60% Gypsum 20% Non-fibrous (Other)	None Detected
2025-Joint Compound <i>511802577-0002A</i>	Drywall w/ Joint - Unit E, 1st Level, S.W. <i>Inseparable paint / coating layer included in analysis</i>	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
2025-Caulk <i>511802577-0002B</i>	Drywall w/ Joint - Unit E, 1st Level, S.W.	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2026-Drywall <i>511802577-0003</i>	Drywall w/ Joint - Unit E, 1st Level, S.E.	Brown/White Fibrous Homogeneous	25% Cellulose	55% Gypsum 20% Non-fibrous (Other)	None Detected
2026-Woven Tape <i>511802577-0003A</i>	Drywall w/ Joint - Unit E, 1st Level, S.E.	White Fibrous Homogeneous	95% Glass	5% Non-fibrous (Other)	None Detected
2026-Joint Compound <i>511802577-0003B</i>	Drywall w/ Joint - Unit E, 1st Level, S.E.	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2027-Mastic <i>511802577-0004</i>	Baseboard Mastic - Unit F, 1st Level, S.W.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2027-Baseboard <i>511802577-0004A</i>	Baseboard Mastic - Unit F, 1st Level, S.W.	Brown/White Fibrous Homogeneous	45% Cellulose	20% Gypsum 35% Non-fibrous (Other)	None Detected
2028 <i>511802577-0005</i>	Baseboard Mastic - Unit C, 1st Level, S.E.	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2029 <i>511802577-0006</i>	Baseboard Mastic - Unit E, 1st Level, E.Center	Beige Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
2030-Vinyl Sheet Flooring <i>511802577-0007</i>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, N.W.	Brown/White Fibrous Homogeneous	35% Cellulose 15% Glass	50% Non-fibrous (Other)	None Detected
2030-Mastic <i>511802577-0007A</i>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, N.W.	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2031-Vinyl Sheet Flooring <i>511802577-0008</i>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, N.E.	Brown/Gray Fibrous Homogeneous	25% Cellulose 30% Glass	45% Non-fibrous (Other)	None Detected

Initial report from: 09/05/2018 11:55:23



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**EMSL Order:** 511802577  
**Customer ID:** 32CITA50D  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2031-Mastic <small>511802577-0008A</small>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, N.E.	Gray/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
2032-Vinyl Sheet Flooring <small>511802577-0009</small>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, S.E.	Brown/Gray Fibrous Homogeneous	20% Cellulose 30% Glass	50% Non-fibrous (Other)	None Detected
2032-Mastic <small>511802577-0009A</small>	Brown Specs Floor Sheet w/ Mastic - Unit F, 1st Level, S.E.	Gray/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached material</i>					
2033-Stucco <small>511802577-0010</small>	Exterior Stucco - Exterior, W	White Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2033-Concrete <small>511802577-0010A</small>	Exterior Stucco - Exterior, W	Gray Non-Fibrous Homogeneous		10% Quartz 4% Micaceous Flakes 86% Non-fibrous (Other)	None Detected
2034-Stucco <small>511802577-0011</small>	Exterior Stucco - Exterior, S.W.	Beige Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2034-Concrete <small>511802577-0011A</small>	Exterior Stucco - Exterior, S.W.	Gray Non-Fibrous Homogeneous		10% Quartz 4% Micaceous Flakes 86% Non-fibrous (Other)	None Detected
2035-Stucco <small>511802577-0012</small>	Exterior Stucco - Exterior, S.E.	White Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2035-Concrete <small>511802577-0012A</small>	Exterior Stucco - Exterior, S.E.	Gray Non-Fibrous Homogeneous		10% Quartz 3% Micaceous Flakes 87% Non-fibrous (Other)	None Detected
2036-Stucco <small>511802577-0013</small>	Exterior Stucco - Exterior S	Beige Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2036-Concrete <small>511802577-0013A</small>	Exterior Stucco - Exterior S	Gray Non-Fibrous Homogeneous		10% Quartz 3% Micaceous Flakes 87% Non-fibrous (Other)	None Detected
2037 <small>511802577-0014</small>	Exterior Stucco - Exterior S.W.	White Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2038-Membrane <small>511802577-0015</small>	Roof Field Membrane - Roof S.E.	Gray Non-Fibrous Homogeneous	10% Synthetic	90% Non-fibrous (Other)	None Detected
2038-Shingle <small>511802577-0015A</small>	Roof Field Membrane - Roof S.E.	Red/Black Fibrous Homogeneous	20% Glass	5% Quartz 75% Non-fibrous (Other)	None Detected
2038-Tar Felt <small>511802577-0015B</small>	Roof Field Membrane - Roof S.E.	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2038-Tar Felt <small>511802577-0015C</small>	Roof Field Membrane - Roof S.E.	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
2038-Shingle <small>511802577-0015D</small>	Roof Field Membrane - Roof S.E.	Gray/Black Fibrous Homogeneous	25% Glass	10% Quartz 65% Non-fibrous (Other)	None Detected
2039-Membrane <small>511802577-0016</small>	Roof Field Membrane - Roof Center	Gray Non-Fibrous Homogeneous	10% Synthetic	90% Non-fibrous (Other)	None Detected

Initial report from: 09/05/2018 11:55:23





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EMSL Order: 511802577

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2039-Shingle <i>511802577-0016A</i>	Roof Field Membrane - Roof Center	Red/Black Fibrous Homogeneous	20% Glass	10% Quartz 70% Non-fibrous (Other)	None Detected
2039-Tar Felt <i>511802577-0016B</i>	Roof Field Membrane - Roof Center	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
2039-Tar Felt <i>511802577-0016C</i>	Roof Field Membrane - Roof Center	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
2039-Shingle <i>511802577-0016D</i>	Roof Field Membrane - Roof Center	Gray/Black Fibrous Homogeneous	25% Glass	10% Quartz 65% Non-fibrous (Other)	None Detected
2040-Membrane <i>511802577-0017</i>	Roof Field Membrane - Roof N.W.	Gray Non-Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
2040-Shingle <i>511802577-0017A</i>	Roof Field Membrane - Roof N.W.	Red/Black Fibrous Homogeneous	25% Cellulose	10% Quartz 65% Non-fibrous (Other)	None Detected
2040-Shingle <i>511802577-0017B</i>	Roof Field Membrane - Roof N.W.	Gray/Black Fibrous Homogeneous	25% Cellulose	10% Quartz 65% Non-fibrous (Other)	None Detected
2041 <i>511802577-0018</i> <i>Inseparable paint / coating layer included in analysis</i>	Penetration - Roof S.E.	Gray/Black Non-Fibrous Homogeneous	3% Synthetic	90% Non-fibrous (Other)	7% Chrysotile
2042 <i>511802577-0019</i> <i>Inseparable paint / coating layer included in analysis</i>	Penetration - Roof N.W.	Gray/Black Non-Fibrous Homogeneous	3% Synthetic	91% Non-fibrous (Other)	6% Chrysotile
2043 <i>511802577-0020</i> <i>Inseparable paint / coating layer included in analysis</i>	Penetration - Roof N.E.	White/Black Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2044 <i>511802577-0021</i>	Roof Patch - Roof Center	Black Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
2045 <i>511802577-0022</i>	Roof Patch - Roof W. Center	Black Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
2046 <i>511802577-0023</i> <i>Inseparable paint / coating layer included in analysis</i>	Roof Patch - Roof N.W.	Gray/White/Black Non-Fibrous Homogeneous	10% Cellulose 3% Synthetic	84% Non-fibrous (Other)	3% Chrysotile



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Lauren Kerber, Laboratory Manager  
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Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 09/05/2018 11:55:23



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**EMSL Order:** 031823924

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**Received Date:** 08/29/2018 9:58 AM

**Analysis Date:** 09/03/2018 - 09/04/2018

**Collected Date:** 08/22/2018

**Project:** 7076.1017.0/ HALEY & ALDRICH/ CANYON CREST FAMILY HOUSING SURVEY/ UNIVERSITY OF CALIFORNIA RIVERSIDE- HDDRS WAREHOUSE/ CA

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2047-Plaster 031823924-0001	1ST FL/ SW - PLASTER W/ BUTTON	Gray/White Non-Fibrous Homogeneous	5% Cellulose	40% Quartz 25% Gypsum 30% Non-fibrous (Other)	None Detected
2047-Sheetrock 031823924-0001A	1ST FL/ SW - PLASTER W/ BUTTON	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	62% Gypsum 28% Non-fibrous (Other)	None Detected
2048-Plaster 031823924-0002	1ST FL/ NE - PLASTER W/ BUTTON	Gray/White Non-Fibrous Homogeneous	8% Cellulose	35% Quartz 30% Gypsum 27% Non-fibrous (Other)	None Detected
2048-Sheetrock 031823924-0002A	1ST FL/ NE - PLASTER W/ BUTTON	Brown/Gray Non-Fibrous Homogeneous	12% Cellulose	55% Gypsum 33% Non-fibrous (Other)	None Detected
2049-Sheetrock 031823924-0003	1ST FL/ NW - PLASTER W/ BUTTON	Gray Non-Fibrous Homogeneous	10% Cellulose	50% Gypsum 40% Non-fibrous (Other)	None Detected
2049-Plaster 031823924-0003A	1ST FL/ NW - PLASTER W/ BUTTON	Gray Non-Fibrous Homogeneous		30% Quartz 45% Gypsum 25% Non-fibrous (Other)	None Detected
2050-Skim Coat 031823924-0004	1ST FL/ SW - PLASTER	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
2050-Rough Coat 031823924-0004A	1ST FL/ SW - PLASTER	Gray Non-Fibrous Homogeneous		40% Quartz 25% Gypsum 35% Non-fibrous (Other)	None Detected
2051-Skim Coat 031823924-0005	1ST FL/ NE - PLASTER	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
2051-Rough Coat 031823924-0005A	1ST FL/ NE - PLASTER	Gray Non-Fibrous Homogeneous	5% Cellulose	30% Quartz 35% Gypsum 30% Non-fibrous (Other)	None Detected

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Initial report from: 09/04/2018 21:24:58



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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2052-Skim Coat 031823924-0006	1ST FL/ SW - PLASTER	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2052-Rough Coat 031823924-0006A	1ST FL/ SW - PLASTER	Gray Non-Fibrous Homogeneous		40% Quartz 30% Gypsum 30% Non-fibrous (Other)	None Detected
2053-Joint Compound 031823924-0007	1ST FL/ NW - DRYWALL W/ JOINT C.	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
2053-Tape 031823924-0007A	1ST FL/ NW - DRYWALL W/ JOINT C.	Tan Fibrous Homogeneous	94% Cellulose	6% Non-fibrous (Other)	None Detected
2053-Sheetrock 031823924-0007B	1ST FL/ NW - DRYWALL W/ JOINT C.	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	60% Gypsum 30% Non-fibrous (Other)	None Detected
2054-Joint Compound 031823924-0008	1ST FL/ NW - DRYWALL W/ JOINT C.	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
2054-Sheetrock 031823924-0008A	1ST FL/ NW - DRYWALL W/ JOINT C.	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	62% Gypsum 28% Non-fibrous (Other)	None Detected
2055-Sheetrock 031823924-0009	1ST FL/ SE - DRYWALL W/ JOINT C.	Gray Non-Fibrous Homogeneous		55% Gypsum 45% Non-fibrous (Other)	None Detected
2055-Joint Compound 031823924-0009A	1ST FL/ SE - DRYWALL W/ JOINT C.	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2056-Texture 031823924-0010	1ST FL/ NE - DRYWALL W/ TEXTURE	Tan/White Non-Fibrous Homogeneous		60% Ca Carbonate 4% Mica 36% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2056-Tape 031823924-0010A	1ST FL/ NE - DRYWALL W/ TEXTURE	Tan Fibrous Homogeneous	92% Cellulose	8% Non-fibrous (Other)	None Detected
2056-Sheetrock 031823924-0010B	1ST FL/ NE - DRYWALL W/ TEXTURE	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	58% Gypsum 32% Non-fibrous (Other)	None Detected
2057-Texture 031823924-0011	1ST FL/ NW - DRYWALL W/ TEXTURE	Tan/White Non-Fibrous Homogeneous		60% Ca Carbonate 4% Mica 36% Non-fibrous (Other)	None Detected
2057-Tape 031823924-0011A	1ST FL/ NW - DRYWALL W/ TEXTURE	Tan Fibrous Homogeneous	92% Cellulose	8% Non-fibrous (Other)	None Detected
2057-Sheetrock 031823924-0011B	1ST FL/ NW - DRYWALL W/ TEXTURE	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	55% Gypsum 35% Non-fibrous (Other)	None Detected
2058-Texture 031823924-0012	1ST FL/ SW - DRYWALL W/ TEXTURE	White Non-Fibrous Homogeneous		55% Ca Carbonate 3% Mica 42% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
2058-Tape 031823924-0012A	1ST FL/ SW - DRYWALL W/ TEXTURE	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
2058-Sheetrock 031823924-0012B	1ST FL/ SW - DRYWALL W/ TEXTURE	Gray Non-Fibrous Homogeneous		65% Gypsum 35% Non-fibrous (Other)	None Detected
2059-Floor Tile 031823924-0013	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous		15% Matrix 85% Non-fibrous (Other)	<1% Chrysotile

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<b>Project:</b> 7076.1017.0/ HALEY & ALDRICH/ CANYON CREST FAMILY HOUSING SURVEY/ UNIVERSITY OF CALIFORNIA RIVERSIDE- HDDRS WAREHOUSE/ CA	

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2059-Mastic 031823924-0013A	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	4% Cellulose	94% Non-fibrous (Other)	2% Chrysotile
2059-Vapor Barrier 031823924-0013B	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
2060-Floor Tile 031823924-0014	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
2060-Mastic 031823924-0014A	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
2060-Vapor Barrier 031823924-0014B	1ST FL/ CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2061-Floor Tile 031823924-0015	1ST FL/ W CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Tan Non-Fibrous Homogeneous		50% Ca Carbonate 48% Non-fibrous (Other)	2% Chrysotile
2061-Mastic 031823924-0015A	1ST FL/ W CENTER - 12" BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	<1% Chrysotile
This is a composite result of inseparable mastic and vapor barrier.					
2062 031823924-0016	1ST FL/ NE - GREY/ WHITE SHEET FL W/ VAPOR	Gray/White Non-Fibrous Homogeneous		22% Ca Carbonate 63% Non-fibrous (Other)	15% Chrysotile
2063-Sheet Flooring 031823924-0017	1ST FL/ SW - GREY/ WHITE SHEET FL W/ VAPOR	Gray/White Non-Fibrous Homogeneous		25% Ca Carbonate 60% Non-fibrous (Other)	15% Chrysotile

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2063-Vapor Barrier 031823924-0017A	1ST FL/ SW - GREY/ WHITE SHEET FL W/ VAPOR	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
2064 031823924-0018	1ST FL/ NW - GREY/ WHITE SHEET FL W/ VAPOR	Brown/White Non-Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
Contain only sheetflooring.					
2065-Sheet Flooring 031823924-0019	1ST FL/ NW - 12" BEIGE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous	20% Cellulose	30% Ca Carbonate 50% Non-fibrous (Other)	None Detected
2065-Mastic 031823924-0019A	1ST FL/ NW - 12" BEIGE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
2066-Sheet Flooring 031823924-0020	1ST FL/ NW - 12" BEIGE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous	20% Cellulose	22% Ca Carbonate 58% Non-fibrous (Other)	None Detected
2066-Mastic 031823924-0020A	1ST FL/ NW - 12" BEIGE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
2066-Vapor Barrier 031823924-0020B	1ST FL/ NW - 12" BEIGE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
2067-Sheet Flooring 031823924-0021	1ST FL/ NE - 12" BEIGE W/ BLACK MASTIC & VAPOR	Brown/Tan Non-Fibrous Homogeneous	25% Cellulose 10% Glass	65% Non-fibrous (Other)	None Detected
2067-Mastic 031823924-0021A	1ST FL/ NE - 12" BEIGE W/ BLACK MASTIC & VAPOR	Brown Non-Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	<1% Chrysotile
This is a composite result of inseparable mastic and vapor barrier.					

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2068-Sheet Flooring 031823924-0022	1ST FL/ NE - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Tan Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
2068-Mastic 031823924-0022A	1ST FL/ NE - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2068-Vapor Barrier 031823924-0022B	1ST FL/ NE - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Gray/Purple Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
2069-Sheet Flooring 031823924-0023	1ST FL/ NW - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Tan Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
2069-Mastic 031823924-0023A	1ST FL/ NW - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2069-Vapor Barrier 031823924-0023B	1ST FL/ NW - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Gray Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
2070-Sheet Flooring 031823924-0024	1ST FL/ NW - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Brown/Gray Non-Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
2070-Mastic 031823924-0024A	1ST FL/ NW - MARBLE SHEET FLOOR W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	10% Cellulose	88% Non-fibrous (Other)	2% Chrysotile
2071-Floor Tile 031823924-0025	1ST FL/ NW - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile

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**Project:** 7076.1017.0/ HALEY & ALDRICH/ CANYON CREST FAMILY HOUSING SURVEY/ UNIVERSITY OF CALIFORNIA RIVERSIDE- HDDRS WAREHOUSE/ CA

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2071-Mastic 031823924-0025A	1ST FL/ NW - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
2072-Floor Tile 031823924-0026	1ST FL/ NE - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Beige Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
2072-Mastic 031823924-0026A	1ST FL/ NE - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2073-Floor Tile 031823924-0027	1ST FL/ SW - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Tan Non-Fibrous Homogeneous		50% Ca Carbonate 48% Non-fibrous (Other)	2% Chrysotile
2073-Mastic 031823924-0027A	1ST FL/ SW - 12" RIGHT BEIGE FLOOR TILE W/ BLACK MASTIC & VAPOR	Black Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
2074-Ceiling Tile 031823924-0028	1ST FL/ SE - FISSURED CEILING TILE: GLUED	Gray Fibrous Homogeneous	45% Cellulose 25% MinWool	10% Perlite 20% Non-fibrous (Other)	None Detected
2074-Glue 031823924-0028A	1ST FL/ SE - FISSURED CEILING TILE: GLUED	Brown Non-Fibrous Homogeneous	5% Cellulose 3% Glass	92% Non-fibrous (Other)	None Detected
2074-Joint Compound 031823924-0028B	1ST FL/ SE - FISSURED CEILING TILE: GLUED	White Non-Fibrous Homogeneous	5% Glass	60% Ca Carbonate 4% Mica 31% Non-fibrous (Other)	None Detected
2074-Sheetrock 031823924-0028C	1ST FL/ SE - FISSURED CEILING TILE: GLUED	Gray Non-Fibrous Homogeneous	15% Cellulose	50% Gypsum 35% Non-fibrous (Other)	None Detected

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Initial report from: 09/04/2018 21:24:58



# EMSL Analytical, Inc.

307 West 38th Street New York, NY 10018

Tel/Fax: (212) 290-0051 / (212) 290-0058

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<b>EMSL Order:</b> 031823924
<b>Customer ID:</b> 32CITA50D
<b>Customer PO:</b>
<b>Project ID:</b>

<b>Attention:</b> Jack Samuels Citadel Environmental Services 151 Kalmus Drive Suite F-4 Costa Mesa, CA 92626	<b>Phone:</b> (562) 599-9918 <b>Fax:</b> (714) 547-4647 <b>Received Date:</b> 08/29/2018 9:58 AM <b>Analysis Date:</b> 09/03/2018 - 09/04/2018 <b>Collected Date:</b> 08/22/2018
<b>Project:</b> 7076.1017.0/ HALEY & ALDRICH/ CANYON CREST FAMILY HOUSING SURVEY/ UNIVERSITY OF CALIFORNIA RIVERSIDE- HDDRS WAREHOUSE/ CA	

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2075-Ceiling Tile 031823924-0029	1ST FL/ W CENTER - FISSURED CEILING TILE: GLUED	Gray Fibrous Homogeneous	50% Cellulose 35% MinWool	10% Perlite 5% Non-fibrous (Other)	None Detected
2075-Sheetrock 031823924-0029A	1ST FL/ W CENTER - FISSURED CEILING TILE: GLUED	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose 2% Glass	60% Gypsum 28% Non-fibrous (Other)	None Detected
2076-Ceiling Tile 031823924-0030	1ST FL/ NE - FISSURED CEILING TILE: GLUED	Brown Fibrous Homogeneous	55% Cellulose 30% MinWool	10% Perlite 5% Non-fibrous (Other)	None Detected
2076-Sheetrock 031823924-0030A	1ST FL/ NE - FISSURED CEILING TILE: GLUED	Tan Non-Fibrous Homogeneous	5% Cellulose	70% Gypsum 25% Non-fibrous (Other)	None Detected
2077-Ceiling Tile 031823924-0031	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
2077-Adhesive 031823924-0031A	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Non-Fibrous Homogeneous	4% Cellulose	94% Non-fibrous (Other)	2% Anthophyllite
2078-Ceiling Tile 031823924-0032	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Fibrous Homogeneous	93% Cellulose	7% Non-fibrous (Other)	None Detected
2078-Adhesive 031823924-0032A	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Non-Fibrous Homogeneous	5% Cellulose	93% Non-fibrous (Other)	2% Anthophyllite
2079-Ceiling Tile 031823924-0033	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2079-Adhesive 031823924-0033A	1ST FL/ S WALL - WALL TILE: SMALL HOLE TILE W/ ADHESIVE	Brown Non-Fibrous Homogeneous	10% Wollastonite	90% Non-fibrous (Other)	<1% Anthophyllite
2080 031823924-0034	1ST FL/ FLOOR: CENTER - TRANSITE PANELS	Gray Non-Fibrous Homogeneous		40% Ca Carbonate 46% Non-fibrous (Other)	14% Chrysotile
2081 031823924-0035	1ST FL/ WALL N - TRANSITE PANELS	Brown/Tan Non-Fibrous Homogeneous		30% Ca Carbonate 60% Non-fibrous (Other)	10% Chrysotile
2082 031823924-0036	1ST FL/ WALL N - TRANSITE PANELS	Gray Non-Fibrous Homogeneous		87% Non-fibrous (Other)	13% Chrysotile
2083 031823924-0037	1ST FL/ SW - BASEBOARD MASTIC	Brown/Tan Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2084 031823924-0038	1ST FL/ CENTER - BASEBOARD MASTIC	Tan Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2085 031823924-0039	1ST FL/ N - BASEBOARD MASTIC	Brown Non-Fibrous Homogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	None Detected
2086 031823924-0040	1ST FL/ E - BASEBOARD MASTIC	Brown Non-Fibrous Homogeneous	11% Cellulose	89% Non-fibrous (Other)	None Detected
2087 031823924-0041	1ST FL/ NE - BASEBOARD MASTIC	Brown Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
2088 031823924-0042	1ST FL/ E - BASEBOARD MASTIC	Brown Non-Fibrous Homogeneous		25% Gypsum 75% Non-fibrous (Other)	None Detected

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**Customer PO:**

**Project ID:**

**Attention:** Jack Samuels  
Citadel Environmental Services  
151 Kalmus Drive  
Suite F-4  
Costa Mesa, CA 92626

**Phone:** (562) 599-9918

**Fax:** (714) 547-4647

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**Project:** 7076.1017.0/ HALEY & ALDRICH/ CANYON CREST FAMILY HOUSING SURVEY/ UNIVERSITY OF CALIFORNIA RIVERSIDE- HDDRS WAREHOUSE/ CA

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2089 031823924-0043	1ST FL/ NW WINDOW - WINDOW PUTTY	Brown/Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
Result includes a small amount of inseparable attached material					
2090 031823924-0044	1ST FL/ NW WINDOW - WINDOW PUTTY	Brown/Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
2091 031823924-0045	1ST FL/ NW WINDOW - WINDOW PUTTY	Brown/Gray Non-Fibrous Homogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	None Detected
Result includes a small amount of inseparable attached material					
2092 031823924-0046	1ST FL/ E OF RM Q - EXTERIOR STUCCO	Brown/White Non-Fibrous Homogeneous		40% Quartz 15% Gypsum 45% Non-fibrous (Other)	None Detected
2093 031823924-0047	1ST FL/ E OF RM A - EXTERIOR STUCCO	White Non-Fibrous Homogeneous		45% Quartz 10% Ca Carbonate 45% Non-fibrous (Other)	None Detected
2094 031823924-0048	1ST FL/ S OF RM A - EXTERIOR STUCCO	White Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 45% Non-fibrous (Other)	None Detected
2095 031823924-0049	1ST FL/ W OF RM Q - EXTERIOR STUCCO	White Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 40% Non-fibrous (Other)	None Detected
2096 031823924-0050	1ST FL/ W OF RM A - EXTERIOR STUCCO	White Non-Fibrous Homogeneous		55% Quartz 45% Non-fibrous (Other)	None Detected
2097 031823924-0051	1ST FL/ S OF RM V - EXTERIOR STUCCO	Brown Non-Fibrous Homogeneous		50% Quartz 25% Ca Carbonate 25% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2098 031823924-0052	1ST FL/ S OF RM T - EXTERIOR STUCCO	Brown Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 1% Mica 29% Non-fibrous (Other)	None Detected
2099 031823924-0053	1ST FL/ N O FRM U - EXTERIOR STUCCO	Tan Non-Fibrous Homogeneous		55% Quartz 45% Non-fibrous (Other)	None Detected
2100 031823924-0054	1ST FL/ W OF RM R - EXTERIOR STUCCO	Beige Non-Fibrous Homogeneous		30% Ca Carbonate 65% Non-fibrous (Other)	5% Chrysotile
2101 031823924-0055	1ST FL/ W OF RM R - EXTERIOR STUCCO	Beige Non-Fibrous Homogeneous		40% Ca Carbonate 57% Non-fibrous (Other)	3% Chrysotile
2102 031823924-0056	1ST FL/ E OF RM R - EXTERIOR STUCCO	Beige Non-Fibrous Homogeneous		30% Quartz 67% Non-fibrous (Other)	3% Chrysotile
2103 031823924-0057	ROOF/ N - MULTIPLE LAYERS: ROOF MEMBRANE	Black Non-Fibrous Homogeneous	5% Glass	10% Quartz 85% Non-fibrous (Other)	None Detected
2104 031823924-0058	ROOF/ SW - MULTIPLE LAYERS: ROOF MEMBRANE	Black Non-Fibrous Homogeneous	10% Glass	15% Quartz 75% Non-fibrous (Other)	None Detected
2105 031823924-0059	ROOF/ CENTER - MULTIPLE LAYERS: ROOF MEMBRANE	Black Non-Fibrous Homogeneous	10% Glass	30% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2106 031823924-0060	ROOF/ SW - MULTIPLE LAYERS: ROOF MEMBRANE	Gray/Black Non-Fibrous Homogeneous		30% Gypsum 70% Non-fibrous (Other)	None Detected
2107 031823924-0061	ROOF/ E - MULTIPLE LAYERS: ROOF MEMBRANE	Black Non-Fibrous Homogeneous		25% Gypsum 75% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2108 031823924-0062	ROOF/ CENTER - MULTIPLE LAYERS: ROOF MEMBRANE	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
2109 031823924-0063	ROOF/ SW - ROOF SHINGLES	Black Non-Fibrous Homogeneous	8% Glass	50% Ca Carbonate 42% Non-fibrous (Other)	None Detected
2110 031823924-0064	ROOF/ N - ROOF SHINGLES	Black Non-Fibrous Homogeneous	11% Glass	40% Ca Carbonate 49% Non-fibrous (Other)	None Detected
2111 031823924-0065	ROOF/ CENTER - ROOF SHINGLES	White/Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
2112 031823924-0066	ROOF/ NW - PENETRATION MASTIC	Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
2113 031823924-0067	ROOF/ E - PENETRATION MASTIC	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
2114 031823924-0068	ROOF/ SE - PENETRATION MASTIC	Black Non-Fibrous Homogeneous		25% Ca Carbonate 66% Non-fibrous (Other)	9% Chrysotile
2115 031823924-0069	ROOF/ N CENTER - HVAC MASTIC	Gray Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	None Detected
2116 031823924-0070	ROOF/ N CENTER - HVAC MASTIC	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2117 031823924-0071	ROOF/ N CENTER - HVAC MASTIC	Gray Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected

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The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

### Report Comments:

Sample Receipt Date:	08/29/2018	Sample Receipt Time:	9:58 AM
Analysis Completed Date:	09/04/2018	Analysis Completed Time:	9:12 PM

### **Analyst(s):**

Krystal Harris PLM (11)

Tiquasha Thompson PLM (53)

Yolanda Chow PLM (49)

### **Samples Reviewed and approved by:**

James Hall, Laboratory Manager  
or other approved signatory

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# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6	DATE: 0 8 2 0 1 8	PAGE 1
CLIENT: Haley & Aldrich	INSPECTOR(S): J. Magallon	OF 3
PROJECT ID: Canyon Crest Family Housing Survey	CSST/CAC NO: 15-6358J	
SITE ADDRESS: University of California Riverside • Maintenance • Ground Shop		

HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREALOCATION				
WS/J 51	1909	white	Drywall Panels	D	1st	S.E. Area	4,000	PF <sup>2</sup>	NA	NA
WS/J 51	1910			E		E. Center				
WS/J 51	1911			G		S.E. Area				
WS/J 51	1912			D		Ceiling: S.W.				
WS/J 51	1913			D		N.W.				
W/P 51	1914	white	Plaster	F		S.W.				
W/P 51	1915					S.E.				
W/P 51	1916					N.E.				
MISC 51	1917	Brown	Compact Wood Boards	F		N. Center				
MISC 51	1918					E. Center				
MISC 51	1919					S.E.				
WS/J 52	1920	white	Drywall	E		S. Center				
WS/J 52	1921					S.E.				
WS/J 52	1922					N. Center				

# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Maintenance Ground Shop

DATE: 0 8 2 0 1 8

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

PAGE 2

OF 3



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
12VFT SB	1923	Beige	Beige Floor Tile w/ Beige Mastic	E	1st	N.W.			NF	G	NA
12VFT SB	1924	✓	✓	✓	✓	S. Center			✓	✓	✓
12VFT SB	1925	✓	✓	✓	✓	E. Center			✓	✓	✓
FVB 52	1926	Black	Sub Floor Vapor Bar.	D		E. Center			F	✓	✓
FVB 52	1927	✓	✓	✓	✓	S.W.			✓	✓	✓
FVB 52	1928	✓	✓	A		S.W.			✓	✓	✓
WP 50	1929	white	Window Putty	Exterior		Garage: N.W.			F	D	W
WP 50	1930	✓	✓	✓	✓	E. of Pm. G			✓	✓	✓
WP 50	1931	✓	✓	✓	✓	E. of Pm. D			✓	✓	✓
MISC 52	1932	Grey	Exterior Transite 1x2 Panels	Exterior		N.W.	2500	ft <sup>2</sup>	F	G	NA
MISC 52	1933	✓	✓	✓	✓	N.			✓	✓	✓
MISC 57	1934	✓	✓	✓	✓	E.			✓	✓	✓
MISC 52	1935	✓	✓	✓	✓	S.E.			✓	✓	✓
MISC 52	1936	✓	✓	✓	✓	SW S.W.			✓	✓	✓

# 511802583

# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Maintenance / Ground Shop

DATE: 08 20 18

INSPECTOR(S): J. Magallon

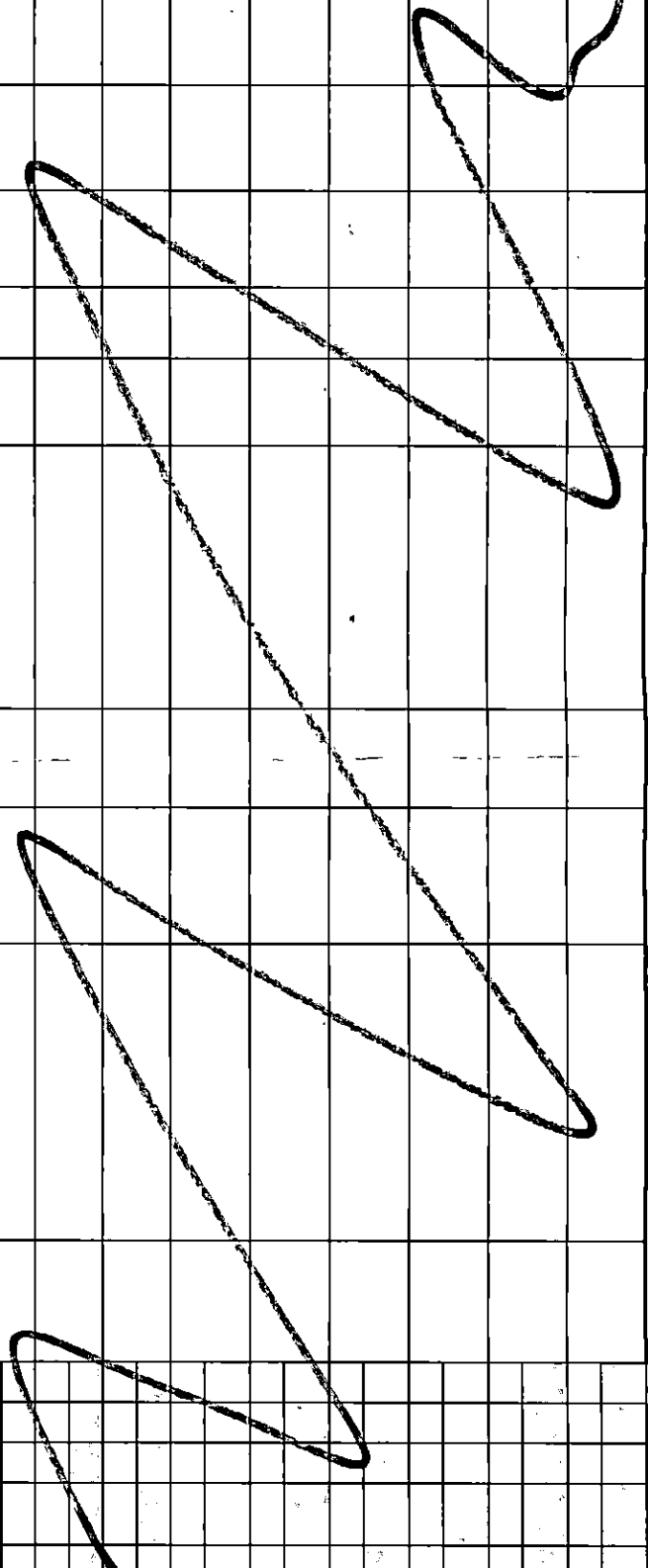
CSSTICAC NO: 15-5358

PAGE 3

OF 3



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
PS	1937	Red	Roof Shingles	Roof	Roof	E. Center	2500	NF	⊙	W
SI										
PS	1938					N.E.				
SI										
PS	1939					N.W.				
SI										
PS	1940					S.E.				
SI										
PS	1941					S.W.				
SI										



②

#511802583



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Seattle	<b>Phone Number:</b>	
		<b>Fax Number:</b>	

**Does new lab hold equivalent or additional accreditation? \***       Yes     No

<b>EMSL Customer ID # (if known):</b>	32CITA50D
<b>Client Name:</b>	Citadel Environmental Services
<b>Client Project:</b>	Various
<b>Tests to be Performed:</b>	PLM
<b>Date Received:</b>	8/27/18
<b>Date Relinquished:</b>	8/28/18
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out

<b>Relinquished by (Signature):</b> 	<b>Date:</b> 8/18	<b>Received by (Signature):</b> 	<b>Date:</b> 8/29/18	<b>Time:</b> 9:00 AM
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>	

**Customer Agreement-** Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications\* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.

<b>Name (please print):</b> Claudia Morner	<b>Signature:</b> 	<b>Agent of:</b> LA Testing	<b>Date:</b> 8/28
---	-----------------------	--------------------------------	----------------------

*If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.*

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.  
 Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

#511802587

CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone:(562) 599-9918  
Fax: (714) 547-4647

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone:(661) 257-9009  
Fax:(661) 257-9019

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone:(310) 212-1714  
Fax:(310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 221

SAMPLE NUMBERS: 1909-2129

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

BULK

SOIL

ZEFON  
 AIR-O-CELL

ANDERSEN  
 PLATE

OTHER

TYPE OF ANALYSIS:

Asbestos

Phase Contrast Microscopy

Polarized Light Microscopy

1st Positive Stop

Point Count  400 Point Count  1000 Point Count

Transmission Electron Microscopy

Qualitative  Quantitative

Culturable Air

Andersen Fungi (genue ID, Aspergillus)

Andersen Bacteria

Non-Culturable Air

Non-Viable Spore Trap Slide

Surface Samples

Surface Sample (direct examination)

Lead

Flame Atomic Absorption

TTLC

STLC

TCLP

Culturable Samples

Quantitative Fungi-dust, bulk swab-1 medium

Quantitative Fungi-dust, bulk swab-3 media

Quantitative Bacteria-dust, bulk swab-1 medium

Quantitative Bacteria-dust, bulk, swab-3 media

E.coli and Coliforms (MUG)

Other

TURNAROUND TIME (CIRCLE ONE):

Rush

12 HOURS

24 HOURS

48 HOURS

3 DAYS

5 DAYS

5-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN REPORT

PDF

NOTES/COMMENTS:

Special Project "JS" Perform layered analysis and provide layered results.

TRANSMITTAL RECORD:

Relinquished By: *JF Mjell*

Date: 08-27-18

Time: \_\_\_\_\_

Received By: *[Signature]*

Date: 8/27

Time: 1:30

Relinquished By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

OTHER

RETAIN FOR

\_\_\_\_\_ DAYS

YEAR (S)



#511802587



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Seattle	<b>Phone Number:</b>	
		<b>Fax Number:</b>	

**Does new lab hold equivalent or additional accreditation? \***  Yes  No

<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM		
<b>Date Received:</b>	8/27/18		
<b>Date Relinquished:</b>	8/28/18		
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out		
<b>Relinquished by (Signature):</b> 	<b>Date:</b> 8/18	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>

**Customer Agreement-** Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications\* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.

<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Claudia Martinez		LA Testing	8/28

*If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.*

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.  
 Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Dallas	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM		
<b>Date Received:</b>	8/27/18		
<b>Date Relinquished:</b>	8/28/18		
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out		
<b>Relinquished by (Signature):</b> 	<b>Date:</b> 8/28	<b>Received by (Signature):</b> 	<b>Date:</b> 8/29/18
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement</b> - Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Claudia Martinez		LA Testing	8/28
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

EPEDEX 7955 5452 9910



111801352

### CHAIN OF CUSTODY



#### CITADEL LOCATION:

<input type="checkbox"/> <b>GLENDALE</b>	<input checked="" type="checkbox"/> <b>ORANGE COUNTY</b>	<input type="checkbox"/> <b>VALENCIA</b>	<input type="checkbox"/> <b>TORRANCE OFFICE</b>
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone:(562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone:(661) 257-9009 Fax:(661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone:(310) 212-1714 Fax:(310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

**PROJECT NUMBER:** 7076.1017.0

**PROJECT ID:** Canyon Crest Family Housing Survey

**NUMBER OF SAMPLES:** 221

**SAMPLE NUMBERS:** 1909-2129

**TYPE OF SAMPLES (CIRCLE ONE):**

<input type="radio"/> AIR	<input type="radio"/> TAPE	<input type="radio"/> WATER	<input type="radio"/> WIPE
<input type="radio"/> BULK	<input type="radio"/> SOIL	<input type="radio"/> ZEFON	<input type="radio"/> ANDERSEN
		<input type="radio"/> AIR-O-CELL	<input type="radio"/> PLATE
			<input type="radio"/> OTHER

**TYPE OF ANALYSIS:**

<input checked="" type="checkbox"/> <b>Asbestos</b>	<input type="checkbox"/> <b>Lead</b>
<input checked="" type="checkbox"/> Phase Contrast Microscopy	<input type="checkbox"/> Flame Atomic Absorption
<input type="checkbox"/> Polarized Light Microscopy	<input type="checkbox"/> TTLC
<input type="checkbox"/> 1st Positive Stop	<input type="checkbox"/> STLC
<input type="checkbox"/> Point Count	<input type="checkbox"/> TCLP
<input type="checkbox"/> 400 Point Count	
<input type="checkbox"/> 1000 Point Count	
<input type="checkbox"/> Transmission Electron Microscopy	
<input type="checkbox"/> Qualitative	<input type="checkbox"/> Quantitative

<b>Culturable Air</b>	<b>Culturable Samples</b>
<input type="checkbox"/> Andersen Fungi (genue ID, Aspergillus)	<input type="checkbox"/> Quantitative Fungi-dust, bulk swab-1 medium
<input type="checkbox"/> Andersen Bacteria	<input type="checkbox"/> Quantitative Fungi-dust, bulk swab-3 media
<b>Non-Culturable Air</b>	<input type="checkbox"/> Quantitative Bacteria-dust, bulk swab-1 medium
<input type="checkbox"/> Non-Viable Spore Trap Slide	<input type="checkbox"/> Quantitative Bacteria-dust, bulk, swab-3 media
<b>Surface Samples</b>	<input type="checkbox"/> E.coli and Coliforms (MUG)
<input type="checkbox"/> Surface Sample (direct examination)	<b>Other</b>

**TURNAROUND TIME (CIRCLE ONE):**

Rush	12 HOURS	24 HOURS	48 HOURS
3 DAYS	5 DAYS	5-10 DAYS	OTHER

**REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):**

<input type="checkbox"/> PHONE	<input type="checkbox"/> FAX	<input type="checkbox"/> WRITTEN REPORT	<input checked="" type="checkbox"/> PDF
--------------------------------	------------------------------	---	---

**NOTES/COMMENTS:**

Special Project "JS" - Perform layered analysis and provide layered results.

Please copy Jessica Aburto jaburto@citadelenvironmental.com on all confirmations and reports.

**TRANSMITTAL RECORD:**

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: 08-27-18	Date: 8/27
Time: _____	Time: 1:30
Relinquished By: _____	Received By: _____
Date: _____	Date: _____
Time: _____	Time: _____

**LABORATORY INFORMATION:**

NAME: \_\_\_\_\_ LOCATION: \_\_\_\_\_

**DISPOSITION OF SAMPLES:**

<input type="checkbox"/> RETURN _____ DAYS AFTER ANALYSIS	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> RETAIN FOR _____ DAYS	<input type="checkbox"/> YEAR (S) _____

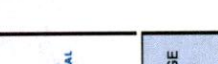
# BULK SAMPLING DATA FORM

PROJECT NO.:		7 0 7 6		1 0 1 7 0		DATE:		0 8 2 1 1 8		PAGE	
CLIENT:		Haley & Aldrich				INSPECTOR(S):		J. Magallon		OF	
PROJECT ID:		Canyon Crest Family Housing Survey				CSST/CAC NO.:		15-5358		4	
SITE ADDRESS:		University of California Riverside - Community Center				BULK SAMPLE LOCATION		QUANTITY		FRIABILITY	
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE	
		COLOR	TEXTURE/PATTERN								
WDF 51	1947	white	Plaster w/ Button	E	1st	S.E.	6440	Ft <sup>2</sup>	G	NA	
WDF 52	1948			H		E. Center					
WDF 52	1949			D		N.W.					
WDF 52	1950			B		S. Center					
WDF 52	1951			A		w. Center					
WDF 52	1952			I		N.W.					
WDF 52	1953			H		N. Center					
WS/J 53	1954	white	Drywall w/ Joint	E		S.E.	800	Ft <sup>2</sup>			
WS/J 53	1955			D		N.E.					
WS/J 53	1956			B		N.E.					
VSF 64	1957	white	Top layer: 6" Square Sheet Floor w/ Mastic	H		N.E.			F		
VSF 64	1958			C		S. Center					
VSF 64	1959			A		N.E.					
12VFT 59	1960	Beige	Middle layer: Beige Floor Tile w/ Black Mastic	E		N.E.					



# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 1 1 8		PAGE 2						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 1575358		4						
SITE ADDRESS: University of California Riverside - Community Center		BULK SAMPLE LOCATION		FRIABILITY						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN							
12VFT 59	1 9 6 1	Beige	Middle Layer: Beige Floor Tile w/ Black Mastic	H	1st	N.E.			NF	NA
12VFT 59	1 9 6 2			I		N.E.				
12VFT 59	1 9 6 3			<del>NA</del>		N.W.				
12VFT 59	1 9 6 4			B		N.E.				
9VFT 61	1 9 6 5	Brown	Bottom Layer: Brown Floor Tile w/ Black Mastic & Vapor Paper	E		N.E.				
9VFT 51	1 9 6 6			H		N.E.				
9VFT 51	1 9 6 7			I		N.E.				
9VFT 51	1 9 6 8			A		N.E.				
9VFT 51	1 9 6 9			B		N.W.				
VSF 65	1 9 7 0	Yellow	Bottom Layer: Yellow Sheet Floor w/ Mastic & Barrier Paper	G		N.E.			F	
VSF 65	1 9 7 1									
VSF 65	1 9 7 2									
VSF 65	1 9 7 3									
VSF 66	1 9 7 4	Beige	Bottom Layer: Beige w/ Specs Sheet Floor w/ Black Mastic & Vapor	F		N.W.				
VSF 60	1 9 7 4									



# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 1 1 8		PAGE 3						
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF						
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		4						
SITE ADDRESS: University of California Riverside - Community Center		BULK SAMPLE LOCATION		MATERIAL CONDITION						
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN							
VSF 66	1975	Beige	Bottom Layer: Beige w/ Specs Floor	F	1st	N. Center			F	G
FCM 50	1976	Beige	Carpet Mastic	E		N.W.			NF	
FCM 50	1977			F		N.W.				
FCM 50	1978			B		S.W.				
FBM 52	1979	white	Grey Baseboard Vinyl Mastic	D		S.E.				
FBM 52	1980			H		S. Center				
FBM 52	1981			B		N.W.				
WP 51	1982	white	Window Putty	Exterior		N.E.			F	
WP 51	1983					N.W.				
WP 51	1984					N.W.				
USM 53	1985	Grey	Sink Mastic	A		S. Center				
USM 53	1986					E. Center				
USM 53	1987									
ES 63	1988	Orange	Stucco	Exterior		N. Center			NF	



# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 1 1 8		PAGE 4 OF 4				
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.				
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION				
SITE ADDRESS: University of California Riverside - Community Center		BULK SAMPLE LOCATION		FRIABILITY				
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN					
ES	1989	Orange	Stucco	1st	N.E.			NA
ES	1990				S.E.			
ES	1991				S.W.			
ES	1992				W.Center			
ES	1993	Red	Roof Shingles	Roof	N.W.			
ES	1994							
ES	1995							
ES	1996							
ES	1997							

2222

ORIGIN ID: APVA (714) 828-4999  
CONTACT NAME: LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA 92649  
UNITED STATES US

SHIP DATE: 28AUG18  
ACTWGT: 1.00 LB  
CAD: 1025098837MSX12500

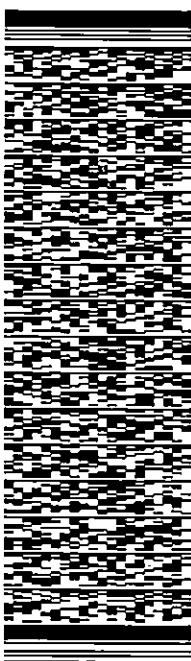
TO **SAMPLE RECEIVING**

**EMSL ANALYTICAL, INC.**  
**2307 SPRINGLAKE ROAD**  
**SUITE 510**

**DALLAS TX 75234**

REF: ARL-MEB(A)  
INV: (972) 892-9928  
RMA: 33LATEST  
DEPT: PO

552J16309/DCA5



TRK# 7955 5452 9510  
0221

**RETURNS MON-FRI**  
**PRIORITY OVERNIGHT**

TX-US

**75234**



**Disclaimer**

Use of this FedEx shipping label is subject to the following restrictions and conditions:

**IMPORTANT! Do not duplicate this label. Each package must contain a unique tracking number in order to maintain tracking and billing integrity.**

1. The shipment must be via FedEx packaging (FedEx envelope pack or FedEx box); this free shipping label is not valid for use on non-standard FedEx packages nor coolers or other large boxes.
2. Valid for shipment of the following samples only: Lead analysis of paint chips, air samples, or wipe samples; Asbestos testing of bulk material samples, wipe/dust samples, or air sample cassettes; Microbiology air samples or bulk samples, tape lift samples, and/or swab samples. This label and shipping is not valid for shipment of any sample that requires a cooler or any other sample type not specifically described herein.
3. The package shipment must exceed a minimum of \$100 in analytical fees. If this minimum is not met, a minimum shipping fee of \$15 will be added to the analysis invoice.
4. Not valid for the shipping of any hazardous materials or items prohibited to be shipped by these means.
5. Valid for only those accounts pre-approved to use this service. This courtesy shipping service may be terminated at any time by EMSL for any customer accounts that are not in good standing due to late payment /COD Status, or any other reason in the sole determination of EMSL.
6. Any additional fees, including, but not limited to, custom pickup fees from FedEx, excessive weight fees, and any surcharge items added by FedEx, associated with this label/package will be back-charged to the customer that made the shipment.
7. This label is not valid for weekend or holiday deliveries.
8. Excludes Summa Canisters, Equipment Rental and Loaner Returns.
9. Valid in the Continental United States and within Canada.
10. For Metals (Air, Chips & Wipes), IH Organics (Formaldehyde, Methamphetamine, Isocyanates, BTEX, etc.), Combustion By-Products (Soot)/Material Identification, and Silica, Respirable Dust/Total Dust: Based on the method you are choosing, please confirm with the lab or your sales rep to determine they can perform the specific method you require, prior to shipping samples.

## CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

### CITADEL LOCATION:

GLENDALE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

ORANGE COUNTY

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

VALENCIA

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 221

SAMPLE NUMBERS: 1909-2129

TYPE OF SAMPLES (CIRCLE ONE):

AIR

TAPE

WATER

WIPE

BULK

SOIL

ZEFON

ANDERSEN

OTHER

TYPE OF ANALYSIS:

Asbestos

Lead

Phase Contrast Microscopy

Flame Atomic Absorption

Polarized Light Microscopy

TTLIC

STLC

TCLP

1st Positive Stop

Point Count \_\_\_\_\_ 400 Point Count \_\_\_\_\_ 1000 Point Count \_\_\_\_\_

Transmission Electron Microscopy

Qualitative \_\_\_\_\_ Quantitative \_\_\_\_\_

Culturable Air

Culturable Samples

Andersen Fungi (genue ID, Aspergillus)

Quantitative Fungi-dust, bulk swab-1 medium

Andersen Bacteria

Quantitative Fungi-dust, bulk swab-3 media

Non-Culturable Air

Quantitative Bactena-dust, bulk swab-1 medium

Non-Viable Spore Trap Slide

Quantitative Bacteria-dust, bulk, swab-3 media

Surface Samples

E.coli and Coliforms (MUG)

Surface Sample (direct examination)

Other

TURNAROUND TIME (CIRCLE ONE):

Rush

12 HOURS

24 HOURS

48 HOURS

3 DAYS

5 DAYS

5-10 DAYS

OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

PHONE

FAX

WRITTEN REPORT

PDF

NOTES/COMMENTS:

Special Project JS - Perform layered analysis and provide layered results

TRANSMITTAL RECORD:

Relinquished By: [Signature]

Received By: [Signature]

Date: 08-27-18

Time: \_\_\_\_\_

Date: 8/27

Time: 1:30

Relinquished By: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

RETURN

\_\_\_\_\_ DAYS AFTER ANALYSIS

OTHER

RETAIN FOR

\_\_\_\_\_ DAYS

YEAR(S)

# BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - Laundry Room Building

DATE: 08 21 18

INSPECTOR(S): J. Magallon

CSST/CAC NO: 15-5358

PAGE 1

OF 2



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY		FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	NO.	UNIT			
WS/J 54	1998	white	Drywall w/ Joint-C.	A	1st	S.E.	1000	ft <sup>2</sup>	NF	G	NA
WS/T 54	1999			B		S.W.					
WS/J 54	2000			F		S.E.					
WS/J 54	2001			A		Ceiling: W. Center					
WS/J 54	2002			D		S.E.					
12VFT 60	2003	Beige	Beige Floor Tile w/ Beige Mastic	A		S.E.					
12VFT 60	2004					N.W.					
12VFT 60	2005			B		S. Center			V		
VSF 57	2006	white	Small Triangle Shred Floor w/ Mastic	F		N.E.			F		
VSF 57	2007					S.E.					
VSF 57	2008					S.W.					
WP 52	2009	white	Window Putty	Exterior		S.W.					
WP 52	2010					Window					
WP 52	2011								V		

#511802576





#511802576



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Seattle	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>EMSL Customer ID # (if known):</b>	32CITA50D
<b>Client Name:</b>	Citadel Environmental Services
<b>Client Project:</b>	Various
<b>Tests to be Performed:</b>	PLM
<b>Date Received:</b>	8/27/18
<b>Date Relinquished:</b>	8/28/18
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out
<b>Relinquished by (Signature):</b>	<b>Date:</b> 8/18
<b>Received by (Signature):</b>	<b>Date:</b> 8/28/18 9:00 AM
<b>Relinquished by (Signature):</b>	<b>Date:</b>
<b>Received by (Signature):</b>	<b>Date:</b>

**Customer Agreement-** Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications\* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.

<b>Name (please print):</b>	<b>Signature:</b>	<b>Agent of:</b>	<b>Date:</b>
Claudia Martinez		LA Testing	8/28

*If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.*

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.  
 Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

CITADEL LOCATION:

GLENDALE

ORANGE COUNTY

VALENCIA

TORRANCE OFFICE

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
1725 Victory Blvd.  
Glendale, CA 91201  
Phone: (818) 246-2707  
Fax: (818) 246-3145

Contact: Jack Samuels  
jsamuels@citadelenvironmental.com  
151 Kalmus Drive, Suite F-4  
Costa Mesa, CA 92626  
Phone: (562) 599-9918  
Fax: (714) 547-4647

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
28212 Kelly Johnson Parkway  
Valencia, CA 91355  
Phone: (661) 257-9009  
Fax: (661) 257-9019

Contact: \_\_\_\_\_  
email: \_\_\_\_\_  
3700 West 190th Street  
Torrance, CA 90509  
Phone: (310) 212-1714  
Fax: (310) 212-1702

PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 221

SAMPLE NUMBERS: 1909-2129

TYPE OF SAMPLES (CIRCLE ONE):

- AIR
- BULK
- TAPE
- SOIL
- WATER
- ZEFON
- AIR-O-CELL
- WIPE
- ANDERSEN
- PLATE
- OTHER

TYPE OF ANALYSIS:

Asbestos

- Phase Contrast Microscopy
- Polarized Light Microscopy
- 1st Positive Stop
- Point Count
- 400 Point Count
- 1000 Point Count
- Transmission Electron Microscopy
- Qualitative
- Quantitative

Lead

- Flame Atomic Absorption
- TTLC
- STLC
- TCLP

Culturable Air

- Andersen Fungi (genus ID, Aspergillus)
- Andersen Bacteria

Non-Culturable Air

- Non-Viable Spore Trap Slide

Surface Samples

- Surface Sample (direct examination)

Culturable Samples

- Quantitative Fungi-dust, bulk swab-1 medium
- Quantitative Fungi-dust, bulk swab-3 media
- Quantitative Bacteria-dust, bulk swab-1 medium
- Quantitative Bacteria-dust, bulk, swab-3 media
- E.coli and Coliforms (MUG)

Other

TURNAROUND TIME (CIRCLE ONE):

- Rush
- 12 HOURS
- 24 HOURS
- 48 HOURS
- 3 DAYS
- 5 DAYS
- 5-10 DAYS
- OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

- PHONE
- FAX
- WRITTEN REPORT
- PDF

NOTES/COMMENTS:

Special Project "JS" - Perform layered analysis and provide layered results.

TRANSMITTAL RECORD:

Relinquished By: [Signature]  
 Date: 08-27-18 Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature]  
 Date: 8/27 Time: 1:30  
 Received By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY INFORMATION:

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

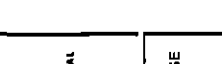
DISPOSITION OF SAMPLES:

- RETURN \_\_\_\_\_ DAYS AFTER ANALYSIS
- RETAIN FOR \_\_\_\_\_ DAYS

- OTHER \_\_\_\_\_
- YEAR (S) \_\_\_\_\_

# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 1 1 8		PAGE 1							
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 2							
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-8358									
SITE ADDRESS: University of California Riverside - 3358 Utah		BULK SAMPLE LOCATION		DAMAGE TYPE							
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	AREA/LOCATION	QUANTITY		FRIABILITY	MATERIAL CONDITION	
		COLOR	TEXTURE/PATTERN				NO.	UNIT			
WS/J 65	2024	White	Drywall w/ Joint	E	1st	N.W.	900	ft <sup>2</sup>	NF	G	NA
WS/J 55	2025	↓	↓	↓	↓	S.W.	↓	↓	↓	↓	↓
WS/J 55	2026	↓	↓	↓	↓	S.E.	↓	↓	↓	↓	↓
FBM 53	2027	white	Baseboard Mastic	F		S.W.					
FBM 53	2028	↓	↓	C		S.E.					
FBM 53	2029	↓	↓	E		E. Center			↓		
VSF 67	2030	White	Brown Specs Floor Sheet w/ Mastic	F		N.W.			F		
VSF 67	2031	↓	↓	↓		N.E.			↓		
VSF 67	2032	↓	↓	↓		S.E.			↓		
ES 55	2033	Grey	Exterior Stucco	Exterior		W			NF		
ES 55	2034	↓	↓	↓		S.W.			↓		
ES 55	2035	↓	↓	↓		S.E.			↓		
ES 55	2036	↓	↓	↓		S.			↓		
ES 55	2037	↓	↓	↓		S.W.			↓		



# BULK SAMPLING DATA FORM

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside • 3358 Utah

DATE: 08 21 18

INSPECTOR(S): J. Magallon

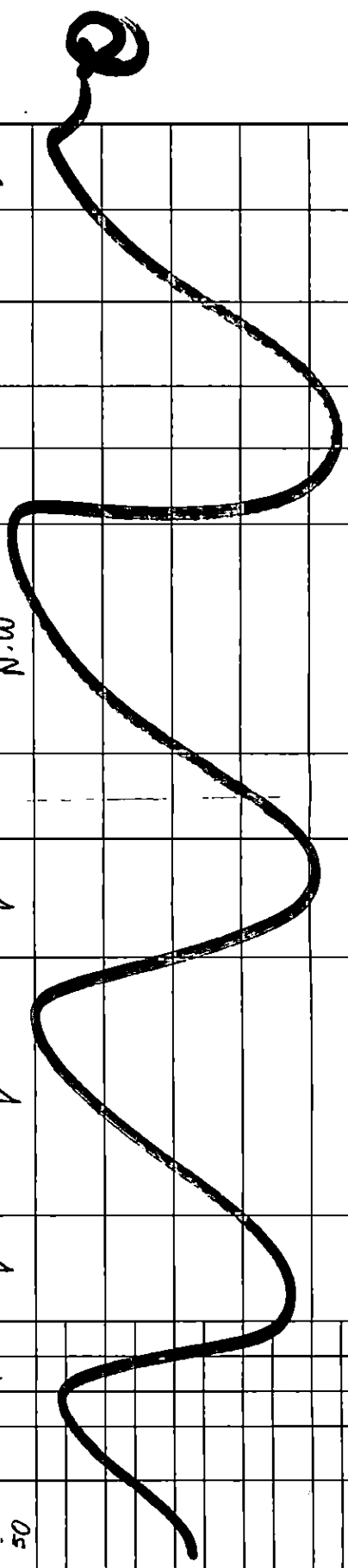
CSST/CAC NO.:

PAGE 2

OF 2



HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION				
REM	2038	Black	Roof Field Membrane	Roof	Roof	SE		NF	G	NA
REM	2039					Center				
REM	2040					N.W.				
RPM	2041		Penetration			S.E.				
RPM	2042					N.W.				
RPM	2043					N.E.				
RP	2044		Roof Patch			Center				
RP	2045					W. Center				
RP	2046					N.W.				



#511802577

#511802577



## EMSL Analytical, Inc. Sample Transfer Form

<b>Receiving Lab:</b>	EMSL- Huntington Beach	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Relinquished to:</b>	EMSL- Seattle	<b>Phone Number:</b>	
		<b>Fax Number:</b>	
<b>Does new lab hold equivalent or additional accreditation? *</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>EMSL Customer ID # (if known):</b>	32CITA50D		
<b>Client Name:</b>	Citadel Environmental Services		
<b>Client Project:</b>	Various		
<b>Tests to be Performed:</b>	PLM		
<b>Date Received:</b>	8/27/18		
<b>Date Relinquished:</b>	8/28/18		
<b>Date Due:</b>	1 week TAT Due 9/4/18 1:30 PM		
<b>Special Instructions:</b> (e.g. Work Order # , required qualifications, project specific procedures/modifications)	*Verified and counted for by HB admin*  Per Jack Samuels; okay to send out		
<b>Relinquished by (Signature):</b> 	<b>Date:</b> 8/28	<b>Received by (Signature):</b> 	<b>Date:</b> 8/28/18 9:00 AM
<b>Relinquished by (Signature):</b>	<b>Date:</b>	<b>Received by (Signature):</b>	<b>Date:</b>
<b>Customer Agreement-</b> Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.			
<b>Name (please print):</b> Claudia Maldonado	<b>Signature:</b> 	<b>Agent of:</b> LA Testing	<b>Date:</b> 8/28
<i>If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.</i>			

\* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

### CHAIN OF CUSTODY



CITADEL ENVIRONMENTAL SERVICES, INC.

#### CITADEL LOCATION:

<input type="checkbox"/> GLENDALE	<input checked="" type="checkbox"/> ORANGE COUNTY	<input type="checkbox"/> VALENCIA	<input type="checkbox"/> TORRANCE OFFICE
Contact: _____ email: _____ 1725 Victory Blvd. Glendale, CA 91201 Phone: (818) 246-2707 Fax: (818) 246-3145	Contact: Jack Samuels jsamuels@citadelenvironmental.com 151 Kalmus Drive, Suite F-4 Costa Mesa, CA 92626 Phone: (562) 599-9918 Fax: (714) 547-4647	Contact: _____ email: _____ 28212 Kelly Johnson Parkway Valencia, CA 91355 Phone: (661) 257-9009 Fax: (661) 257-9019	Contact: _____ email: _____ 3700 West 190th Street Torrance, CA 90509 Phone: (310) 212-1714 Fax: (310) 212-1702

#### PROJECT AND SAMPLE INFORMATION

PROJECT NUMBER: 7076.1017.0

PROJECT ID: Canyon Crest Family Housing Survey

NUMBER OF SAMPLES: 221      SAMPLE NUMBERS: 1909-2129

TYPE OF SAMPLES (CIRCLE ONE):

<input type="radio"/> AIR	<input type="radio"/> TAPE	<input type="radio"/> WATER	<input type="radio"/> WIPE
<input type="radio"/> BULK	<input type="radio"/> SOIL	<input type="radio"/> ZEFON	<input type="radio"/> ANDERSEN
		<input type="radio"/> AIR-O-CELL	<input type="radio"/> PLATE
			<input type="radio"/> OTHER

TYPE OF ANALYSIS:

**Asbestos**

Phase Contrast Microscopy

Polarized Light Microscopy

1st Positive Stop

Point Count     400 Point Count     1000 Point Count

Transmission Electron Microscopy

Qualitative     Quantitative

**Lead**

Flame Atomic Absorption

TTLC     STLC     TCLP

**Culturable Air**

Andersen Fungi (genue ID, Aspergillus)

Andersen Bacteria

**Non-Culturable Air**

Non-Viable Spore Trap Slide

**Surface Samples**

Surface Sample (direct examination)

**Culturable Samples**

Quantitative Fungi-dust, bulk swab-1 medium

Quantitative Fungi-dust, bulk swab-3 media

Quantitative Bacteria-dust, bulk swab-1 medium

Quantitative Bacteria-dust, bulk, swab-3 media

E.coli and Coliforms (MUG)

**Other**

\_\_\_\_\_

ENHANCED MATHEMATICS LAB  
 RECEIVED  
 18 AUG 29 AM 9:57

TURNAROUND TIME (CIRCLE ONE):

<input type="radio"/> Rush	<input checked="" type="radio"/> 12 HOURS	<input type="radio"/> 24 HOURS	<input type="radio"/> 48 HOURS
<input type="radio"/> 3 DAYS	<input type="radio"/> 5 DAYS	<input type="radio"/> 5-10 DAYS	<input type="radio"/> OTHER

REPORT RESULTS VIA (CIRCLE ALL THAT APPLY):

<input type="checkbox"/> PHONE	<input type="checkbox"/> FAX	<input type="checkbox"/> WRITTEN REPORT	<input checked="" type="checkbox"/> PDF
--------------------------------	------------------------------	---	---

NOTES/COMMENTS: **Special Project "JS" - Perform layered analysis and provide layered results.**

*Please copy Jessica Adams and upload to environment.com on all communications and reports.*

TRANSMITTAL RECORD:

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Date: <u>08-27-18</u> Time: _____	Date: <u>8/27</u> Time: <u>1:30</u>
Relinquished By: _____	Received By: <u>[Signature]</u>
Date: _____ Time: _____	Date: <u>8/29/18</u> Time: <u>9:57A</u>

LABORATORY INFORMATION:      NAME: \_\_\_\_\_      LOCATION: \_\_\_\_\_

DISPOSITION OF SAMPLES:

<input type="checkbox"/> RETURN _____ DAYS AFTER ANALYSIS	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> RETAIN FOR _____ DAYS	<input type="checkbox"/> YEAR (S) _____

KCM 9/4

xc 9/4/18 2:13pm

Copied by [Signature] 9/3/18 6:40AM

031823924

**BULK SAMPLE DATA FORM**

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 2 1 8		PAGE 1					
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		OF 6					
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358							
SITE ADDRESS: University of California Riverside - HDPS Warehouse		BULK SAMPLE LOCATION AREA/LOCATION		FRIABILITY					
HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		UNIT	LEVEL	QUANTITY NO.	UNIT	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN						
WDF 53	2047	White	Plaster w/ Button	Q	1st			NA	
WDF 53	2048			J					
WDF 53	2049			G					
WDF 54	2050	Grey	Plaster	O					
WDF 54	2051			L					
WDF 54	2052			K					
WS/J 56	2053	White	Drywall w/ JointC.	S					
WS/J 56	2054			J					
WS/J 56	2055			D					
WS/J 57	2056	White	Drywall w/ Texture	H					
WS/J 57	2057								
WS/J 57	2058								
12VFT 61	2059	Beige	12" Beige Floor Tile w/ Black Mastic & Vapor	H					
12VFT 61	2060			E					

ENSL MANHATTAN LAB RECEIVED

18 AUG 29 AM 9:57

*Handwritten signatures and initials*

TT 9/3/18

KAH 9/4

XC 9/4/18 2:13PM



031823924

BULK SAMPLE DATA FORM

ENSL MANHATTAN LAB RECEIVED

18 AUG 29 AM 9:38

*Demond  
S. Wells  
C. SEA*

TC 9/3/18

Kathy 9/14

YC 9/14/18  
2:13PM

PROJECT NO:	7 0 7 6				1 0 1 7 0				DATE: 0 8 2 2 1 8				PAGE
	CLIENT: Haley & Aldrich								INSPECTOR(S): J. Magallon				
PROJECT ID:	Canyon Crest Family Housing Survey								CSST/CAC NO: 15-5358				6
SITE ADDRESS:	University of California Riverside - HDPS Warehouse								BULK SAMPLE LOCATION				
HA TYPE	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION		QUANTITY	DAMAGE TYPE	MATERIAL CONDITION	FRIABILITY	DAMAGE TYPE			
		COLOR	TEXTURE/PATTERN	UNIT	LEVEL						AREA/LOCATION	NO.	UNIT
12VFT 61	2061	Beige	12" Beige Floor Tile w/ Mastic & Vapor	A	1st		NA	GF	NF	NA			
VSF 68	2062	Black	Grey/White Sheet-FI w/ Vapor	Q					F				
VSF 68	2063			J					✓				
VSF 68	2064			M					✓				
12VFT 62	2065	Light Beige	12" Light Beige Floor Tile, w/ Black Mastic & Vapor	L					NF				
12VFT 62	2066								✓				
12VFT 62	2067								✓				
VSF 69	2068	Black	Marble Sheet Floor w/ Black Mastic & Vapor	G					F				
VSF 69	2069								✓				
VSF 69	2070								✓				
12VFT 63	2071	Light Beige	12" Light Beige Floor Tile w/ Black Mastic & Vapor	R					NF				
12VFT 63	2072								✓				
12VFT 63	2073								✓				
CT 50	2074	White	Fissured Ceiling Tile: Glued	F					F				

031823924

**BULK SAMPLE DATA FORM**

PROJECT NO.: 7 0 7 6 1 0 1 7 0

CLIENT: Haley & Aldrich

PROJECT ID: Canyon Crest Family Housing Survey

SITE ADDRESS: University of California Riverside - ~~HDRS~~ Warehouse

DATE: 0 8 2 2 1 8  
 INSPECTOR(S): J. Magallon  
 CSST/CAC NO: 15-5358

PAGE 3 OF 6



HA TYPE HA NO.	SAMPLE NO.	MATERIAL DESCRIPTION		BULK SAMPLE LOCATION			QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
		COLOR	TEXTURE/PATTERN	LEVEL	AREA/LOCATION	UNIT					
CT	2075	White	Fissured Ceiling Tile: Glued	1st	W. Center		F		G	NA	
SO	2076				N.E.						
CT	2077	White	Small Hole Tile w/ Adhesive		S. Wall						
SI	2078										
CT	2079										
SI	2080	Grey	Transite Panels		Floor: Center						
MISC	2081				Wall: N						
SI	2082				Wall: N						
MISC	2083	Tan	Baseboard Mastic		S.W.		NF				
SI	2084				Center						
FBM	2085				N.						
SI	2086	Brown			E.						
FBM	2087				N.E.						
SI	2088				E						
FBM	2089										

TEST MATERIAL LAB REPORTS  
 18 AUG 29 11 09 58  
 J. Magallon  
 8/29/18  
 9588

11/13/18

Kelly

10/9/18  
 2:13 PM

031823924

BULK SAMPLE DATA FORM

PROJECT NO.: 7 0 7 6		DATE: 0 8 2 2 1 8		PAGE 4 OF 6									
CLIENT: Haley & Aldrich		INSPECTOR(S): J. Magallon		CITADEL ENVIRONMENTAL SERVICES, INC.									
PROJECT ID: Canyon Crest Family Housing Survey		CSST/CAC NO: 15-5358		MATERIAL CONDITION									
SITE ADDRESS: University of California Riverside - HDRS Warehouse		BULK SAMPLE LOCATION		DAMAGE TYPE									
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	TEXTURE/PATTERN	UNIT	LEVEL	AREA/LOCATION	QUANTITY NO.	UNIT	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
WP	53	2089	Grey	Window Pitting		U	1st	N.W. Window			F	G	NA
WP	53	2090									NF		
WP	53	2091											
ES	56	2092	White	Exterior		Exterior		E. of Rm Q					
ES	56	2093		Stucco				E. of Rm A					
ES	56	2094						S. of Rm A					
ES	56	2095						W. of Rm Q					
ES	56	2096						W. of Rm A					
ES	56	2097	Orange					S. of Rm V					
ES	57	2098						S. of Rm T					
ES	57	2099						N. of Rm U					
ES	58	2100	Brown					W. of Rm P					
ES	58	2101											
ES	58	2102						E. of Rm R					
ES	58												

EMSL MANHATTAN LAB RECEIVED  
20 AUG 29 AM 9:58

Demolition  
8/29/18  
P. Magallon

TT 9/3/18

10/9/18

10/9/18

031823924

ENCL MANHATTAN LAB RECEIVED

*Smey*  
8/19/18  
*Qusep*

**BULK SAMPLE DATA FORM**

PROJECT NO:		7 0 7 6		1 0 1 7 0		DATE: 0 8 2 2 1 8		PAGE 5 OF 6		CITADEL ENVIRONMENTAL SERVICES, INC.	
CLIENT:		Hailey & Aldrich		Canyon Crest Family Housing Survey		INSPECTOR(S): J. Magallon					
PROJECT ID:		University of California Riverside		HDPS Warehouse		CSST/CAC NO: 15-5358					
SITE ADDRESS:											
HA TYPE	HA NO.	SAMPLE NO.	COLOR	MATERIAL DESCRIPTION	UNIT	BULK SAMPLE LOCATION	AREA/LOCATION	QUANTITY	FRIABILITY	MATERIAL CONDITION	DAMAGE TYPE
				TEXTURE/PATTERN	LEVEL			NO.			
RFM	52	2103	Black	Multiple layers: Roof Membrane	Roof	N.			NF	G	NA
RFM	52	2104	↓	↓	↓	S.W.			↓	↓	↓
RFM	52	2105	↓	↓	↓	Center			↓	↓	↓
RFM	53	2106	Black	↓	↓	S.W.			↓	↓	↓
RFM	53	2107	↓	↓	↓	E.			↓	↓	↓
RFM	53	2108	↓	↓	↓	Center			↓	↓	↓
RS	54	2109	Red	Roof Shingles	↓	S.W.			↓	↓	↓
RS	54	2110	↓	↓	↓	N.			↓	↓	↓
RS	54	2111	↓	↓	↓	Center			↓	↓	↓
RPM	52	2112	Black	Penetration Mastic	↓	N.W.			↓	↓	↓
RPM	52	2113	↓	↓	↓	E.			↓	↓	↓
RPM	52	2114	↓	↓	↓	S.E.			↓	↓	↓
HVT	50	2115	Green	HVAC Mastic	↓	N. Center			↓	↓	↓
HVT	50	2116	↓	↓	↓	↓			↓	↓	↓

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**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix F**

## **Table 3.0 - Lead XRF SA Results**

07/23/18 THROUGH 08/03/18



**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
5	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.05
6	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.06
7	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
8	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
9	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	2.3
11	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	<LOD
12	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
13	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
14	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
15	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	0
16	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	1.6
17	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	<LOD
18	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	2
19	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	<LOD
20	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	NEGATIVE	1	<LOD
21	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.01
22	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.04
23	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2.8
24	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2
25	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2.4
26	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	LCP	1	0.5
28	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	LCP	1	0.5
29	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	NEGATIVE	1	0
30	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	NEGATIVE	1	<LOD
32	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.09
33	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	NEGATIVE	1	<LOD
34	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	NEGATIVE	1	<LOD
35	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	NEGATIVE	1	<LOD
36	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.13
37	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.1
39	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.7
40	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.03
41	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.01
42	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	NEGATIVE	1	0
43	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	NEGATIVE	1	0
44	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	811 PLUM	LCP	1	0.01
45	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	811 PLUM	LCP	1	0.3
46	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	811 PLUM	NEGATIVE	1	0
47	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	LCP	1	0.02
48	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
51	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
52	PAINT	MG / CM ^2	FINAL	STAIRS	WOOD	D	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
53	PAINT	MG / CM ^2	FINAL	STAIRS RAIL	WOOD	D	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
54	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
55	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	2.5
56	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
57	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	3.7
58	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	5.9
62	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	LCP	1	0.16
63	PAINT	MG / CM ^2	FINAL	EVE	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0
64	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	C	CRACKED	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	9
65	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	7.1
66	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	NEGATIVE	1	0



**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
71	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	LCP	1	0.3
72	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	NEGATIVE	1	<LOD
73	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	LCP	1	0.4
74	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	2.7
75	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	1.9
78	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.3
79	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.4
80	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.3
82	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.6
83	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.3
84	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.11
85	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	NEGATIVE	1	0
86	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	822 PLUM	LCP	1	0.03
87	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	822 PLUM	POSITIVE	1	2.2
90	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.8
91	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.01
92	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.03
93	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	NEGATIVE	1	0
96	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	EXT	822 PLUM	POSITIVE	1	2.4
97	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
98	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
99	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
100	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
101	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
102	PAINT	MG / CM ^2	FINAL	FLASHING	METAL	A	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
103	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	B	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
109	PAINT	MG / CM ^2	FINAL	RAIL	METAL	A	INTACT	YELLOW	7076.1017.0	FIRST	EXT	822 PLUM	NEGATIVE	1	0
110	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.04
111	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	NEGATIVE	1	<LOD
112	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.01
113	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.09
114	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.6
115	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	1.7
116	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.6
117	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.2
118	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.04
119	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.04
120	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.7
122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	POSITIVE	1	2.4
123	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	POSITIVE	1	2
124	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	NEGATIVE	1	<LOD
125	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.13
126	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.3
127	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.01
128	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.7
129	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.22
130	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	NEGATIVE	1	0
131	PAINT	MG / CM ^2	FINAL	CABINET DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	NEGATIVE	1	0
132	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	4.1
133	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	6.5
134	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	7.8
135	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	3.7
136	PAINT	MG / CM ^2	FINAL	RAIL	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
137	PAINT	MG / CM ^2	FINAL	STAIRS	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	NEGATIVE	1	0
138	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	NEGATIVE	1	0
139	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	NEGATIVE	1	0
140	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	WHITE	7076.1017.0	FIRST	EXT	851 PLUM	LCP	1	0.01
141	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	FIRST	EXT	851 PLUM	NEGATIVE	1	0
142	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	WHITE	7076.1017.0	FIRST	EXT	851 PLUM	LCP	1	0.01
143	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	WHITE	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
144	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
145	PAINT	MG / CM ^2	FINAL	CLOTHESLINE POLE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	EXT	849 PLUM	LCP	1	0.04
146	PAINT	MG / CM ^2	FINAL	STAIRS	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
147	PAINT	MG / CM ^2	FINAL	DECK	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
148	PAINT	MG / CM ^2	FINAL	RAIL	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
149	PAINT	MG / CM ^2	FINAL	RAIL	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
150	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
151	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	2.6
152	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	1.8
153	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	3.3
154	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	LCP	1	0.06
155	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	NEGATIVE	1	0
156	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	849 PLUM	LCP	1	0.01
157	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.3
159	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.27
160	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	POSITIVE	1	2.4
161	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.4
162	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	NEGATIVE	1	0
163	PAINT	MG / CM ^2	FINAL	CABINET DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	NEGATIVE	1	0
164	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	NEGATIVE	1	<LOD
165	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	LCP	1	0.01
166	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	LCP	1	0.01
167	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	NEGATIVE	1	0
168	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	NEGATIVE	1	0
169	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	EXT	849 PLUM	NEGATIVE	1	0
170	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	PINK	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.01
176	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	NEGATIVE	1	<LOD
177	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.04
178	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	NEGATIVE	1	0
179	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.07
180	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	NEGATIVE	1	0
182	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	POSITIVE	1	1.6
183	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	POSITIVE	1	6.8
184	PAINT	MG / CM ^2	FINAL	FRONT GATE	METAL	A	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	NEGATIVE	1	0
186	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.22
187	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
188	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.04
189	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.21
190	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	NEGATIVE	1	0
191	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	NEGATIVE	1	0
192	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.01
193	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.26
194	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	NEGATIVE	1	0
195	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	POSITIVE	1	2.9
196	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-HALL	7076.1017.0	NEGATIVE	1	<LOD
197	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-HALL	7076.1017.0	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
198	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	NEGATIVE	1	0
199	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	NEGATIVE	1	0
200	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.01
201	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.05
203	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.01
204	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	NEGATIVE	1	<LOD
205	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.3
206	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	NEGATIVE	1	0
207	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	POSITIVE	1	3.3
208	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.09
209	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.04
210	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	NEGATIVE	1	0
211	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.05
212	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 1	7076.1017.0	POSITIVE	1	3.9
213	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	POSITIVE	1	2.7
214	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
215	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	3.8
216	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	NEGATIVE	1	0
217	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.04
218	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
219	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	2
221	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
222	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	6.6
223	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	5.2
224	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	2.5
225	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	NEGATIVE	1	0
226	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	NEGATIVE	1	0
227	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	LCP	1	0.02
228	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	NEGATIVE	1	0
229	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	NEGATIVE	1	0
230	PAINT	MG / CM ^2	FINAL	BOARD WALL	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	NEGATIVE	1	0
231	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	POSITIVE	1	3.8
232	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	POSITIVE	1	2.6
233	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	NEGATIVE	1	0
244	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	LCP	1	0.03
245	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	NEGATIVE	1	0
246	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	3.9
247	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	8
248	PAINT	MG / CM ^2	FINAL	SIDING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	8.6
251	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	NEGATIVE	1	0
253	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	NEGATIVE	1	0
254	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	9
255	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	2.6
256	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.6
259	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	POSITIVE	1	2.5
260	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.06
261	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	NEGATIVE	1	0
262	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.02
263	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
264	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	POSITIVE	1	5
265	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.07
266	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.12
267	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.03

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
268	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.04
269	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.28
270	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.06
271	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	NEGATIVE	1	0
272	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3398 IDAHO	LCP	1	0.05
273	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3398 IDAHO	NEGATIVE	1	0
274	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3398 IDAHO	LCP	1	0.19
275	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.18
276	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	POSITIVE	1	4
277	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.05
278	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.22
279	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	POSITIVE	1	1.5
280	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	NEGATIVE	1	0
281	PAINT	MG / CM ^2	FINAL	CABINET SINK	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	NEGATIVE	1	0
284	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	NEGATIVE	1	0
285	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	NEGATIVE	1	0
287	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.7
288	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
289	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
290	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	NEGATIVE	1	0
294	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.02
295	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.01
296	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.03
297	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	NEGATIVE	1	0
298	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	NEGATIVE	1	0
299	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	2
300	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	4.7
301	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	4.2
302	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	2
303	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLACK	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	NEGATIVE	1	0
304	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.06
306	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.01
307	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	1.5
308	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.03
309	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.05
310	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.19
311	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	POSITIVE	1	1.8
312	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.02
314	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.04
315	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	NEGATIVE	1	0
316	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-HALL	7076.1017.0	NEGATIVE	1	0
317	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.05
318	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.6
319	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	NEGATIVE	1	0
320	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	NEGATIVE	1	0
322	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	CERAMIC	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	NEGATIVE	1	0
323	PAINT	MG / CM ^2	FINAL	SINK	CERAMIC	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.01
324	PAINT	MG / CM ^2	FINAL	TOILET	CERAMIC	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.21
325	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	POSITIVE	1	2.2
326	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	POSITIVE	1	2.6
327	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	LCP	1	0.02
328	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	NEGATIVE	1	0
329	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
330	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	LCP	1	0.06
331	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	POSITIVE	1	3.3
332	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	1.9
334	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	NEGATIVE	1	0
338	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	2.2
339	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	3.7
340	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	NEGATIVE	1	0
341	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	4.1
342	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	1.4
344	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-KITCHEN	7076.1017.0	LCP	1	0.23
345	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-KITCHEN	7076.1017.0	NEGATIVE	1	0
347	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-KITCHEN	7076.1017.0	NEGATIVE	1	0
348	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.02
349	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	NEGATIVE	1	0
351	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	NEGATIVE	1	0
353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.05
356	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.01
357	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	POSITIVE	1	1.6
358	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.01
359	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.03
361	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.3
363	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
364	PAINT	MG / CM ^2	FINAL	WINDOW	PLASTER	C	INTACT	BLACK	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	2
365	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
366	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
368	PAINT	MG / CM ^2	FINAL	PANELS ABOVE WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
370	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
371	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW FRAME	METAL	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
372	PAINT	MG / CM ^2	FINAL	PORCH RAILS	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
373	PAINT	MG / CM ^2	FINAL	PORCH STEPS	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
384	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.01
385	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
386	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
387	PAINT	MG / CM ^2	FINAL	PORCH HANDRAIL	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
388	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
389	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLK	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
390	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
391	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	8.2
392	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.27
393	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
395	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	NEGATIVE	1	0
396	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.01
397	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	7.1
398	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	3.8
399	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	2.1
400	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	POSITIVE	1	1.8
401	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	NEGATIVE	1	0
402	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	NEGATIVE	1	0
403	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	LCP	1	0.2
404	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3334 IDAHO	NEGATIVE	1	<LOD
405	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3334 IDAHO	NEGATIVE	1	0
406	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	LCP	1	0.2
407	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.05

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
408	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	POSITIVE	1	2.9
409	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.3
410	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	NEGATIVE	1	0
411	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	POSITIVE	1	1
412	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.01
415	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3334 IDAHO	NEGATIVE	1	0
416	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3334 IDAHO	NEGATIVE	1	0
417	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3334 IDAHO	NEGATIVE	1	0
418	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3334 IDAHO	LCP	1	0.02
419	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3334 IDAHO	NEGATIVE	1	0
420	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3334 IDAHO	NEGATIVE	1	0
424	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	NEGATIVE	1	0
425	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	LCP	1	0.6
426	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	LCP	1	0.3
427	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	LCP	1	0.05
429	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	LCP	1	0.01
430	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	LCP	1	0.4
431	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	NEGATIVE	1	0
432	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	NEGATIVE	1	0
433	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	NEGATIVE	1	0
434	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	NEGATIVE	1	0
435	PAINT	MG / CM ^2	FINAL	TOILET	CERAMIC	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	LCP	1	0.01
436	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	3.1
437	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	5.1
438	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	6.9
439	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	5.9
440	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	POSITIVE	1	5
441	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	5.9
442	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	POSITIVE	1	4.1
446	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	4.1
447	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	NEGATIVE	1	0
448	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	1.3
449	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	1.8
450	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	1.5
451	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	1.9
452	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	NEGATIVE	1	0
453	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	NEGATIVE	1	0
454	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	1.5
455	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	NEGATIVE	1	0
456	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	NEGATIVE	1	0
457	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	NEGATIVE	1	0
458	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	NEGATIVE	1	0
459	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-HALL	7076.1017.0	NEGATIVE	1	0
460	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	NEGATIVE	1	0
461	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.16
462	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BATHRM	7076.1017.0	LCP	1	0.4
463	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-KITCHEN	7076.1017.0	NEGATIVE	1	0
464	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-KITCHEN	7076.1017.0	LCP	1	0.06
468	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-HALL	7076.1017.0	NEGATIVE	1	0
469	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-HALL	7076.1017.0	NEGATIVE	1	0
470	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.01
471	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	NEGATIVE	1	0
472	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
473	PAINT	MG / CM ^2	FINAL	CLOSET FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	NEGATIVE	1	0
474	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	1.8
475	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	4.6
476	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	POSITIVE	1	2.4
477	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	POSITIVE	1	2
478	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.07
479	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BATHRM	7076.1017.0	LCP	1	0.03
480	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	LCP	1	0.03
481	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	3.4
482	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	2.4
483	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-KITCHEN	7076.1017.0	LCP	1	0.12
484	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.3
485	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.15
486	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.17
487	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.11
490	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	LCP	1	0.25
491	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	POSITIVE	1	1.8
493	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.5
494	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
496	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
498	PAINT	MG / CM ^2	FINAL	PANELS ABOVE WINDOW	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
499	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
500	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
501	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	4.8
503	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.4
504	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
505	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
506	PAINT	MG / CM ^2	FINAL	PORCH RAILS	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
507	PAINT	MG / CM ^2	FINAL	PORCH RAILS	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
508	PAINT	MG / CM ^2	FINAL	PORCH RAILS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
509	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
510	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.5
511	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
512	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.6
513	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
514	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
515	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
516	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
517	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.02
518	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	1.4
520	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	6.8
521	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	7.2
522	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	2.1
523	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	1.7
524	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	2.3
525	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	NEGATIVE	1	0
526	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.01
527	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	LCP	1	0.22
528	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	NEGATIVE	1	0
529	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	POSITIVE	1	2.2
530	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	POSITIVE	1	1.9
531	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	POSITIVE	1	1.8
533	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	LCP	1	0.4

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
534	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	LCP	1	0.07
535	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	POSITIVE	1	1.5
536	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3370 IDAHO	LCP	1	0.02
537	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3370 IDAHO	LCP	1	0.06
538	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.4
539	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	NEGATIVE	1	0
540	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	NEGATIVE	1	0
541	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.07
542	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	NEGATIVE	1	0
543	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	NEGATIVE	1	0
544	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.5
545	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.01
546	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.4
547	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.01
548	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	NEGATIVE	1	0
549	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	LCP	1	0.6
550	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	LCP	1	0.4
551	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	NEGATIVE	1	0
559	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801	7076.1017.0	NEGATIVE	1	0
560	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.02
561	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM3	7076.1017.0	NEGATIVE	1	0
562	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM1	7076.1017.0	NEGATIVE	1	<LOD
563	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM1	7076.1017.0	LCP	1	0.1
564	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
565	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
566	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	NEGATIVE	1	0
567	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-HALL	7076.1017.0	POSITIVE	1	3.1
569	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM2	7076.1017.0	NEGATIVE	1	0
570	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	NEGATIVE	1	0
571	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	NEGATIVE	1	0
573	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	NEGATIVE	1	0
574	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	NEGATIVE	1	0
575	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	LCP	1	0.03
578	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
579	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.2
581	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM	7076.1017.0	LCP	1	0.29
582	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM 2	7076.1017.0	POSITIVE	1	1.8
583	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	2.1
584	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.01
585	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
586	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM1	7076.1017.0	NEGATIVE	1	0
587	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM2	7076.1017.0	POSITIVE	1	1.5
588	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM2	7076.1017.0	POSITIVE	1	2.4
589	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	3.8
590	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	2.5
591	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	LCP	1	0.03
592	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.07
593	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.04
594	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	3.2
595	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	NEGATIVE	1	0
596	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.02
597	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	NEGATIVE	1	0
599	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	LCP	1	0.01



**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
600	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	NEGATIVE	1	0
601	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.01
602	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-HALL	7076.1017.0	NEGATIVE	1	0
603	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	NEGATIVE	1	0
605	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	NEGATIVE	1	0
606	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.01
607	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-HALL	7076.1017.0	LCP	1	0.02
608	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	NEGATIVE	1	0
609	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	NEGATIVE	1	0
610	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	NEGATIVE	1	0
611	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	LCP	1	0.04
612	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	NEGATIVE	1	0
613	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	POSITIVE	1	2.4
614	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.1
615	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	1.8
616	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	5.8
617	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	2.5
618	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	2.3
619	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.02
620	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.03
621	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.3
622	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM3	7076.1017.0	LCP	1	0.01
623	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	NEGATIVE	1	0
624	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	NEGATIVE	1	<L0D
625	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.05
628	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.02
629	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	LCP	1	0.01
631	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	NEGATIVE	1	0
632	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	NEGATIVE	1	0
633	PAINT	MG / CM ^2	FINAL	PORCH RAILS	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
634	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.03
635	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
636	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
637	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
639	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	8.1
640	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.08
641	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.7
642	PAINT	MG / CM ^2	FINAL	PANEL FRAME BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
643	PAINT	MG / CM ^2	FINAL	PANEL FRAME BELOW WINDOW	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
644	PAINT	MG / CM ^2	FINAL	PANEL ABOVE WINDOW	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
645	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
646	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
647	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	B	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
648	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	2
649	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	10.9
650	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
651	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
652	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	7.1
653	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
654	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
656	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	3.4
657	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	C	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
659	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
660	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.01
661	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
662	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
663	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	3.2
664	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
665	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.2
666	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
667	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	NEGATIVE	1	0
668	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.05
669	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.04
670	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.02
671	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.05
674	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3429 FLORIDA	NEGATIVE	1	0
675	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3429 FLORIDA	NEGATIVE	1	0
676	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.11
677	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.11
678	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.6
680	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.06
682	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	NEGATIVE	1	0
683	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	LCP	1	0.02
684	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	NEGATIVE	1	0
686	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	NEGATIVE	1	0
687	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	POSITIVE	1	1.4
691	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	NEGATIVE	1	<LOD
692	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.07
693	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	NEGATIVE	1	0
694	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.11
695	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.02
696	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	POSITIVE	1	3.5
697	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.23
698	PAINT	MG / CM ^2	FINAL	DOOR FRAME TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.09
700	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.08
701	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.21
702	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.03
703	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	NEGATIVE	1	0
704	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	NEGATIVE	1	0
705	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.24
706	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	NEGATIVE	1	0
714	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	LCP	1	0.01
715	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
716	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	NEGATIVE	1	0
717	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
719	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
720	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.02
721	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.02
722	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-HALL	7076.1017.0	LCP	1	0.05
723	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	LCP	1	0.04
724	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BATHRM	7076.1017.0	NEGATIVE	1	0
725	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	NEGATIVE	1	0
726	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-HALL	7076.1017.0	NEGATIVE	1	0
728	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BATHRM	7076.1017.0	LCP	1	0.02
730	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	2.1
731	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	2.6

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
732	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	POSITIVE	1	1.7
733	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	POSITIVE	1	6.7
734	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	POSITIVE	1	2.3
735	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	LCP	1	0.11
736	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.07
737	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	3
738	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	7.3
739	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.07
740	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
741	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	LCP	1	0.01
742	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	NEGATIVE	1	<LOD
745	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
746	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	LCP	1	0.3
747	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.01
748	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	NEGATIVE	1	0
749	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	NEGATIVE	1	0
750	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	NEGATIVE	1	0
751	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	LCP	1	0.01
752	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	LCP	1	0.04
753	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	1.7
754	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	LCP	1	0.05
755	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	POSITIVE	1	2.1
756	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	1.9
757	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	2.3
758	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	6.3
759	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	POSITIVE	1	2.6
760	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
762	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	LCP	1	0.3
763	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	NEGATIVE	1	0
764	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	POSITIVE	1	3.5
765	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	LCP	1	0.3
766	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.05
767	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	LCP	1	0.12
768	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	NEGATIVE	1	0
769	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	NEGATIVE	1	0
770	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVIN RM	7076.1017.0	NEGATIVE	1	0
771	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	NEGATIVE	1	0
775	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	4.5
776	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
777	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
778	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
779	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
780	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
781	PAINT	MG / CM ^2	FINAL	PANELS ABOVE WINDOWS	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
782	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
783	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
784	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06
786	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	A	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
794	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	NEGATIVE	1	0
795	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	NEGATIVE	1	0
796	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	NEGATIVE	1	<LOD
797	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	NEGATIVE	1	0
798	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-HALL	7076.1017.0	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
799	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	NEGATIVE	1	0
800	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	NEGATIVE	1	0
802	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	NEGATIVE	1	<LOD
803	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.13
804	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-HALL	7076.1017.0	LCP	1	0.19
805	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM3	7076.1017.0	LCP	1	0.01
806	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	NEGATIVE	1	0
807	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	NEGATIVE	1	0
808	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.01
809	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	NEGATIVE	1	0
810	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	NEGATIVE	1	0
811	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.01
813	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.21
814	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.08
815	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.12
817	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.05
818	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.1
819	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
820	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	LCP	1	0.01
821	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.08
822	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.01
823	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.04
824	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.06
825	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.05
826	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.02
827	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.5
828	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	POSITIVE	1	1.6
830	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	2
831	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	3
832	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	4.5
833	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	POSITIVE	1	2.4
834	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.06
836	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.05
837	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	LCP	1	0.24
838	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.1
839	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	D	INTACT	BEIGE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	NEGATIVE	1	0
840	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	2
841	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.1
842	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.6
843	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01
844	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-BEDRM2	7076.1017.0	LCP	1	0.02
845	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-HALL	7076.1017.0	NEGATIVE	1	0
848	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
849	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	NEGATIVE	1	0
850	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	NEGATIVE	1	0
851	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-BATHRM	7076.1017.0	NEGATIVE	1	0
852	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-HALL	7076.1017.0	NEGATIVE	1	0
853	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-HALL	7076.1017.0	LCP	1	0.01
854	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	NEGATIVE	1	<LOD
855	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM1	7076.1017.0	NEGATIVE	1	0
856	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM1	7076.1017.0	LCP	1	0.02
858	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.06
859	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	LCP	1	0.01

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
861	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	POSITIVE	1	1.8
862	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01
863	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01
864	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM2	7076.1017.0	NEGATIVE	1	0
865	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	POSITIVE	1	2
866	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	POSITIVE	1	7.1
867	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM1	7076.1017.0	POSITIVE	1	2.9
868	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.8
869	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	POSITIVE	1	2.6
870	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	3.3
871	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
872	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	16.5
873	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.04
874	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
875	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
876	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.6
877	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.4
878	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06
879	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
880	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
881	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
882	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
895	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407	7076.1017.0	NEGATIVE	1	<LOD
896	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	NEGATIVE	1	<LOD
897	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	NEGATIVE	1	0
898	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.01
899	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	NEGATIVE	1	0
900	PAINT	MG / CM ^2	FINAL	CABINET	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	NEGATIVE	1	<LOD
905	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.19
906	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	NEGATIVE	1	0
907	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	NEGATIVE	1	0
908	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	NEGATIVE	1	0
909	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.01
910	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	NEGATIVE	1	0
911	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	NEGATIVE	1	0
912	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	NEGATIVE	1	0
913	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	NEGATIVE	1	0
914	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	LCP	1	0.06
915	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	LCP	1	0.01
916	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407 LIVING RM	7076.1017.0	LCP	1	0.21
917	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407 RM2	7076.1017.0	LCP	1	0.14
918	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.08
920	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	POSITIVE	1	2.5
921	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	POSITIVE	1	2
922	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	LCP	1	0.01
923	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	NEGATIVE	1	0
924	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	LCP	1	0.07
925	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	POSITIVE	1	7.8
926	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	POSITIVE	1	2
927	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	POSITIVE	1	1.7
928	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	LCP	1	0.21
929	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	POSITIVE	1	1.8
930	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	POSITIVE	1	1.6

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
931	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	POSITIVE	1	5.9
932	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	LCP	1	0.04
933	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	LCP	1	0.11
934	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	LCP	1	0.02
935	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.1
936	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.05
937	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 1	7076.1017.0	NEGATIVE	1	0
938	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 1	7076.1017.0	LCP	1	0.3
939	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-HALLWAY	7076.1017.0	LCP	1	0.04
940	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.27
941	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.05
943	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.05
944	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BATHROOM	7076.1017.0	NEGATIVE	1	0
945	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	NEGATIVE	1	0
947	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.06
948	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 1	7076.1017.0	LCP	1	0.21
949	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.02
950	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	POSITIVE	1	1.9
954	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	3.2
955	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	NEGATIVE	1	0
956	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	NEGATIVE	1	0
957	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.08
958	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM1	7076.1017.0	NEGATIVE	1	0
959	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	NEGATIVE	1	0
960	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	POSITIVE	1	2.9
961	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	POSITIVE	1	7.4
962	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BATHRM	7076.1017.0	POSITIVE	1	1.8
963	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BATHRM	7076.1017.0	LCP	1	0.03
964	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	LCP	1	0.15
965	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	NEGATIVE	1	0
966	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.01
967	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	3.9
968	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	9.1
969	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.11
970	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.2
971	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	LCP	1	0.08
972	PAINT	MG / CM ^2	FINAL	GATED DOOR	METAL	B	INTACT	BLACK	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	NEGATIVE	1	0
977	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.07
978	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.11
979	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
980	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
981	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
982	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BROWN	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	6.2
983	PAINT	MG / CM ^2	FINAL	LAUNDRY LINE POLE	METAL	D	INTACT	SILVER	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
992	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
993	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.01
994	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.01
998	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
999	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
1000	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
1002	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.4
1003	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
1004	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1006	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	NEGATIVE	1	0
1007	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	5.9
1008	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	2
1010	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	1.7
1011	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	4.2
1012	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.3
1014	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.8
1016	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3367 UTAH	POSITIVE	1	3
1017	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3367 UTAH	LCP	1	0.06
1018	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3367 UTAH	POSITIVE	1	1.8
1019	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3367 UTAH	NEGATIVE	1	0
1021	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	NEGATIVE	1	0
1022	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	NEGATIVE	1	0
1023	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	NEGATIVE	1	0
1024	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	LCP	1	0.7
1025	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	NEGATIVE	1	<LOD
1028	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	POSITIVE	1	2.1
1031	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3367 UTAH	NEGATIVE	1	<LOD
1034	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3367 UTAH	LCP	1	0.14
1035	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3367 UTAH	NEGATIVE	1	0
1036	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1037	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1039	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.02
1047	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.01
1048	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	2.1
1050	PAINT	MG / CM ^2	FINAL	GAS METER BOX	METAL	A	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.01
1051	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1052	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.18
1053	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.1
1054	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	D	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1055	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.6
1056	PAINT	MG / CM ^2	FINAL	PORCH RAILING	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1057	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1058	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1059	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1061	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	PEELING	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1062	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	PEELING	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	6.8
1063	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	1.1
1064	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	NEGATIVE	1	0
1065	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	4
1066	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.06
1067	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.6
1068	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3341 UTAH	POSITIVE	1	1.5
1069	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3341 UTAH	NEGATIVE	1	0
1070	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3341 UTAH	LCP	1	0.09
1072	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	POSITIVE	1	2.4
1074	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	LCP	1	0.4
1075	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	NEGATIVE	1	0
1078	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	NEGATIVE	1	0
1079	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	LCP	1	0.4
1080	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.02
1082	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.14
1083	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.4

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1084	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	NEGATIVE	1	0
1086	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.17
1090	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	NEGATIVE	1	0
1091	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM2	7076.1017.0	NEGATIVE	1	0
1092	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRML	7076.1017.0	NEGATIVE	1	0
1093	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	LCP	1	0.16
1094	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	LCP	1	0.4
1095	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	NEGATIVE	1	0
1096	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	LCP	1	0.16
1097	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	NEGATIVE	1	0
1098	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	NEGATIVE	1	0
1099	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	NEGATIVE	1	0
1100	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	LCP	1	0.07
1101	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	LCP	1	0.05
1102	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	LCP	1	0.16
1103	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM2	7076.1017.0	POSITIVE	1	3.3
1104	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM2	7076.1017.0	NEGATIVE	1	0
1105	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	NEGATIVE	1	0
1106	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	LCP	1	0.08
1107	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	POSITIVE	1	2.3
1108	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	POSITIVE	1	6.3
1109	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	POSITIVE	1	3.2
1110	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-HALL	7076.1017.0	LCP	1	0.14
1111	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	POSITIVE	1	1.5
1112	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	POSITIVE	1	2.1
1113	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	NEGATIVE	1	0
1114	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	NEGATIVE	1	0
1115	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	11.1
1116	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	2.5
1117	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.13
1118	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	LCP	1	0.02
1119	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-KITCHEN	7076.1017.0	NEGATIVE	1	0
1120	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	1.7
1121	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	5.8
1122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BATHRM	7076.1017.0	POSITIVE	1	5.6
1123	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-KITCHEN	7076.1017.0	NEGATIVE	1	0
1124	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-KITCHEN	7076.1017.0	NEGATIVE	1	0
1125	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.01
1126	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.08
1127	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.02
1128	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.03
1129	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-HALL	7076.1017.0	NEGATIVE	1	0
1130	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
1131	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-KITCHEN	7076.1017.0	NEGATIVE	1	0
1132	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.23
1133	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	MINIBLIND	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.03
1134	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	LCP	1	0.08
1135	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	POSITIVE	1	2.5
1136	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.19
1137	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.12
1138	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.02
1139	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1140	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06



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**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1141	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	3.5
1142	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	12.5
1146	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1147	PAINT	MG / CM ^2	FINAL	LAUNDRY LINE POLE	METAL	D	INTACT	SILVER	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.03
1148	PAINT	MG / CM ^2	FINAL	WATER HEATER	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.04
1149	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.09
1150	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1151	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1152	PAINT	MG / CM ^2	FINAL	ENTRY WAY STEP	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.4
1153	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1156	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BROWN	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1158	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	B	INTACT	BROWN	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1167	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.03
1168	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM2	7076.1017.0	NEGATIVE	1	<LOD
1169	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.06
1170	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	NEGATIVE	1	<LOD
1171	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	NEGATIVE	1	0
1173	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	LCP	1	0.4
1174	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	NEGATIVE	1	0
1175	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	NEGATIVE	1	0
1176	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	NEGATIVE	1	0
1177	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	NEGATIVE	1	0
1178	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	NEGATIVE	1	0
1179	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	LCP	1	0.01
1180	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.07
1182	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.5
1184	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	1.5
1185	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM2	7076.1017.0	LCP	1	0.15
1186	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.5
1187	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	POSITIVE	1	4.1
1188	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	POSITIVE	1	3.6
1189	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	NEGATIVE	1	0
1190	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	NEGATIVE	1	0
1191	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	NEGATIVE	1	0
1192	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	3.7
1196	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-HALL	7076.1017.0	LCP	1	0.21
1197	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.5
1202	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	1.6
1206	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	POSITIVE	1	1.7
1207	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	LCP	1	0.13
1208	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.05
1209	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	NEGATIVE	1	0
1210	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM1	7076.1017.0	LCP	1	0.05
1211	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	NEGATIVE	1	<LOD
1212	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	LCP	1	0.6
1214	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-HALL	7076.1017.0	LCP	1	0.02
1215	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	NEGATIVE	1	0
1217	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.26
1218	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	LCP	1	0.6
1220	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	POSITIVE	1	1.4
1221	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.11
1222	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	POSITIVE	1	1.8
1223	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	2.8

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1225	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	1.3
1226	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	3.5
1228	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BATHRM	7076.1017.0	LCP	1	0.3
1231	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM1	7076.1017.0	NEGATIVE	1	0
1232	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	NEGATIVE	1	0
1233	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1234	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1236	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1237	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1238	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.8
1239	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1240	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	8.6
1241	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1242	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1243	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1244	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1245	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1246	PAINT	MG / CM ^2	FINAL	ENTRY WAY STEP	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1247	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
1248	PAINT	MG / CM ^2	FINAL	WATER HEATER	METAL	A	INTACT	SILVER	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1249	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1250	PAINT	MG / CM ^2	FINAL	GATE	METAL	D	INTACT	BLACK	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	NEGATIVE	1	0
1251	PAINT	MG / CM ^2	FINAL	GATE	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1252	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	POSITIVE	1	5.2
1253	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1254	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.04
1255	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1256	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1257	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1258	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	PEELING	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	POSITIVE	1	4.3
1259	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.7
1260	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.01
1261	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	PEELING	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1263	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1264	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.01
1265	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1266	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1267	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.3
1268	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	NEGATIVE	1	0
1269	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.5
1270	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.1
1271	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.4
1272	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.09
1273	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.27
1274	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.2
1276	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.02
1279	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	NEGATIVE	1	0
1280	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	POSITIVE	1	3.9
1281	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.27
1283	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	NEGATIVE	1	<LOD
1284	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.06
1285	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	NEGATIVE	1	0
1286	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1287	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.01
1288	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.7
1289	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3308 UTAH	LCP	1	0.5
1291	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3308 UTAH	NEGATIVE	1	0
1292	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3308 UTAH	POSITIVE	1	2.5
1293	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1294	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.01
1295	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1296	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.02
1297	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.02
1298	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	1.7
1299	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	2.7
1300	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	2.2
1301	PAINT	MG / CM ^2	FINAL	GATE	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1303	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1305	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.01
1306	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	3.6
1307	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	1.7
1308	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1309	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	NEGATIVE	1	0
1310	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3384 UTAH	LCP	1	0.2
1320	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	LCP	1	0.01
1324	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	NEGATIVE	1	0
1325	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	NEGATIVE	1	0
1326	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	POSITIVE	1	1.1
1327	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM 1	3384 UTAH	LCP	1	0.14
1329	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM 1	3384 UTAH	NEGATIVE	1	0
1330	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.2
1331	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM 2	GRAPE ST-725	LCP	1	0.05
1332	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-725	NEGATIVE	1	0
1333	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.01
1334	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.08
1337	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.17
1338	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.14
1339	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.01
1340	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	NEGATIVE	1	0
1341	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.01
1342	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	1.6
1343	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	4.8
1344	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	POSITIVE	1	4.1
1345	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	NEGATIVE	1	<LOD
1346	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	LCP	1	0.01
1347	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.02
1348	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.22
1349	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.4
1350	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	2.2
1351	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.16
1352	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	HALL	GRAPE ST-725	LCP	1	0.15
1353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.28
1357	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	1.8
1358	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.01
1359	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	NEGATIVE	1	0
1360	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	LCP	1	0.03

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1361	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.3
1362	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-727	LCP	1	0.03
1363	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	LCP	1	0.16
1364	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	NEGATIVE	1	0
1365	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	LCP	1	0.5
1366	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	NEGATIVE	1	0
1367	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	NEGATIVE	1	0
1368	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.11
1369	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	NEGATIVE	1	0
1370	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	NEGATIVE	1	0
1371	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	POSITIVE	1	3.3
1372	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	POSITIVE	1	10.1
1373	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	POSITIVE	1	3.4
1374	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.12
1375	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	POSITIVE	1	4.2
1376	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-727	LCP	1	0.17
1377	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	LCP	1	0.24
1378	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	LCP	1	0.3
1379	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.09
1382	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.23
1383	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	POSITIVE	1	2.7
1384	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.01
1386	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	NEGATIVE	1	0
1387	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1388	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1389	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.02
1390	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.02
1391	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1392	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	POSITIVE	1	2.3
1393	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1394	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1395	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1396	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	C	INTACT	BLACK	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1397	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	NEGATIVE	1	0
1398	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.03
1408	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.03
1409	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	NEGATIVE	1	<LOD
1410	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.03
1411	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-815	NEGATIVE	1	<LOD
1412	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-815	LCP	1	0.04
1413	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	NEGATIVE	1	0
1414	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	LCP	1	0.01
1415	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	NEGATIVE	1	0
1416	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	LCP	1	0.02
1417	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.06
1418	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	2
1419	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	3.5
1420	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.4
1421	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	POSITIVE	1	3.2
1422	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.15
1423	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.08
1424	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	POSITIVE	1	1.6
1425	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	KITCHEN	GRAPE ST-815	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1426	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	5.6
1427	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.25
1428	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.16
1429	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.16
1430	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.17
1431	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OFFICE	GRAPE ST-815	LCP	1	0.2
1432	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	2.3
1433	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.1
1434	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.01
1435	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-813	LCP	1	0.06
1436	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	LCP	1	0.15
1437	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	NEGATIVE	1	<LOD
1438	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	LCP	1	0.03
1439	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	NEGATIVE	1	0
1440	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-813	NEGATIVE	1	0
1441	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-813	NEGATIVE	1	0
1442	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.14
1443	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	POSITIVE	1	2.6
1445	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	POSITIVE	1	7.3
1446	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	POSITIVE	1	2.8
1447	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	LCP	1	0.11
1448	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-813	LCP	1	0.24
1449	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	POSITIVE	1	2.6
1450	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	POSITIVE	1	6.8
1451	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	NEGATIVE	1	0
1452	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.04
1453	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.14
1454	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.6
1455	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	LCP	1	0.05
1456	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.03
1457	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.16
1458	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.01
1459	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	NEGATIVE	1	0
1460	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.06
1461	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.02
1462	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1463	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1466	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.12
1467	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1469	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1470	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	POSITIVE	1	9.9
1471	PAINT	MG / CM ^2	FINAL	PORCH	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1472	PAINT	MG / CM ^2	FINAL	PORCH	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1473	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1474	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1475	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	NEGATIVE	1	0
1476	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.08
1477	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.08
1478	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.03
1480	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.06
1481	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1482	PAINT	MG / CM ^2	FINAL	CLOTHES LINES	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.03
1483	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1484	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1485	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1486	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	PEELING	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1487	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1488	PAINT	MG / CM ^2	FINAL	PORCH HANDRAIL	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1490	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.8
1491	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1492	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	POSITIVE	1	3.4
1493	PAINT	MG / CM ^2	FINAL	GATE	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1495	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1496	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1497	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1498	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	POSITIVE	1	3.9
1500	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.09
1501	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1502	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1503	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	NEGATIVE	1	0
1504	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	LCP	1	0.6
1509	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	LCP	1	0.18
1513	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	POSITIVE	1	1.8
1514	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	KITCHEN	3350 UTAH	LCP	1	0.6
1515	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3350 UTAH	NEGATIVE	1	0
1518	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3350 UTAH	NEGATIVE	1	0
1519	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3350 UTAH	NEGATIVE	1	0
1520	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3350 UTAH	LCP	1	0.26
1521	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3350 UTAH	NEGATIVE	1	0
1524	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	NEGATIVE	1	0
1528	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.4
1529	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	C	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.05
1530	PAINT	MG / CM ^2	FINAL	CLOSE LINE	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	NEGATIVE	1	0
1531	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.01
1532	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.06
1533	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	1.3
1534	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	1.5
1535	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	3.2
1536	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	NEGATIVE	1	0
1537	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	NEGATIVE	1	0
1538	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	NEGATIVE	1	0
1539	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	7.7
1540	PAINT	MG / CM ^2	FINAL	WALL SIDING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.13
1541	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3348 UTAH	LCP	1	0.1
1543	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3348 UTAH	LCP	1	0.5
1548	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	POSITIVE	1	1.8
1549	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.03
1550	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.12
1551	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.5
1552	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.06
1553	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.4
1554	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3348 UTAH	NEGATIVE	1	0
1557	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3348 UTAH	LCP	1	0.07
1566	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	LCP	1	0.01
1567	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	LCP	1	0.01
1568	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1569	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1570	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1571	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1572	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1573	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1574	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	NEGATIVE	1	0
1575	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	POSITIVE	1	1.9
1576	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	POSITIVE	1	3.8
1577	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	766 GRAPE	NEGATIVE	1	0
1578	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	766 GRAPE	LCP	1	0.6
1579	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	766 GRAPE	NEGATIVE	1	0
1580	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	766 GRAPE	LCP	1	0.18
1581	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.09
1582	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.05
1583	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.05
1584	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	NEGATIVE	1	0
1586	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.03
1587	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.8
1588	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	766 GRAPE	NEGATIVE	1	0
1589	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	766 GRAPE	NEGATIVE	1	<LOD
1590	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.08
1591	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.21
1596	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.09
1597	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1598	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	NEGATIVE	1	0
1599	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	NEGATIVE	1	0
1600	PAINT	MG / CM ^2	FINAL	GATE	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1601	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	POSITIVE	1	7.4
1604	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	NEGATIVE	1	0
1605	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	NEGATIVE	1	0
1606	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	NEGATIVE	1	0
1609	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1610	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.26
1611	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.5
1612	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.11
1615	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.05
1616	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.04
1617	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.23
1619	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.01
1620	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.14
1621	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	NEGATIVE	1	0
1622	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.01
1623	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.02
1624	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.02
1625	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.13
1626	PAINT	MG / CM ^2	FINAL	CLOSE LINE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.1
1627	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.09

*08/07/18 THROUGH 08/22/18*





TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
5	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	NEGATIVE	1	<LOD
6	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	NEGATIVE	1	<LOD
7	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	UNIT 876	NEGATIVE	1	<LOD
8	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 876	NEGATIVE	1	<LOD
9	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 876	NEGATIVE	1	0
10	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	1.9
11	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 876	NEGATIVE	1	0
12	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 876	NEGATIVE	1	0
13	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	UNIT 876	NEGATIVE	1	0
14	PAINT	MG / CM ^2	FINAL	CONDUIT	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LCP	1	0.14
15	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	3.5
16	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	4
17	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	LBP	1	3.3
18	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 876	LCP	1	0.21
19	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UNIT 876	LBP	1	8.1
20	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.22
21	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.5
22	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LBP	1	2.7
26	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	LCP	1	0.2
27	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.16
28	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.08
29	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	NEGATIVE	1	<LOD
30	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	NEGATIVE	1	0
31	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	NEGATIVE	1	0
32	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	NEGATIVE	1	0
33	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	NEGATIVE	1	0
34	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 878	LCP	1	0.13
35	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	UNIT 878	NEGATIVE	1	0
37	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LCP	1	0.1
38	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LBP	1	3.8
39	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 878	LBP	1	3.8
40	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LBP	1	4.5
41	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.5
42	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LBP	1	6.2
43	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 878	LCP	1	0.24
44	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.3
45	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LBP	1	2
46	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.18
47	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.5
48	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LCP	1	0.01
49	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	NEGATIVE	1	0
50	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	NEGATIVE	1	0
51	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	NEGATIVE	1	0
52	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.5
53	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.05
54	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.01
55	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.07
56	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
57	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.01
58	PAINT	MG / CM ^2	FINAL	WINDOW GUARDS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LBP	1	8.9
59	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
60	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
62	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
63	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
64	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	NEGATIVE	1	0
65	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.11
71	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.01
72	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.07
73	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
74	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
76	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
77	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
78	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
79	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.08
80	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
81	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0

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 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
82	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	2.7
83	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	3.3
84	PAINT	MG / CM ^2	FINAL	GATE	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
85	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	5.5
86	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.08
87	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	NEGATIVE	1	0
88	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.04
89	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	3
90	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	786 BLAINE	LBP	1	2.1
91	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LBP	1	2.7
92	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	NEGATIVE	1	0
95	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.7
96	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	NEGATIVE	1	0
97	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.01
98	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.5
99	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.05
100	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.08
101	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	786 BLAINE	LCP	1	0.06
102	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	786 BLAINE	NEGATIVE	1	0
110	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
111	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.05
112	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
114	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.01
115	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
116	PAINT	MG / CM ^2	FINAL	PORCH RAILING	METAL	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.07
117	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
118	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.03
119	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
120	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
122	PAINT	MG / CM ^2	FINAL	WATERHEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.08
123	PAINT	MG / CM ^2	FINAL	WATERHEATER PIPE	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.09
124	PAINT	MG / CM ^2	FINAL	CLOSE LINE	METAL	A	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.07
125	PAINT	MG / CM ^2	FINAL	FENCE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	NEGATIVE	1	0
127	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.12
128	PAINT	MG / CM ^2	FINAL	EVE	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.7
129	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	12.6
130	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	6.5
131	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	10
132	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.11
133	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	NEGATIVE	1	<LOD
134	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	LCP	1	0.08
135	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	LBP	1	2.2
136	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	NEGATIVE	1	<LOD
137	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	861 CHERRY	NEGATIVE	1	<LOD
138	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	861 CHERRY	NEGATIVE	1	0
139	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.16
140	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LBP	1	1.9
141	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	NEGATIVE	1	0
142	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.3
143	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.01
144	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.02
145	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.5
146	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	NEGATIVE	1	0
147	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.04
148	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	NEGATIVE	1	0
149	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
150	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.03
151	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.02
152	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
153	PAINT	MG / CM ^2	FINAL	PORCH STEPS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
154	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
155	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
156	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
158	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.3
160	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	2.9
161	PAINT	MG / CM ^2	FINAL	GATE	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
163	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	1.6
164	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
165	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.05
166	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	NEGATIVE	1	0
167	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	11.1
168	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	2.3
169	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	3.4
170	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3419 KENTUCKY	NEGATIVE	1	0
171	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3419 KENTUCKY	NEGATIVE	1	0
172	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3419 KENTUCKY	LCP	1	0.02
173	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.02
174	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	NEGATIVE	1	0
177	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.03
178	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.6
179	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.01
181	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.01
182	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3419 KENTUCKY	NEGATIVE	1	0
184	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3419 KENTUCKY	NEGATIVE	1	0
185	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3419 KENTUCKY	NEGATIVE	1	0
186	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LCP	1	0.04
187	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
189	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
190	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
192	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	2
193	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	1.9
194	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
195	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
196	PAINT	MG / CM ^2	FINAL	GATE	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
197	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	3
198	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
199	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	NEGATIVE	1	0
200	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3434 KENTUCKY	NEGATIVE	1	<LOD
201	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3434 KENTUCKY	LCP	1	0.01
202	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3434 KENTUCKY	LCP	1	0.04
203	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3434 KENTUCKY	LCP	1	0.25
204	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3434 KENTUCKY	NEGATIVE	1	0
206	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	NEGATIVE	1	0
207	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	NEGATIVE	1	0
208	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.04
209	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	NEGATIVE	1	<LOD
210	PAINT	MG / CM ^2	FINAL	TUB	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.13
211	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.15
212	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.03
213	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	NEGATIVE	1	0
214	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LCP	1	0.08
215	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	NEGATIVE	1	0
216	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LCP	1	0.1
217	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LBP	1	2
221	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	NEGATIVE	1	0
222	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	NEGATIVE	1	0
223	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	NEGATIVE	1	0
224	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	NEGATIVE	1	<LOD
225	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LCP	1	0.02
226	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	NEGATIVE	1	0
227	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	NEGATIVE	1	0
228	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	NEGATIVE	1	0
229	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	LCP	1	0.02
231	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	NEGATIVE	1	0
232	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	NEGATIVE	1	0
233	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	NEGATIVE	1	0
234	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	BLAINE ALLEY-758	NEGATIVE	1	0
235	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	BLAINE ALLEY-758	NEGATIVE	1	0
236	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LBP	1	2.6
237	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LBP	1	4.6
238	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	LBP	1	6.6
239	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LCP	1	0.18

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
241	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LBP	1	2.1
242	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LCP	1	0.16
243	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	NEGATIVE	1	0
244	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LBP	1	2.8
245	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	NEGATIVE	1	0
246	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	NEGATIVE	1	<LOD
247	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	LCP	1	0.12
248	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LCP	1	0.3
250	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.3
251	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.07
252	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.11
253	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	NEGATIVE	1	0
254	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	LBP	1	1.7
255	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	NEGATIVE	1	0
257	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	NEGATIVE	1	<LOD
258	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM2	BLAINE ALLEY-760	LCP	1	0.01
259	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	NEGATIVE	1	0
260	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	BLAINE ALLEY-760	LCP	1	0.02
261	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.04
262	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-760	LCP	1	0.02
263	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LBP	1	3.2
264	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	NEGATIVE	1	<LOD
265	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	LBP	1	2.9
266	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	LBP	1	6.5
267	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LBP	1	3.8
268	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LCP	1	0.21
269	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LBP	1	2.3
270	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.3
271	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LBP	1	2.5
272	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.3
273	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.6
274	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.27
275	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LCP	1	0.6
276	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.25
278	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.02
279	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	NEGATIVE	1	0
280	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	NEGATIVE	1	0
281	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	NEGATIVE	1	0
282	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.04
283	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.06
284	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
285	PAINT	MG / CM ^2	FINAL	GATE DOOR FRAMEAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
286	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
287	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
288	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LBP	1	6.1
289	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
290	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
291	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
293	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	NEGATIVE	1	0
294	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.08
295	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.01
304	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.02
305	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LCP	1	0.01
306	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.02
307	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3323	LCP	1	0.14
308	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3323	NEGATIVE	1	0
309	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
314	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UTAH ST-3323	NEGATIVE	1	0
316	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UTAH ST-3323	LCP	1	0.03
317	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UTAH ST-3323	LCP	1	0.01
318	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.6
320	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
321	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3323	LBP	1	1.3
323	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.3
324	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LCP	1	0.5
325	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LBP	1	1.7

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
327	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
328	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	NEGATIVE	1	0
329	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LBP	1	1.7
330	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LBP	1	1.5
334	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.01
336	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.07
337	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	NEGATIVE	1	0
338	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LCP	1	0.01
339	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3321	NEGATIVE	1	0
342	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.04
343	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	UTAH ST-3321	NEGATIVE	1	0
344	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.02
347	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3321	LCP	1	0.04
351	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3321	LCP	1	0.7
352	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3321	LCP	1	0.5
353	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.5
355	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LBP	1	2.3
356	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LBP	1	1.6
357	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	NEGATIVE	1	0
358	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	NEGATIVE	1	0
359	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LBP	1	2.1
364	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
365	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
366	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
367	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
368	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
371	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
372	PAINT	MG / CM ^2	FINAL	PANELS ABOVE WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.08
373	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.6
374	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LBP	1	4.5
375	PAINT	MG / CM ^2	FINAL	CORNER PANEL	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LBP	1	3.9
376	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
377	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
378	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.5
379	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.4
380	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	NEGATIVE	1	0
381	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	B	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.06
385	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.07
387	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.04
389	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.03
390	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.03
391	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	3446 AVOCADO	NEGATIVE	1	0
392	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.01
393	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.01
394	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	NEGATIVE	1	0
395	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	NEGATIVE	1	0
396	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	1.3
398	PAINT	MG / CM ^2	FINAL	EVE	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	NEGATIVE	1	0
399	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	WOOD	C	INTACT	BROWN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	2.8
400	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BROWN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	3.2
401	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	NEGATIVE	1	0
402	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	3.2
405	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	3446 AVOCADO	LCP	1	0.06
407	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	3446 AVOCADO	LCP	1	0.06
411	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LCP	1	0.6
415	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	BEIGE	7076.1017.0	1	BATHROOM	3446 AVOCADO	NEGATIVE	1	0
416	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LCP	1	0.01
417	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LBP	1	1.3
418	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 1	3446 AVOCADO	LCP	1	0.05
420	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	1	BEDROOM 1	3446 AVOCADO	NEGATIVE	1	0
422	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	1	BEDROOM 1	3446 AVOCADO	LBP	1	2.1
423	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.02
424	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.02
425	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.06
426	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	NEGATIVE	1	0
429	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.03

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
430	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.5
433	PAINT	MG / CM ^2	FINAL	WALL MOLDING	WOOD	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	2.1
434	PAINT	MG / CM ^2	FINAL	ROOF TRIM	METAL	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	NEGATIVE	1	0
435	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	6.3
436	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	5.6
437	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.1
438	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.6
439	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	NEGATIVE	1	0
440	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	NEGATIVE	1	0
441	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.01
442	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
443	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	NEGATIVE	1	0
444	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
445	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
446	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.4
447	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	NEGATIVE	1	0
448	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.03
450	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.6
451	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	NEGATIVE	1	0
452	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.13
453	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.06
454	PAINT	MG / CM ^2	FINAL	CLOTHE LINE	METAL	C	INTACT	SILVER	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.05
465	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LCP	1	0.03
466	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LCP	1	0.04
467	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	PEELING	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
468	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
469	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
470	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	2.7
471	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	3.4
472	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
473	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
474	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	6.6
475	PAINT	MG / CM ^2	FINAL	WALL MOLDING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	5.6
476	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	5.5
477	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
478	PAINT	MG / CM ^2	FINAL	GATE	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
479	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	NEGATIVE	1	0
480	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	4.5
481	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	1.9
482	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	3
484	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3452 AVOCADO	LCP	1	0.06
485	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3452 AVOCADO	NEGATIVE	1	<LOD
486	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3452 AVOCADO	LBP	1	1.4
487	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3452 AVOCADO	LBP	1	2.6
488	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3452 AVOCADO	LCP	1	0.06
490	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3452 AVOCADO	NEGATIVE	1	0
491	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	NEGATIVE	1	0
492	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	NEGATIVE	1	0
493	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LBP	1	1.3
494	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.01
495	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.15
496	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.5
497	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LCP	1	0.4
498	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LCP	1	0.18
499	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	NEGATIVE	1	0
502	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LBP	1	2.5
503	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	NEGATIVE	1	0
504	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.01
505	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	NEGATIVE	1	0
506	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	PEELING	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.03
507	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.4
508	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	NEGATIVE	1	0
509	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.01
510	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	NEGATIVE	1	0
511	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	5.9
512	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	5.2

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
513	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.7
515	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.8
517	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.7
518	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.9
519	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	7.6
520	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.5
521	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LBP	1	1.5
522	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LCP	1	0.06
523	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LCP	1	0.07
525	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	810 PEACH	LBP	1	1.3
526	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	BEIGE	7076.1017.0	FIRST	BATHROOM	810 PEACH	NEGATIVE	1	0
527	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	LCP	1	0.5
528	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	NEGATIVE	1	0
529	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	NEGATIVE	1	0
533	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	LCP	1	0.28
534	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	810 PEACH	LBP	1	1.6
535	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	810 PEACH	LCP	1	0.07
536	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	810 PEACH	NEGATIVE	1	0
537	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	810 PEACH	NEGATIVE	1	0
538	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	810 PEACH	LCP	1	0.08
542	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.06
543	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LCP	1	0.01
544	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	NEGATIVE	1	0
546	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.05
547	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.19
548	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	NEGATIVE	1	0
549	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.01
550	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	NEGATIVE	1	0
551	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	NEGATIVE	1	0
552	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.01
554	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	IDAHO ST-3323	NEGATIVE	1	0
555	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LBP	1	3
556	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	1.9
557	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	3.7
558	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	4.8
559	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	2.3
560	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3323	LCP	1	0.06
561	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.02
562	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.02
563	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	LCP	1	0.08
564	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	LCP	1	0.01
565	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LCP	1	0.06
566	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	NEGATIVE	1	0
569	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.3
570	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.21
571	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3323	LBP	1	1.6
572	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	NEGATIVE	1	0
573	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	NEGATIVE	1	0
574	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	NEGATIVE	1	0
575	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	NEGATIVE	1	0
576	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	NEGATIVE	1	<LOD
577	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.05
578	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3325	NEGATIVE	1	0
579	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	NEGATIVE	1	<LOD
580	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	NEGATIVE	1	0
581	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3325	NEGATIVE	1	0
582	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3325	LBP	1	1.5
583	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3325	LBP	1	4.2
584	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LBP	1	2.4
585	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.15
586	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3325	NEGATIVE	1	<LOD
587	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	2
588	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	4.2
589	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LCP	1	0.09
590	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3325	LCP	1	0.01
591	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3325	LCP	1	0.09

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
592	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.08
593	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LCP	1	0.03
594	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	3.8
595	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	NEGATIVE	1	0
597	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	NEGATIVE	1	0
598	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
600	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
601	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.05
602	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.03
603	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.4
604	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LBP	1	11.1
605	PAINT	MG / CM ^2	FINAL	DOOR GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LBP	1	7.4
606	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
607	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
608	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
610	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
611	PAINT	MG / CM ^2	FINAL	GATED DOOR	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.01
612	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	NEGATIVE	1	0
613	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
614	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.17
615	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.03
616	PAINT	MG / CM ^2	FINAL	WATER HEATER	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
617	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.11
625	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	1.9
626	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
627	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	12.1
628	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.03
629	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.02
632	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.3
634	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
635	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	3
636	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.01
637	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
638	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
639	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
640	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.05
641	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
643	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.04
644	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	NEGATIVE	1	0
645	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LCP	1	0.06
646	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	NEGATIVE	1	0
647	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	IDAHO ST-3359	NEGATIVE	1	0
648	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.02
649	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	NEGATIVE	1	0
651	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	NEGATIVE	1	0
652	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.01
653	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.01
654	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.1
655	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	2.6
656	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	2.4
657	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	3.2
658	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	2.8
659	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	3.6
660	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	NEGATIVE	1	0
661	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	NEGATIVE	1	<LOD
662	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.13
663	PAINT	MG / CM ^2	FINAL	DOOR FRAME/AME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.03
664	PAINT	MG / CM ^2	FINAL	DOOR FRAME/AME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3359	LCP	1	0.08
665	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3359	NEGATIVE	1	<LOD
666	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	1.4
667	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LCP	1	0.04
668	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	4.1
669	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.03
670	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	NEGATIVE	1	0
671	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	NEGATIVE	1	0
672	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3361	NEGATIVE	1	0



TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
673	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3361	NEGATIVE	1	0
674	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3361	LCP	1	0.21
675	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	NEGATIVE	1	0
676	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	IDAHO ST-3361	LCP	1	0.01
677	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.5
678	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	4.1
679	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	6.6
680	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.8
681	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3361	LCP	1	0.07
684	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3361	LCP	1	0.11
685	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3361	NEGATIVE	1	0
686	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3361	LCP	1	0.01
688	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.7
689	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	NEGATIVE	1	0
698	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.01
699	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.01
700	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
701	PAINT	MG / CM ^2	FINAL	PATIO	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
702	PAINT	MG / CM ^2	FINAL	PATIO RAILING	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
703	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
710	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
713	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	2.2
714	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	5.8
717	PAINT	MG / CM ^2	FINAL	WALL FLASHING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.5
725	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
726	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
727	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
729	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
731	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
732	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	6.5
733	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	6
734	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3.7
735	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3.8
736	PAINT	MG / CM ^2	FINAL	GATE	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
737	PAINT	MG / CM ^2	FINAL	PORCH FENCING	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
738	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.02
739	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	C	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.02
740	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3
741	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	NEGATIVE	1	0
742	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	860 GRAPE	LCP	1	0.5
743	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	LCP	1	0.03
744	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	LCP	1	0.2
745	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	NEGATIVE	1	<LOD
746	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	NEGATIVE	1	0
747	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	860 GRAPE	LCP	1	0.01
748	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	860 GRAPE	LCP	1	0.18
749	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.21
750	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LBP	1	2.2
751	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	NEGATIVE	1	0
752	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.01
754	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.7
755	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	NEGATIVE	1	0
756	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.01
757	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	NEGATIVE	1	0
758	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	LCP	1	0.6
759	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	NEGATIVE	1	0
760	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	LCP	1	0.12
768	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3411	LCP	1	0.04
769	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3411	NEGATIVE	1	<LOD
770	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3411	NEGATIVE	1	<LOD
771	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3411	NEGATIVE	1	0
772	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3411	LCP	1	0.18
773	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3411	NEGATIVE	1	0
775	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3411	NEGATIVE	1	0
776	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3411	NEGATIVE	1	0
777	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3411	LCP	1	0.7

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
778	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3411	LCP	1	0.06
780	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3411	LCP	1	0.21
781	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3411	LCP	1	0.5
783	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3411	LBP	1	2.5
786	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3413	LCP	1	0.05
787	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.03
788	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3413	NEGATIVE	1	0
790	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.11
791	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.3
792	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3413	LCP	1	0.24
793	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3413	LBP	1	1
794	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3413	NEGATIVE	1	0
797	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.7
798	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.4
799	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	NEGATIVE	1	0
800	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	NEGATIVE	1	0
801	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	NEGATIVE	1	0
802	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	NEGATIVE	1	0
803	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.4
806	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
807	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
808	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.01
809	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
810	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
811	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
812	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
813	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
814	PAINT	MG / CM ^2	FINAL	GATED DOOR	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
815	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.02
816	PAINT	MG / CM ^2	FINAL	WINDOW PANELS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.05
817	PAINT	MG / CM ^2	FINAL	WINDOW PANEL FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	NEGATIVE	1	0
818	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.01
819	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3424	LCP	1	0.02
820	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3424	NEGATIVE	1	0
821	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3424	NEGATIVE	1	0
822	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3424	LCP	1	0.4
824	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	LCP	1	0.08
825	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	NEGATIVE	1	0
826	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	NEGATIVE	1	0
827	PAINT	MG / CM ^2	FINAL	CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	NEGATIVE	1	0
828	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	NEGATIVE	1	0
829	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3424	NEGATIVE	1	0
830	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3422	LCP	1	0.02
832	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3422	NEGATIVE	1	0
833	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3422	LCP	1	0.04
834	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3422	LCP	1	0.6
835	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3422	LCP	1	0.26
836	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3422	LCP	1	0.4
838	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3422	NEGATIVE	1	0
839	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3422	NEGATIVE	1	0
840	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.03
841	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.03
842	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.01
843	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.01
844	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
845	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
846	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
847	PAINT	MG / CM ^2	FINAL	SIDE PANELS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
848	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
849	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
850	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
851	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	NEGATIVE	1	0
852	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.01
853	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3459	LCP	1	0.04
854	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3459	NEGATIVE	1	0
855	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.04

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
856	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3459	LCP	1	0.13
857	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3459	NEGATIVE	1	0
858	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3459	NEGATIVE	1	0
860	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.3
861	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3459	NEGATIVE	1	0
862	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3461	NEGATIVE	1	0
863	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3461	LCP	1	0.3
864	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3461	NEGATIVE	1	<LOD
865	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3461	LCP	1	0.02
866	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LCP	AVOCADO ST-3461	LCP	1	0.7
867	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3461	LCP	1	0.5
868	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3461	NEGATIVE	1	0
869	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3461	LCP	1	0.26
870	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3461	LCP	1	0.01
871	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3461	NEGATIVE	1	0
879	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.02
880	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.02
881	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.04
882	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
883	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
884	PAINT	MG / CM ^2	FINAL	WINDOW PANEL	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LBP	1	2.4
885	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
886	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.01
887	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
888	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
889	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	NEGATIVE	1	0
890	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3489	NEGATIVE	1	0
891	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	LCP	1	0.5
892	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3489	LCP	1	0.01
894	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3489	LCP	1	0.08
896	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	LCP	1	0.5
897	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3489	LCP	1	0.6
899	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	LCP	1	0.19
901	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	NEGATIVE	1	0
902	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	LCP	1	0.01
903	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	NEGATIVE	1	0
904	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	NEGATIVE	1	0
905	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	NEGATIVE	1	0
906	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	NEGATIVE	1	0
907	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3491	LCP	1	0.5
908	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3491	LCP	1	0.09
909	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3491	LCP	1	0.06
910	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3491	NEGATIVE	1	0
911	PAINT	MG / CM ^2	FINAL	CLOSET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3491	NEGATIVE	1	0
912	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3491	LCP	1	0.27
913	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	NEGATIVE	1	0
914	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	LBP	1	1.4
915	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	NEGATIVE	1	0
916	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	LCP	1	0.04
917	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	NEGATIVE	1	0
918	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.05
919	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.01
920	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.03
921	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
922	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
923	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
924	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
925	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
926	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
927	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.01
928	PAINT	MG / CM ^2	FINAL	GATE DOOR	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	NEGATIVE	1	0
929	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.3
930	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3474	LCP	1	0.3
931	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3474	NEGATIVE	1	0
932	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3474	LCP	1	0.13
933	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.02

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
934	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3474	LCP	1	0.08
935	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.4
936	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	NEGATIVE	1	0
937	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.01
938	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	NEGATIVE	1	0
939	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.01
940	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.01
941	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	NEGATIVE	1	0
942	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3472	LCP	1	0.04
943	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3472	LCP	1	0.4
944	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3472	NEGATIVE	1	0
945	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.4
947	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3472	LCP	1	0.04
948	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.07
949	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.7
950	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	NEGATIVE	1	0
951	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	NEGATIVE	1	0
952	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3472	LCP	1	0.02
953	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3472	NEGATIVE	1	0
954	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.07
955	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.08
956	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.04
957	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
958	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
959	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
960	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
961	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
962	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	NEGATIVE	1	0
963	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	LINDEN ST-747	LCP	1	0.3
965	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-747	LCP	1	0.2
966	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-747	LCP	1	0.5
968	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-747	LCP	1	0.25
969	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-747	NEGATIVE	1	0
970	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-747	NEGATIVE	1	0
971	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	LINDEN ST-749	NEGATIVE	1	0
972	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	LINDEN ST-749	NEGATIVE	1	0
974	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	LINDEN ST-749	LCP	1	0.08
975	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	LINDEN ST-749	LCP	1	0.22
976	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-749	LCP	1	0.02
977	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	NEGATIVE	1	0
978	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	LCP	1	0.17
979	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	NEGATIVE	1	0
980	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	NEGATIVE	1	0
981	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	NEGATIVE	1	0
982	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	LCP	1	0.01
983	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	LINDEN ST-749	NEGATIVE	1	0
984	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	LINDEN ST-749	NEGATIVE	1	0
985	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-749	LCP	1	0.11
986	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-749	LCP	1	0.18
994	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LCP	1	0.07
996	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LCP	1	0.14
997	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
998	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
999	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
1000	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
1001	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	<LOD
1002	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
1003	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
1004	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	NEGATIVE	1	0
1005	PAINT	MG / CM ^2	FINAL	WINDOW PANELS	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LBP	1	6.7
1006	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-842	LCP	1	0.06
1007	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-842	NEGATIVE	1	<LOD
1008	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	GARAGE	GRAPE ST-842	LCP	1	0.05
1009	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-842	LCP	1	0.13
1010	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-842	LCP	1	0.02
1011	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	LCP	1	0.4

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1013	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	NEGATIVE	1	0
1014	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	NEGATIVE	1	0
1015	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	NEGATIVE	1	0
1016	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	NEGATIVE	1	0
1017	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-842	NEGATIVE	1	0
1018	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-840	NEGATIVE	1	0
1019	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-840	LCP	1	0.11
1020	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-840	NEGATIVE	1	<LOD
1021	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-840	NEGATIVE	1	0
1022	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-840	LCP	1	0.04
1023	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-840	LCP	1	0.09
1024	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-840	NEGATIVE	1	0
1025	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-840	NEGATIVE	1	0
1026	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-840	LCP	1	0.21
1027	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-840	LCP	1	0.01
1028	PAINT	MG / CM ^2	FINAL	FLOOR TILE	CERAMIC	D	INTACT	RED	7076.1017.0	FIRST	BATHROOM	3388 IDAHO	NEGATIVE	1	0
1036	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1037	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1038	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1040	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1041	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1042	PAINT	MG / CM ^2	FINAL	FENCE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1043	PAINT	MG / CM ^2	FINAL	FENCE	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1044	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1045	PAINT	MG / CM ^2	FINAL	PORCH STEPS	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1046	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1047	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	1.6
1048	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LCP	1	0.5
1049	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	4.5
1051	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	2.6
1052	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	3.3
1053	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	5.6
1054	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	2.1
1055	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	4.5
1056	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	6.7
1057	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LCP	1	0.01
1058	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1059	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	10.5
1060	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1062	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	1.6
1063	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	6.6
1064	PAINT	MG / CM ^2	FINAL	RAMP HANDRAIL	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1065	PAINT	MG / CM ^2	FINAL	RAMP HANDRAIL	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	NEGATIVE	1	0
1066	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	13
1070	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.5
1071	PAINT	MG / CM ^2	FINAL	WALL	TRANSITE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.8
1072	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	FAIR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1073	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	FAIR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1074	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	FAIR	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.2
1075	PAINT	MG / CM ^2	FINAL	WALL COLUMN	WOOD	C	FAIR	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.09
1076	PAINT	MG / CM ^2	FINAL	WALL SKIRTING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1077	PAINT	MG / CM ^2	FINAL	WALL SKIRTING TRIM	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1080	PAINT	MG / CM ^2	FINAL	WALL	TRANSITE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.7
1081	PAINT	MG / CM ^2	FINAL	WALL SKIRTING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1082	PAINT	MG / CM ^2	FINAL	WALL SKIRTING TRIM	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.08
1083	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	PEELING	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1084	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1085	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1087	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1088	PAINT	MG / CM ^2	FINAL	WALL	METAL	D	PEELING	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	6.1
1089	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	D	POOR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1091	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	D	POOR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1092	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1093	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.3
1094	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	10.6
1095	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	6.3

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1096	PAINT	MG / CM ^2	FINAL	EVE	METAL	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	7.8
1097	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	5.2
1098	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	POOR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.9
1099	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1100	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	POOR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1101	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	POOR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1102	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1103	PAINT	MG / CM ^2	FINAL	GARAGE DOOR FRAME	WOOD	C	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1104	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	FAIR	WHITE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1105	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	FAIR	WHITE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1106	PAINT	MG / CM ^2	FINAL	WORK BENCH	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1107	PAINT	MG / CM ^2	FINAL	WORK BENCH FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1108	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1109	PAINT	MG / CM ^2	FINAL	STEPS	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1110	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.3
1111	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.12
1112	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.1
1113	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1114	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1116	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1117	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.08
1118	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.17
1121	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.1
1122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1123	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1124	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.15
1125	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.4
1126	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1127	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1129	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1130	PAINT	MG / CM ^2	FINAL	FOOTING	CONCRETE	C	INTACT	YELLOW	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1131	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.19
1132	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1133	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.11
1134	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.28
1135	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1136	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.24
1137	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.9
1138	PAINT	MG / CM ^2	FINAL	FLOOR STRIPE	WOOD	B	POOR	YELLOW	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1139	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1140	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.4
1141	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1142	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.07
1143	PAINT	MG / CM ^2	FINAL	HVAC DUCT	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.05
1144	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1145	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.13
1146	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1147	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1148	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1149	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1150	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.05
1153	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1155	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.29
1157	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.16
1158	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.13
1159	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	<LOD
1160	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.07
1161	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1162	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1163	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1164	PAINT	MG / CM ^2	FINAL	RAMP	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1165	PAINT	MG / CM ^2	FINAL	RAMP RAILING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.1
1166	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1167	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.16
1169	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1170	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1171	PAINT	MG / CM ^2	FINAL	RAMP	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1172	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	NEGATIVE	1	0
1176	PAINT	MG / CM ^2	FINAL	WALL	CINDER BLOCK	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1177	PAINT	MG / CM ^2	FINAL	WALL	CINDER BLOCK	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1178	PAINT	MG / CM ^2	FINAL	WALL	CINDER BLOCK	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1179	PAINT	MG / CM ^2	FINAL	COLUMN	BRICK	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1180	PAINT	MG / CM ^2	FINAL	WALL	CINDER BLOCK	C	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1181	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1182	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1183	PAINT	MG / CM ^2	FINAL	STALL DOOR	METAL	A	INTACT	TAN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1184	PAINT	MG / CM ^2	FINAL	TOILET	METAL	A	INTACT	TAN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.05
1185	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.05
1186	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.02
1187	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1188	PAINT	MG / CM ^2	FINAL	DOOR	METAL	B	INTACT	BROWN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1189	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BROWN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1190	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BROWN	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1192	PAINT	MG / CM ^2	FINAL	WALL	CINDER BLOCK	A	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1193	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1194	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1195	PAINT	MG / CM ^2	FINAL	URINAL	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1197	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1198	PAINT	MG / CM ^2	FINAL	ELECT BRKR BOX	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.1
1199	PAINT	MG / CM ^2	FINAL	STALL DOOR	METAL	C	INTACT	TAN	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1200	PAINT	MG / CM ^2	FINAL	STALL BOX	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1201	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1202	PAINT	MG / CM ^2	FINAL	METER BOX	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1203	PAINT	MG / CM ^2	FINAL	METER CONDUIT	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1204	PAINT	MG / CM ^2	FINAL	METER POST	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1206	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1207	PAINT	MG / CM ^2	FINAL	ROOF BEAM	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1209	PAINT	MG / CM ^2	FINAL	ROOF TRUSS	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1210	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1211	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1212	PAINT	MG / CM ^2	FINAL	GUARDRAIL	WOOD	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1213	PAINT	MG / CM ^2	FINAL	GUARDRAIL	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1214	PAINT	MG / CM ^2	FINAL	COLUMN	BRICK	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1215	PAINT	MG / CM ^2	FINAL	COLUMN	BRICK	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1216	PAINT	MG / CM ^2	FINAL	PICNIC TABLE	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1217	PAINT	MG / CM ^2	FINAL	PICNIC TABLE	WOOD	C	PEELING	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1218	PAINT	MG / CM ^2	FINAL	BENCH	WOOD	C	FAIR	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1219	PAINT	MG / CM ^2	FINAL	TABLE	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	NEGATIVE	1	0
1220	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1221	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1222	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.6
1223	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.6
1224	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.3
1226	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1227	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.04
1228	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1229	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.1
1230	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.4
1231	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1232	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1233	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1234	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	6.2
1235	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.8
1237	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1242	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1243	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1244	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1245	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1246	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1248	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1249	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1250	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1251	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	D	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1252	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	D	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1253	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	D	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1254	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1255	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1257	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	LBP	1	3.3
1263	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1264	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1265	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1266	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	F	COMMUNITY CENTER 890-892 PLUM	LBP	1	5
1270	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	F	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.7
1271	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LBP	1	3.3
1272	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.16
1274	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1275	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1276	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1277	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.15
1279	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1280	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1281	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1283	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1286	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	LBP	1	1.7
1287	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1289	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1292	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1293	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.27
1294	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1296	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1297	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1298	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1300	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LBP	1	3
1301	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1302	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.04
1303	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1304	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1305	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1306	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1308	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	NEGATIVE	1	0
1317	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1318	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1319	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1321	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1322	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1323	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1324	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1325	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1327	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.6
1328	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1331	PAINT	MG / CM ^2	FINAL	WALL SIDING	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.22
1334	PAINT	MG / CM ^2	FINAL	ROOF FASCIA	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	<LOD
1336	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	4
1337	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1338	PAINT	MG / CM ^2	FINAL	GARAGE DOOR FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1339	PAINT	MG / CM ^2	FINAL	DOOR	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	1.6
1340	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.29
1341	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1342	PAINT	MG / CM ^2	FINAL	STEPS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1343	PAINT	MG / CM ^2	FINAL	PLATFORM	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1344	PAINT	MG / CM ^2	FINAL	PLATFORM RAILING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1345	PAINT	MG / CM ^2	FINAL	HVAC	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	<LOD
1346	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1347	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.4
1348	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.7
1349	PAINT	MG / CM ^2	FINAL	FLAG POLE	METAL	B	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.5
1350	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.1



**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1354	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1355	PAINT	MG / CM ^2	FINAL	HANDRAILING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1357	PAINT	MG / CM ^2	FINAL	PARKING STRIPES	ASPHALT	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1358	PAINT	MG / CM ^2	FINAL	PARKING STRIPES	ASPHALT	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1359	PAINT	MG / CM ^2	FINAL	PARKING STRIPES	ASPHALT	B	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.8
1360	PAINT	MG / CM ^2	FINAL	POSTS	METAL	B	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1361	PAINT	MG / CM ^2	FINAL	STEPS	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1362	PAINT	MG / CM ^2	FINAL	CRAWL SPACE ACCESS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1369	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.08
1370	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.01
1371	PAINT	MG / CM ^2	FINAL	STUDS	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.01
1373	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1374	PAINT	MG / CM ^2	FINAL	TRUSS	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1376	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	GRAY	7076.1017.0	FIRST	B	3358 UTAH CARPENTER SHOP	LBP	1	1.3
1381	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	C	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1382	PAINT	MG / CM ^2	FINAL	CROWN MOLDING	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	C	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1383	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	D	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1384	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1385	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1386	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1387	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1388	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1389	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1390	PAINT	MG / CM ^2	FINAL	GARAGE DOOR STUDS	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1392	PAINT	MG / CM ^2	FINAL	GARAGE DOOR STUDS	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	E	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1394	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1395	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1396	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1397	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1398	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1399	PAINT	MG / CM ^2	FINAL	GARAGE DOOR FRAME	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1400	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.08
1401	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1402	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LBP	1	3.5
1403	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1404	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LBP	1	2.1
1405	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1406	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1407	PAINT	MG / CM ^2	FINAL	SLIDING DOOR	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.27
1408	PAINT	MG / CM ^2	FINAL	SLIDING DOOR FRAME	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.3
1409	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1410	PAINT	MG / CM ^2	FINAL	EVE FLASHING	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.02
1411	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1412	PAINT	MG / CM ^2	FINAL	FASCIA MOLDING	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	NEGATIVE	1	0
1413	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1415	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1417	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1418	PAINT	MG / CM ^2	FINAL	AC UNIT WINDOW FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1419	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1420	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.18
1421	PAINT	MG / CM ^2	FINAL	EVE	METAL	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1422	PAINT	MG / CM ^2	FINAL	EVE	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1423	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1424	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.16
1425	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.07
1426	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1427	PAINT	MG / CM ^2	FINAL	GARAGE DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1428	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1429	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1430	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1431	PAINT	MG / CM ^2	FINAL	PATIO ROOF	METAL	C	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1432	PAINT	MG / CM ^2	FINAL	PATIO COLUMNS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.12
1433	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1434	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1435	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	PEELING	WHITE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1436	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1439	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1443	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	BEIGE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1444	PAINT	MG / CM ^2	FINAL	PIPE	PLASTIC	D	INTACT	BEIGE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	LCP	1	0.01
1445	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	LCP	1	0.01
1446	PAINT	MG / CM ^2	FINAL	SINK BACKSLAH	CERAMIC	C	INTACT	PINK	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1447	PAINT	MG / CM ^2	FINAL	SINK BACKSLAH	CERAMIC	C	INTACT	BEIGE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1448	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1449	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1451	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1452	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1453	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1454	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1455	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1456	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	NEGATIVE	1	0
1457	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1458	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1459	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1460	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1461	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	B	LAUNDRY BUILDING	NEGATIVE	1	0
1462	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	LCP	1	0.01
1463	PAINT	MG / CM ^2	FINAL	VENT	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.01
1464	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1465	PAINT	MG / CM ^2	FINAL	POST	METAL	D	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1466	PAINT	MG / CM ^2	FINAL	WATER HEATER CLOSET	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1467	PAINT	MG / CM ^2	FINAL	WATER HEATER CLOSET DOOR	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1468	PAINT	MG / CM ^2	FINAL	WATER HEATER CLOSET DOOR FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	NEGATIVE	1	0
1469	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	NEGATIVE	1	0
1471	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	NEGATIVE	1	0
1472	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	LCP	1	0.01
1473	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	NEGATIVE	1	0
1474	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	BLUE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	NEGATIVE	1	0
1475	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	E	LAUNDRY BUILDING	NEGATIVE	1	0
1476	PAINT	MG / CM ^2	FINAL	FLOOR	CONCRETE	A	INTACT	GRAY	7076.1017.0	FIRST	E	LAUNDRY BUILDING	NEGATIVE	1	0
1477	PAINT	MG / CM ^2	FINAL	CABINET	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	E	LAUNDRY BUILDING	NEGATIVE	1	0
1478	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	E	LAUNDRY BUILDING	LCP	1	0.02
1479	PAINT	MG / CM ^2	FINAL	FLOOR	CONCRETE	C	INTACT	GRAY	7076.1017.0	FIRST	E	LAUNDRY BUILDING	NEGATIVE	1	0
1480	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	D	LAUNDRY BUILDING	NEGATIVE	1	0
1481	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	NEGATIVE	1	0
1483	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	LBP	1	2.9
1487	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	LBP	1	1.5
1488	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	NEGATIVE	1	0
1489	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	NEGATIVE	1	0
1490	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	NEGATIVE	1	0
1498	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1499	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1500	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1501	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1502	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LBP	1	1.2
1504	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.6
1505	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1506	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1507	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LBP	1	4.4
1508	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1509	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.07
1510	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.09
1511	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.12
1512	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	YELLOW	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1513	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	GRAY	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1515	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GRAY	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	LCP	1	0.7
1516	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	GRAY	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1517	PAINT	MG / CM ^2	FINAL	COLUMN	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.05
1518	PAINT	MG / CM ^2	FINAL	HVAC DUCT	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1519	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	YELLOW	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1520	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	BLUE	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1521	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1523	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LBP	1	1.2

TABLE 3.0 - LEAD XRF SA RESULTS  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1524	PAINT	MG / CM ^2	FINAL	WINDOW SILL	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LBP	1	1.8
1525	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	F	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1526	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	BEIGE	7076.1017.0	FIRST	F	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1527	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	BEIGE	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1528	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1529	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1530	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1531	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1532	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1533	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.03
1534	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.05
1535	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LCP	1	0.08
1536	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1537	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1538	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LBP	1	1.9
1539	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1540	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1541	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	NEGATIVE	1	<LOD
1542	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLK	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1543	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.23
1544	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.9
1545	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1546	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1548	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.6
1549	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1550	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1551	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1552	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1553	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LCP	1	0.13
1554	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1555	PAINT	MG / CM ^2	FINAL	DOOR	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LBP	1	1.6
1556	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1557	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1558	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1559	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	B	INTACT	WHITE	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1560	PAINT	MG / CM ^2	FINAL	BENCH	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1561	PAINT	MG / CM ^2	FINAL	COLUMN	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1562	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1563	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1565	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	T	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1566	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	T	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1567	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	T	HDR FACILITIES WAREHOUSE	LBP	1	4.4
1568	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1569	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	2.7
1570	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	5.9
1571	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	7.3
1572	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	POOR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	4.7
1573	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	POOR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	9.8
1574	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	C	FAIR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	12.4
1575	PAINT	MG / CM ^2	FINAL	FLOOR	CONCRETE	C	FAIR	GRAY	7076.1017.0	FIRST	S	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1576	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1577	PAINT	MG / CM ^2	FINAL	WALL SIDING MOLDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	5.8
1578	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1579	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1580	PAINT	MG / CM ^2	FINAL	EVE FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1581	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1582	PAINT	MG / CM ^2	FINAL	WINDOW SILL	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1583	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	FAIR	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1584	PAINT	MG / CM ^2	FINAL	COLUMN	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1585	PAINT	MG / CM ^2	FINAL	PATIO SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1586	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1587	PAINT	MG / CM ^2	FINAL	EVE	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1588	PAINT	MG / CM ^2	FINAL	DOOR	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1589	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1590	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1591	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0

**TABLE 3.0 - LEAD XRF SA RESULTS**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1592	PAINT	MG / CM ^2	FINAL	WALL FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1593	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1594	PAINT	MG / CM ^2	FINAL	WINDOW SILL	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.3
1595	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1596	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1597	PAINT	MG / CM ^2	FINAL	METER BOX	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1598	PAINT	MG / CM ^2	FINAL	STAIR RAILING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1599	PAINT	MG / CM ^2	FINAL	BENCH	WOOD	D	POOR	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0
1600	PAINT	MG / CM ^2	FINAL	BENCH SUPPORTS	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	NEGATIVE	1	0



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

## **Appendix G**

### **Table 3.1 - Lead XRF Results - LBP (Positive)**

07/23/18 THROUGH 08/03/18



TABLE 3.1 - LEAD XRF SA RESULTS  
LEAD-BASED PAINTS (≥1.0 mg/cm2)  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
9	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	2.3
16	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	1.6
18	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	POSITIVE	1	2
23	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2.8
24	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2
25	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	POSITIVE	1	2.4
55	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	2.5
57	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	3.7
58	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	5.9
64	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	C	CRACKED	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	9
65	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	EXT	811 PLUM	POSITIVE	1	7.1
74	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	2.7
75	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	1.9
78	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.3
79	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.4
80	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	POSITIVE	1	3.3
87	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	822 PLUM	POSITIVE	1	2.2
96	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	EXT	822 PLUM	POSITIVE	1	2.4
114	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.6
115	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	1.7
116	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.6
117	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	POSITIVE	1	2.2
122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	POSITIVE	1	2.4
123	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	POSITIVE	1	2
132	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	4.1
133	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	6.5
134	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	7.8
135	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXT	851 PLUM	POSITIVE	1	3.7
151	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	2.6
152	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	1.8
153	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	POSITIVE	1	3.3
160	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	POSITIVE	1	2.4
182	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	POSITIVE	1	1.6
183	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	POSITIVE	1	6.8
195	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	POSITIVE	1	2.9
207	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	POSITIVE	1	3.3
212	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 1	7076.1017.0	POSITIVE	1	3.9
213	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	POSITIVE	1	2.7
215	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	3.8
219	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	2
222	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	6.6
223	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	5.2
224	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	POSITIVE	1	2.5
231	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	POSITIVE	1	3.8
232	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BEIGE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	POSITIVE	1	2.6
246	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	3.9
247	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	8
248	PAINT	MG / CM ^2	FINAL	SIDING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	8.6
254	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	9
255	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	POSITIVE	1	2.6
259	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	POSITIVE	1	2.5
264	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	POSITIVE	1	5

TABLE 3.1 - LEAD XRF SA RESULTS  
LEAD-BASED PAINTS (≥1.0 mg/cm2)  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
276	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	POSITIVE	1	4
279	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	POSITIVE	1	1.5
299	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	2
300	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	4.7
301	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	4.2
302	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	2
307	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	POSITIVE	1	1.5
311	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	POSITIVE	1	1.8
325	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	POSITIVE	1	2.1
326	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	POSITIVE	1	2.6
331	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	POSITIVE	1	3.3
332	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	1.9
338	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	2.2
339	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	3.7
341	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	4.1
342	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-LIVIN RM	7076.1017.0	POSITIVE	1	1.4
357	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	POSITIVE	1	1.6
364	PAINT	MG / CM ^2	FINAL	WINDOW	PLASTER	C	INTACT	BLACK	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	2
391	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	8.2
397	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	7.1
398	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	3.8
399	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	POSITIVE	1	2.1
400	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	POSITIVE	1	1.8
408	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	POSITIVE	1	2.9
411	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	POSITIVE	1	1
436	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	3.1
437	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	5.1
438	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	6.9
439	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	5.9
440	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	POSITIVE	1	5
441	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	5.9
442	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	POSITIVE	1	4.1
446	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	4.1
448	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	1.3
449	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	1.8
450	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	POSITIVE	1	1.5
451	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-LIVING RM	7076.1017.0	POSITIVE	1	1.9
454	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	POSITIVE	1	1.5
474	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	1.8
475	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	4.6
476	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	POSITIVE	1	2.4
477	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	POSITIVE	1	2
481	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	3.4
482	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	D	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	POSITIVE	1	2.4
491	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	POSITIVE	1	1.8
501	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	4.8
503	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.4
518	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	1.4
520	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	6.8
521	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	7.2
522	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	2.1
523	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	1.7



TABLE 3.1 - LEAD XRF SA RESULTS  
LEAD-BASED PAINTS (≥1.0 mg/cm2)  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
524	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	POSITIVE	1	2.3
529	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	POSITIVE	1	2.2
530	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	POSITIVE	1	1.9
531	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	POSITIVE	1	1.8
535	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	POSITIVE	1	1.5
567	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-HALL	7076.1017.0	POSITIVE	1	3.1
582	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM 2	7076.1017.0	POSITIVE	1	1.8
583	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	2.1
587	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM2	7076.1017.0	POSITIVE	1	1.5
588	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM2	7076.1017.0	POSITIVE	1	2.4
589	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	3.8
590	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	2.5
594	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	POSITIVE	1	3.2
613	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	POSITIVE	1	2.4
615	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	1.8
616	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	5.8
617	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	2.5
618	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	POSITIVE	1	2.3
639	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	8.1
641	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.7
648	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	2
649	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	10.9
652	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	7.1
656	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	3.4
663	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	POSITIVE	1	3.2
687	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	POSITIVE	1	1.4
696	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	POSITIVE	1	3.5
730	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	2.1
731	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	2.6
732	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	POSITIVE	1	1.7
733	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-KITCHEN	7076.1017.0	POSITIVE	1	6.7
734	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	POSITIVE	1	2.3
737	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	3
738	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	POSITIVE	1	7.3
753	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	1.7
755	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	POSITIVE	1	2.1
756	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	1.9
757	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	2.3
758	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	POSITIVE	1	6.3
759	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	POSITIVE	1	2.6
764	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	POSITIVE	1	3.5
775	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	4.5
828	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	POSITIVE	1	1.6
830	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	2
831	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	3
832	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	4.5
833	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	POSITIVE	1	2.4
840	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	POSITIVE	1	2
861	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	POSITIVE	1	1.8
865	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	POSITIVE	1	2
866	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	POSITIVE	1	7.1
867	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM1	7076.1017.0	POSITIVE	1	2.9

TABLE 3.1 - LEAD XRF SA RESULTS  
LEAD-BASED PAINTS (≥1.0 mg/cm2)  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
869	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	POSITIVE	1	2.6
870	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	3.3
872	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	16.5
920	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	POSITIVE	1	2.5
921	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	POSITIVE	1	2
925	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	POSITIVE	1	7.8
926	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	POSITIVE	1	2
927	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	POSITIVE	1	1.7
929	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	POSITIVE	1	1.8
930	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	POSITIVE	1	1.6
931	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	POSITIVE	1	5.9
950	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	POSITIVE	1	1.9
954	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	3.2
960	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	POSITIVE	1	2.9
961	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	POSITIVE	1	7.4
962	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BATHRM	7076.1017.0	POSITIVE	1	1.8
967	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	3.9
968	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	POSITIVE	1	9.1
982	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BROWN	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	6.2
1007	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	5.9
1008	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	2
1010	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	1.7
1011	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	POSITIVE	1	4.2
1016	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3367 UTAH	POSITIVE	1	3
1018	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3367 UTAH	POSITIVE	1	1.8
1028	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	POSITIVE	1	2.1
1048	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	2.1
1062	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	PEELING	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	6.8
1063	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	1.1
1065	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	POSITIVE	1	4
1068	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3341 UTAH	POSITIVE	1	1.5
1072	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	POSITIVE	1	2.4
1103	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM2	7076.1017.0	POSITIVE	1	3.3
1107	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	POSITIVE	1	2.3
1108	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	POSITIVE	1	6.3
1109	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	POSITIVE	1	3.2
1111	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	POSITIVE	1	1.5
1112	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	POSITIVE	1	2.1
1115	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	11.1
1116	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	2.5
1120	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	1.7
1121	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	POSITIVE	1	5.8
1122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BATHRM	7076.1017.0	POSITIVE	1	5.6
1135	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	POSITIVE	1	2.5
1141	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	3.5
1142	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	12.5
1184	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	1.5
1187	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	POSITIVE	1	4.1
1188	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	POSITIVE	1	3.6
1192	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	3.7
1202	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	POSITIVE	1	1.6
1206	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	POSITIVE	1	1.7

TABLE 3.1 - LEAD XRF SA RESULTS  
LEAD-BASED PAINTS (≥1.0 mg/cm2)  
CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
UNIVERSITY OF CALIFORNIA, RIVERSIDE  
RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1220	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	POSITIVE	1	1.4
1222	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	POSITIVE	1	1.8
1223	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	2.8
1225	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	1.3
1226	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	POSITIVE	1	3.5
1238	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	1.8
1240	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	POSITIVE	1	8.6
1252	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	POSITIVE	1	5.2
1258	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	PEELING	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	POSITIVE	1	4.3
1280	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	POSITIVE	1	3.9
1292	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3308 UTAH	POSITIVE	1	2.5
1298	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	1.7
1299	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	2.7
1300	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	2.2
1306	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	3.6
1307	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	POSITIVE	1	1.7
1326	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	POSITIVE	1	1.1
1342	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	1.6
1343	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	4.8
1344	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	POSITIVE	1	4.1
1350	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	2.2
1357	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	POSITIVE	1	1.8
1371	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	POSITIVE	1	3.3
1372	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	POSITIVE	1	10.1
1373	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	POSITIVE	1	3.4
1375	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	POSITIVE	1	4.2
1383	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	POSITIVE	1	2.7
1392	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	POSITIVE	1	2.3
1418	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	2
1419	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	3.5
1421	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	POSITIVE	1	3.2
1424	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	POSITIVE	1	1.6
1426	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	5.6
1432	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	POSITIVE	1	2.3
1443	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	POSITIVE	1	2.6
1445	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	POSITIVE	1	7.3
1446	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	POSITIVE	1	2.8
1449	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	POSITIVE	1	2.6
1450	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	POSITIVE	1	6.8
1470	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	POSITIVE	1	9.9
1492	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	POSITIVE	1	3.4
1498	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	POSITIVE	1	3.9
1513	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	POSITIVE	1	1.8
1533	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	1.3
1534	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	1.5
1535	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	3.2
1539	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	POSITIVE	1	7.7
1548	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	POSITIVE	1	1.8
1575	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	POSITIVE	1	1.9
1576	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	POSITIVE	1	3.8
1601	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	POSITIVE	1	7.4

*08/07/18 THROUGH 08/22/18*



TABLE 3.1 - LEAD XRF SA RESULTS  
 LEAD-BASED PAINTS (≥1.0 mg/cm<sup>2</sup>)  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
10	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	1.9
15	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	3.5
16	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LBP	1	4
17	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	LBP	1	3.3
19	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UNIT 876	LBP	1	8.1
22	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LBP	1	2.7
38	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LBP	1	3.8
39	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 878	LBP	1	3.8
40	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LBP	1	4.5
42	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LBP	1	6.2
45	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LBP	1	2
58	PAINT	MG / CM ^2	FINAL	WINDOW GUARDS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LBP	1	8.9
82	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	2.7
83	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	3.3
85	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	5.5
89	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LBP	1	3
90	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	786 BLAINE	LBP	1	2.1
91	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LBP	1	2.7
129	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	12.6
130	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	6.5
131	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LBP	1	10
135	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	LBP	1	2.2
140	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LBP	1	1.9
160	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	2.9
163	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	1.6
167	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	11.1
168	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	2.3
169	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LBP	1	3.4
192	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	2
193	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	1.9
197	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LBP	1	3
217	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LBP	1	2
236	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LBP	1	2.6
237	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LBP	1	4.6
238	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	LBP	1	6.6
241	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LBP	1	2.1
244	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LBP	1	2.8
254	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-758	LBP	1	1.7
263	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LBP	1	3.2
265	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	LBP	1	2.9
266	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-760	LBP	1	6.5
267	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LBP	1	3.8
269	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LBP	1	2.3
271	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LBP	1	2.5
288	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LBP	1	6.1
321	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3323	LBP	1	1.3
325	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LBP	1	1.7
329	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LBP	1	1.7
330	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LBP	1	1.5
355	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LBP	1	2.3
356	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LBP	1	1.6
359	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LBP	1	2.1
374	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LBP	1	4.5
375	PAINT	MG / CM ^2	FINAL	CORNER PANEL	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LBP	1	3.9
396	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	C	INTACT	TAN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	1.3
399	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	WOOD	C	INTACT	BROWN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	2.8
400	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BROWN	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	3.2
402	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LBP	1	3.2
417	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LBP	1	1.3
422	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	1	BEDROOM 1	3446 AVOCADO	LBP	1	2.1
433	PAINT	MG / CM ^2	FINAL	WALL MOLDING	WOOD	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	2.1
435	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	TAN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	6.3
436	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	1	OUTSIDE	890 BLAINE	LBP	1	5.6
470	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	2.7
471	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	3.4

TABLE 3.1 - LEAD XRF SA RESULTS  
 LEAD-BASED PAINTS (≥1.0 mg/cm<sup>2</sup>)  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
474	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	6.6
475	PAINT	MG / CM ^2	FINAL	WALL MOULDING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	5.6
476	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	5.5
480	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	4.5
481	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	1.9
482	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LBP	1	3
486	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3452 AVOCADO	LBP	1	1.4
487	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3452 AVOCADO	LBP	1	2.6
493	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LBP	1	1.3
502	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LBP	1	2.5
507	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.4
511	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	5.9
512	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	5.2
513	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.7
515	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	1.8
517	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.7
518	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.9
519	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	7.6
520	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LBP	1	3.5
521	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LBP	1	1.5
525	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	810 PEACH	LBP	1	1.3
534	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	810 PEACH	LBP	1	1.6
555	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LBP	1	3
556	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	1.9
557	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	3.7
558	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	4.8
559	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LBP	1	2.3
571	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3323	LBP	1	1.6
582	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3325	LBP	1	1.5
583	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3325	LBP	1	4.2
584	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LBP	1	2.4
587	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	2
588	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	4.2
594	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LBP	1	3.8
604	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LBP	1	11.1
605	PAINT	MG / CM ^2	FINAL	DOOR GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LBP	1	7.4
625	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	1.9
627	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	12.1
635	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LBP	1	3
655	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	2.6
656	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	2.4
657	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	3.2
658	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	2.8
659	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	3.6
666	PAINT	MG / CM ^2	FINAL	WINDOW FRAME/EA	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LBP	1	1.4
668	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LBP	1	4.1
677	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.5
678	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	4.1
679	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	6.6
680	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.8
688	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3361	LBP	1	1.7
713	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	2.2
714	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	5.8
732	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	6.5
733	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	6
734	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3.7
735	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3.8
740	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LBP	1	3
750	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LBP	1	2.2
783	PAINT	MG / CM ^2	FINAL	DOOR FRAME/EA	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3411	LBP	1	2.5
793	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3413	LBP	1	1
884	PAINT	MG / CM ^2	FINAL	WINDOW PANEL	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LBP	1	2.4
914	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	LBP	1	1.4
1005	PAINT	MG / CM ^2	FINAL	WINDOW PANELS	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LBP	1	6.7
1047	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	1.6

TABLE 3.1 - LEAD XRF SA RESULTS  
 LEAD-BASED PAINTS (≥1.0 mg/cm<sup>2</sup>)  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1049	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	4.5
1051	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	2.6
1052	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	3.3
1053	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	5.6
1054	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	2.1
1055	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	4.5
1056	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	6.7
1059	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	10.5
1062	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	1.6
1063	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	6.6
1066	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890_892 PLUM	LBP	1	13
1070	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.5
1071	PAINT	MG / CM ^2	FINAL	WALL	TRANSITE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.8
1080	PAINT	MG / CM ^2	FINAL	WALL	TRANSITE	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.7
1088	PAINT	MG / CM ^2	FINAL	WALL	METAL	D	PEELING	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	6.1
1094	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	10.6
1095	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	6.3
1096	PAINT	MG / CM ^2	FINAL	EVE	METAL	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	7.8
1097	PAINT	MG / CM ^2	FINAL	EVE	WOOD	B	CRACKED	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	5.2
1098	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	POOR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.9
1110	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.3
1121	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	1.1
1137	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.9
1140	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LBP	1	2.4
1222	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.6
1223	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.6
1229	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.1
1230	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.4
1234	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	6.2
1235	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LBP	1	2.8
1257	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	LBP	1	3.3
1266	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	F	COMMUNITY CENTER 890-892 PLUM	LBP	1	5
1270	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	F	COMMUNITY CENTER 890-892 PLUM	LBP	1	5.7
1271	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LBP	1	3.3
1286	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	LBP	1	1.7
1300	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LBP	1	3
1327	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.6
1336	PAINT	MG / CM ^2	FINAL	EVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	4
1339	PAINT	MG / CM ^2	FINAL	DOOR	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	1.6
1347	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.4
1349	PAINT	MG / CM ^2	FINAL	FLAG POLE	METAL	B	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.5
1353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.1
1359	PAINT	MG / CM ^2	FINAL	PARKING STRIPES	ASPHALT	B	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.8
1376	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	GRAY	7076.1017.0	FIRST	B	3358 UTAH CARPENTER SHOP	LBP	1	1.3
1402	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LBP	1	3.5
1404	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LBP	1	2.1
1483	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	LBP	1	2.9
1487	PAINT	MG / CM ^2	FINAL	GARAGE DOOR	WOOD	C	INTACT	BLUE	7076.1017.0	FIRST	D	LAUNDRY BUILDING	LBP	1	1.5
1502	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LBP	1	1.2
1507	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LBP	1	4.4
1523	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LBP	1	1.2
1524	PAINT	MG / CM ^2	FINAL	WINDOW SILL	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LBP	1	1.8
1538	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LBP	1	1.9
1555	PAINT	MG / CM ^2	FINAL	DOOR	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LBP	1	1.6
1567	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	T	HDR FACILITIES WAREHOUSE	LBP	1	4.4
1569	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	2.7
1570	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	5.9
1571	PAINT	MG / CM ^2	FINAL	WINDOW FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LBP	1	7.3
1572	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	POOR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	4.7
1573	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	POOR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	9.8
1574	PAINT	MG / CM ^2	FINAL	DOOR FLASHING	METAL	C	FAIR	BEIGE	7076.1017.0	FIRST	V	HDR FACILITIES WAREHOUSE	LBP	1	12.4
1577	PAINT	MG / CM ^2	FINAL	WALL SIDING MOLDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	5.8
1594	PAINT	MG / CM ^2	FINAL	WINDOW SILL	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LBP	1	2.3



**CITADEL**  
ENVIRONMENTAL SERVICES, INC.

# **Appendix H**

## **Table 3.2 - Lead XRF Results (LCP)**



07/23/18 THROUGH 08/03/18



**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
5	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.05
6	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.06
21	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.01
22	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	811 PLUM	LCP	1	0.04
26	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	LCP	1	0.5
28	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	811 PLUM	LCP	1	0.5
32	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.09
36	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.13
37	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	811 PLUM	LCP	1	0.1
39	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.7
40	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.03
41	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	811 PLUM	LCP	1	0.01
44	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	811 PLUM	LCP	1	0.01
45	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	811 PLUM	LCP	1	0.3
47	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	LCP	1	0.02
62	PAINT	MG / CM ^2	FINAL	SIDING	WOOD	C	INTACT	YELLOW	7076.1017.0	FIRST	EXT	811 PLUM	LCP	1	0.16
71	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	LCP	1	0.3
73	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	822 PLUM	LCP	1	0.4
82	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.6
83	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.3
84	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	822 PLUM	LCP	1	0.11
86	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	822 PLUM	LCP	1	0.03
90	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.8
91	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.01
92	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATH	822 PLUM	LCP	1	0.03
110	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.04
112	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.01
113	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.09
118	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.04
119	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.04
120	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.7
125	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	851 PLUM	LCP	1	0.13
126	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.3
127	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.01
128	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.7
129	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR2	851 PLUM	LCP	1	0.22
140	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	WHITE	7076.1017.0	FIRST	EXT	851 PLUM	LCP	1	0.01
142	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	WHITE	7076.1017.0	FIRST	EXT	851 PLUM	LCP	1	0.01
145	PAINT	MG / CM ^2	FINAL	CLOTHESLINE POLE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	EXT	849 PLUM	LCP	1	0.04
154	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	849 PLUM	LCP	1	0.06
156	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	849 PLUM	LCP	1	0.01
157	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.3
159	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.27
161	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BR1	849 PLUM	LCP	1	0.4
165	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	LCP	1	0.01
166	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	849 PLUM	LCP	1	0.01
170	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	PINK	7076.1017.0	FIRST	LIVING ROOM	851 PLUM	LCP	1	0.01
177	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.04
179	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.07
186	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-LIVING ROOM	7076.1017.0	LCP	1	0.22
188	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.04
189	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.21

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
192	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.01
193	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-KITCHEN	7076.1017.0	LCP	1	0.26
200	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.01
201	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.05
203	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BATHROOM	7076.1017.0	LCP	1	0.01
205	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.3
208	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.09
209	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.04
211	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 850-BEDROOM 2	7076.1017.0	LCP	1	0.05
214	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
217	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.04
218	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
221	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-LIVING ROOM	7076.1017.0	LCP	1	0.01
227	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	UCR-PEACH STREET	FIRST	UNIT 848-EXTERIOR	7076.1017.0	LCP	1	0.02
244	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3398 IDAHO	LCP	1	0.03
256	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.6
260	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.06
262	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.02
263	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
265	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.07
266	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.12
267	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.03
268	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.04
269	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.28
270	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3398 IDAHO	LCP	1	0.06
272	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3398 IDAHO	LCP	1	0.05
274	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3398 IDAHO	LCP	1	0.19
275	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.18
277	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.05
278	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.22
287	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3398 IDAHO	LCP	1	0.7
288	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
289	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3398 IDAHO	LCP	1	0.01
294	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.02
295	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.01
296	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.03
304	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.06
306	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-LIVING RM	7076.1017.0	LCP	1	0.01
308	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.03
309	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.05
310	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.19
312	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.02
314	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-KITCHEN	7076.1017.0	LCP	1	0.04
317	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.05
318	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.6
323	PAINT	MG / CM ^2	FINAL	SINK	CERAMIC	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.01
324	PAINT	MG / CM ^2	FINAL	TOILET	CERAMIC	B	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BATHROOM	7076.1017.0	LCP	1	0.02
327	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	LCP	1	0.02
330	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	821-BEDROOM 2	7076.1017.0	LCP	1	0.06
344	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-KITCHEN	7076.1017.0	LCP	1	0.23
348	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.02
353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.05

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
356	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.01
358	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.01
359	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.03
361	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	823-BEDROOM 1	7076.1017.0	LCP	1	0.3
363	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
370	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY STREET-UNIT 821,823	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
384	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.01
392	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.27
396	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3334 IDAHO	LCP	1	0.01
403	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	LCP	1	0.2
406	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3334 IDAHO	LCP	1	0.2
407	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.05
409	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.3
412	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3334 IDAHO	LCP	1	0.01
418	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3334 IDAHO	LCP	1	0.02
425	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM2	7076.1017.0	LCP	1	0.6
426	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	LCP	1	0.3
427	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-KITCHEN	7076.1017.0	LCP	1	0.05
429	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BEDRM1	7076.1017.0	LCP	1	0.01
430	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	LCP	1	0.4
435	PAINT	MG / CM ^2	FINAL	TOILET	CERAMIC	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3416-BATHRM	7076.1017.0	LCP	1	0.01
461	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.16
462	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BATHRM	7076.1017.0	LCP	1	0.4
464	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-KITCHEN	7076.1017.0	LCP	1	0.06
470	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.01
478	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.07
479	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BATHRM	7076.1017.0	LCP	1	0.03
480	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	LCP	1	0.03
483	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-KITCHEN	7076.1017.0	LCP	1	0.12
484	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.3
485	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.15
486	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM2	7076.1017.0	LCP	1	0.17
487	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-BEDRM1	7076.1017.0	LCP	1	0.11
490	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	UNIT 3408-LIVING RM	7076.1017.0	LCP	1	0.25
493	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.5
494	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	UCR - FLORIDA ST UNIT 3408,3416	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
510	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.5
512	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLK	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.6
517	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.02
526	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3370 IDAHO	LCP	1	0.01
527	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3370 IDAHO	LCP	1	0.22
533	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	LCP	1	0.4
534	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3370 IDAHO	LCP	1	0.07
536	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3370 IDAHO	LCP	1	0.02
537	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3370 IDAHO	LCP	1	0.06
538	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.4
541	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.07
544	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.5
545	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.01
546	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.4
547	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3370 IDAHO	LCP	1	0.01
549	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	LCP	1	0.6

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS (≥0.01 mg/cm<sup>2</sup> and <1.0 mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
550	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	3370 IDAHO	LCP	1	0.4
560	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.02
563	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM1	7076.1017.0	LCP	1	0.1
564	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
575	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	LCP	1	0.03
578	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
579	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.2
581	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BEDRM 2	7076.1017.0	LCP	1	0.29
584	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.01
585	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-LIVING RM	7076.1017.0	LCP	1	0.02
591	PAINT	MG / CM ^2	FINAL	DOOR JAMB	METAL	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-BATHRM	7076.1017.0	LCP	1	0.03
592	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.07
593	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 801-KITCHEN	7076.1017.0	LCP	1	0.04
596	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.02
599	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	LCP	1	0.01
601	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.01
606	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.01
607	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-HALL	7076.1017.0	LCP	1	0.02
611	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	B	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BATHRM	7076.1017.0	LCP	1	0.04
614	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.1
619	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.02
620	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.03
621	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM2	7076.1017.0	LCP	1	0.3
622	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM3	7076.1017.0	LCP	1	0.01
625	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-KITCHEN	7076.1017.0	LCP	1	0.05
628	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-LIVING RM	7076.1017.0	LCP	1	0.02
629	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-CHERRY ST-UNIT 801,803	FIRST	UNIT 803-BEDRM1	7076.1017.0	LCP	1	0.01
634	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.03
640	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.08
642	PAINT	MG / CM ^2	FINAL	PANEL FRAME BELOW WINDOW	WOOD	C	INTACT	BEIGE	UCR-CHERRY ST-UNIT 801,803	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
660	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.01
665	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.2
668	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.05
669	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.04
670	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.02
671	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3429 FLORIDA	LCP	1	0.05
676	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.11
677	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.11
678	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.6
680	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3429 FLORIDA	LCP	1	0.06
683	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3429 FLORIDA	LCP	1	0.02
692	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.07
694	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.11
695	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.02
697	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.23
698	PAINT	MG / CM ^2	FINAL	DOOR FRAME TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3429 FLORIDA	LCP	1	0.09
700	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.08
701	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.21
702	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.03
705	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3429 FLORIDA	LCP	1	0.24
714	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-LIVING RM	7076.1017.0	LCP	1	0.01
720	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.02

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS (≥0.01 mg/cm<sup>2</sup> and <1.0 mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
721	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.02
722	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-HALL	7076.1017.0	LCP	1	0.05
723	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	LCP	1	0.04
728	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BATHRM	7076.1017.0	LCP	1	0.02
735	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM2	7076.1017.0	LCP	1	0.11
736	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3475-BEDRM1	7076.1017.0	LCP	1	0.07
739	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.07
741	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	LCP	1	0.01
746	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	LCP	1	0.3
747	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.01
751	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	LCP	1	0.01
752	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BATHRM	7076.1017.0	LCP	1	0.04
754	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	LCP	1	0.05
762	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM1	7076.1017.0	LCP	1	0.3
765	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-KITCHEN	7076.1017.0	LCP	1	0.3
766	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-LIVING RM	7076.1017.0	LCP	1	0.05
767	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	UNIT 3479-BEDRM2	7076.1017.0	LCP	1	0.12
776	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
777	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
780	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
784	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	UCR - FLORIDA ST-UNIT 3475,3479	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06
803	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.13
804	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-HALL	7076.1017.0	LCP	1	0.19
805	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM3	7076.1017.0	LCP	1	0.01
808	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.01
811	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.01
813	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.21
814	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.08
815	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.12
817	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.05
818	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.1
820	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	LCP	1	0.01
821	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.08
822	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.01
823	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.04
824	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.06
825	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.05
826	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.02
827	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.5
834	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.06
836	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM1	7076.1017.0	LCP	1	0.05
837	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-KITCHEN	7076.1017.0	LCP	1	0.24
838	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-LIVING RM	7076.1017.0	LCP	1	0.1
841	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BATHRM	7076.1017.0	LCP	1	0.1
842	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3488-BEDRM2	7076.1017.0	LCP	1	0.6
843	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01
844	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-KENTUCKY ST-3480,3488	FIRST	3480-BEDRM2	7076.1017.0	LCP	1	0.02
853	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-HALL	7076.1017.0	LCP	1	0.01
856	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-BEDRM1	7076.1017.0	LCP	1	0.02
858	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.06
859	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-KITCHEN	7076.1017.0	LCP	1	0.01
862	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
863	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.01
868	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	3480-LIVING RM	7076.1017.0	LCP	1	0.8
873	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.04
874	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
876	PAINT	MG / CM ^2	FINAL	WALL PANELS	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.6
877	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.4
878	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	D	INTACT	BEIGE	UCR-KENTUCKY-3480,3488	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06
898	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.01
905	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.19
909	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.01
914	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	LCP	1	0.06
915	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BATHRM	7076.1017.0	LCP	1	0.01
916	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	LCP	1	0.21
917	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407 RM2	7076.1017.0	LCP	1	0.14
918	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM1	7076.1017.0	LCP	1	0.08
922	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	LCP	1	0.01
924	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	LCP	1	0.07
928	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	LCP	1	0.21
932	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-LIVING RM	7076.1017.0	LCP	1	0.04
933	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-KITCHEN	7076.1017.0	LCP	1	0.11
934	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3407-BEDRM2	7076.1017.0	LCP	1	0.02
935	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.1
936	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.05
938	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 1	7076.1017.0	LCP	1	0.3
939	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-HALLWAY	7076.1017.0	LCP	1	0.04
940	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.27
941	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.05
943	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.05
947	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.06
948	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 1	7076.1017.0	LCP	1	0.21
949	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDROOM 2	7076.1017.0	LCP	1	0.02
957	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.08
963	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BATHRM	7076.1017.0	LCP	1	0.03
964	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	LCP	1	0.15
966	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.01
969	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-LIVING RM	7076.1017.0	LCP	1	0.11
970	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-KITCHEN	7076.1017.0	LCP	1	0.2
971	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	UCR-KENTUCKY ST-3401,3407	FIRST	3401-BEDRM2	7076.1017.0	LCP	1	0.08
977	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.07
978	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.11
979	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
983	PAINT	MG / CM ^2	FINAL	LAUNDRY LINE POLE	METAL	D	INTACT	SILVER	UCR-KENTUCKY ST-3401,3407	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
993	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.01
994	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.01
1002	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.4
1012	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.3
1014	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3367 UTAH	LCP	1	0.8
1017	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3367 UTAH	LCP	1	0.06
1024	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3367 UTAH	LCP	1	0.7
1034	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3367 UTAH	LCP	1	0.14
1039	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.02
1047	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.01

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1050	PAINT	MG / CM ^2	FINAL	GAS METER BOX	METAL	A	INTACT	GRAY	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.01
1052	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.18
1053	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.1
1055	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.6
1066	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.06
1067	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3341 UTAH	LCP	1	0.6
1070	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3341 UTAH	LCP	1	0.09
1074	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	LCP	1	0.4
1079	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3341 UTAH	LCP	1	0.4
1080	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.02
1082	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.14
1083	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.4
1086	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3341 UTAH	LCP	1	0.17
1093	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	LCP	1	0.16
1094	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	LCP	1	0.4
1096	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BATHRM	7076.1017.0	LCP	1	0.16
1100	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-LIVING RM	7076.1017.0	LCP	1	0.07
1101	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	LCP	1	0.05
1102	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-BEDRM1	7076.1017.0	LCP	1	0.16
1106	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-KITCHEN	7076.1017.0	LCP	1	0.08
1110	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3315-HALL	7076.1017.0	LCP	1	0.14
1117	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.13
1118	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	LCP	1	0.02
1125	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.01
1126	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.08
1127	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.02
1128	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.03
1132	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.23
1133	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	MINIBLIND	C	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.03
1134	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM1	7076.1017.0	LCP	1	0.08
1136	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-BEDRM2	7076.1017.0	LCP	1	0.19
1137	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.12
1138	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3315,3317	FIRST	3317-LIVING RM	7076.1017.0	LCP	1	0.02
1139	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1140	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.06
1146	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	C	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1147	PAINT	MG / CM ^2	FINAL	LAUNDRY LINE POLE	METAL	D	INTACT	SILVER	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.03
1148	PAINT	MG / CM ^2	FINAL	WATER HEATER	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.04
1149	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	D	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.09
1152	PAINT	MG / CM ^2	FINAL	ENTRY WAY STEP	WOOD	B	INTACT	BEIGE	UCR-UTAH ST-3315,3317	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.4
1167	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.03
1169	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.06
1173	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	LCP	1	0.4
1179	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BATHRM	7076.1017.0	LCP	1	0.01
1180	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.07
1182	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-LIVING RM	7076.1017.0	LCP	1	0.5
1185	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM2	7076.1017.0	LCP	1	0.15
1186	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.5
1196	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-HALL	7076.1017.0	LCP	1	0.21
1197	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-BEDRM1	7076.1017.0	LCP	1	0.5
1207	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3342-KITCHEN	7076.1017.0	LCP	1	0.13
1208	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.05



**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1210	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM1	7076.1017.0	LCP	1	0.05
1212	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-LIVING RM	7076.1017.0	LCP	1	0.6
1214	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-HALL	7076.1017.0	LCP	1	0.02
1217	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.26
1218	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-KITCHEN	7076.1017.0	LCP	1	0.6
1221	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BEDRM2	7076.1017.0	LCP	1	0.11
1228	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	UCR-UTAH ST-3342,3344	FIRST	3344-BATHRM	7076.1017.0	LCP	1	0.3
1234	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1237	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1242	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	C	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1247	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.02
1249	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	BEIGE	UCR-UTAH ST-3342,3344	FIRST	EXTERIOR	7076.1017.0	LCP	1	0.01
1254	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.04
1259	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.7
1260	PAINT	MG / CM ^2	FINAL	EVE	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.01
1264	PAINT	MG / CM ^2	FINAL	ROOF	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.01
1267	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3308 UTAH	LCP	1	0.3
1269	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.5
1270	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.1
1271	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.4
1272	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.09
1273	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.27
1274	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.2
1276	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3308 UTAH	LCP	1	0.02
1281	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.27
1284	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.06
1287	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.01
1288	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3308 UTAH	LCP	1	0.7
1289	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3308 UTAH	LCP	1	0.5
1294	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.01
1296	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.02
1297	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.02
1305	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3384 UTAH	LCP	1	0.01
1310	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3384 UTAH	LCP	1	0.2
1320	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	3384 UTAH	LCP	1	0.01
1327	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM 1	3384 UTAH	LCP	1	0.14
1330	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.2
1331	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM 2	GRAPE ST-725	LCP	1	0.05
1333	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.01
1334	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.08
1337	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.17
1338	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.14
1339	PAINT	MG / CM ^2	FINAL	CABINET	METAL	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.01
1341	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-725	LCP	1	0.01
1346	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	LCP	1	0.01
1347	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.02
1348	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.22
1349	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.4
1351	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.16
1352	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	HALL	GRAPE ST-725	LCP	1	0.15
1353	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-725	LCP	1	0.28
1358	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-725	LCP	1	0.01

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1360	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-725	LCP	1	0.03
1361	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.3
1362	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-727	LCP	1	0.03
1363	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1076.0	FIRST	KITCHEN	GRAPE ST-727	LCP	1	0.16
1365	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	LCP	1	0.5
1368	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.11
1374	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.12
1376	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BATHROOM	GRAPE ST-727	LCP	1	0.17
1377	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM2	GRAPE ST-727	LCP	1	0.24
1378	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1076.0	FIRST	BEDROOM1	GRAPE ST-727	LCP	1	0.3
1379	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.09
1382	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.23
1384	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1076.0	FIRST	LIVING ROOM	GRAPE ST-727	LCP	1	0.01
1389	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.02
1390	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.02
1398	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	7076.1076.0	FIRST	EXTERIOR	GRAPE ST-727	LCP	1	0.03
1408	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.03
1410	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.03
1412	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-815	LCP	1	0.04
1414	PAINT	MG / CM ^2	FINAL	CABINET	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	LCP	1	0.01
1416	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-815	LCP	1	0.02
1417	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.06
1420	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.4
1422	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.15
1423	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.08
1427	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.25
1428	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.16
1429	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-815	LCP	1	0.16
1430	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-815	LCP	1	0.17
1431	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	OFFICE	GRAPE ST-815	LCP	1	0.2
1433	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-815	LCP	1	0.1
1434	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.01
1435	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-813	LCP	1	0.06
1436	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	LCP	1	0.15
1438	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	LCP	1	0.03
1442	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.14
1447	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-813	LCP	1	0.11
1448	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-813	LCP	1	0.24
1452	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.04
1453	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.14
1454	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.6
1455	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-813	LCP	1	0.05
1456	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-813	LCP	1	0.03
1457	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.16
1458	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	GRAPE ST-813	LCP	1	0.01
1460	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.06
1461	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.02
1466	PAINT	MG / CM ^2	FINAL	WALL PANEL FRAME	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.12
1476	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.08
1477	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.08
1478	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-813	LCP	1	0.03
1480	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.06

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1482	PAINT	MG / CM ^2	FINAL	CLOTHES LINES	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.03
1490	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.8
1500	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	EXTERIOR	3350 UTAH	LCP	1	0.09
1504	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	LCP	1	0.6
1509	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3350 UTAH	LCP	1	0.18
1514	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	KITCHEN	3350 UTAH	LCP	1	0.6
1520	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3350 UTAH	LCP	1	0.26
1528	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.4
1529	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	C	PEELING	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.05
1531	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.01
1532	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.06
1540	PAINT	MG / CM ^2	FINAL	WALL SIDING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3348 UTAH	LCP	1	0.13
1541	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3348 UTAH	LCP	1	0.1
1543	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3348 UTAH	LCP	1	0.5
1549	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.03
1550	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.12
1551	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.5
1552	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.06
1553	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3348 UTAH	LCP	1	0.4
1557	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	3348 UTAH	LCP	1	0.07
1566	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	LCP	1	0.01
1567	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	766 GRAPE	LCP	1	0.01
1578	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	766 GRAPE	LCP	1	0.6
1580	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	766 GRAPE	LCP	1	0.18
1581	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.09
1582	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.05
1583	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.05
1586	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.03
1587	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	766 GRAPE	LCP	1	0.8
1590	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.08
1591	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.21
1596	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.09
1597	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1600	PAINT	MG / CM ^2	FINAL	GATE	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1609	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.01
1610	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.26
1611	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.5
1612	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.11
1615	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	873 GRAPE	LCP	1	0.05
1616	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.04
1617	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.23
1619	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.01
1620	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.14
1622	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	873 GRAPE	LCP	1	0.01
1623	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.02
1624	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.02
1625	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	873 GRAPE	LCP	1	0.13
1626	PAINT	MG / CM ^2	FINAL	CLOSE LINE	METAL	A	INTACT	SILVER	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.1
1627	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	873 GRAPE	LCP	1	0.09

*08/07/18 THROUGH 08/22/18*



TABLE 3.2 - LEAD XRF SA RESULTS  
 LEAD-CONTAINING PAINTS ( $\geq 0.01 \text{ mg/cm}^2$  and  $< 1.0 \text{ mg/cm}^2$ )  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
14	PAINT	MG / CM ^2	FINAL	CONDUIT	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 876	LCP	1	0.14
18	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UNIT 876	LCP	1	0.21
20	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.22
21	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.5
26	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 876	LCP	1	0.2
27	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.16
28	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 876	LCP	1	0.08
34	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 878	LCP	1	0.13
37	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LCP	1	0.1
41	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.5
43	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UNIT 878	LCP	1	0.24
44	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.3
46	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.18
47	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.5
48	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UNIT 878	LCP	1	0.01
52	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UNIT 878	LCP	1	0.5
53	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UNIT 878	LCP	1	0.05
54	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.01
55	PAINT	MG / CM ^2	FINAL	STUCCO WALLS	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.07
57	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.01
65	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	UNIT 878	LCP	1	0.11
71	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.01
72	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.07
79	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.08
86	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.08
88	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	786 BLAINE	LCP	1	0.04
95	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.7
97	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.01
98	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.5
99	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.05
100	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	786 BLAINE	LCP	1	0.08
101	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	786 BLAINE	LCP	1	0.06
111	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.05
114	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.01
116	PAINT	MG / CM ^2	FINAL	PORCH RAILING	METAL	C	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.07
118	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	C	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.03
122	PAINT	MG / CM ^2	FINAL	WATERHEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.08
123	PAINT	MG / CM ^2	FINAL	WATERHEATER PIPE	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.09
124	PAINT	MG / CM ^2	FINAL	CLOSE LINE	METAL	A	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.07
127	PAINT	MG / CM ^2	FINAL	WALL SIDING	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.12
128	PAINT	MG / CM ^2	FINAL	EVE	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.7
132	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	861 CHERRY	LCP	1	0.11
134	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	861 CHERRY	LCP	1	0.08
139	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.16
142	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.3
143	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.01
144	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.02
145	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.5
147	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	861 CHERRY	LCP	1	0.04
150	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.03
151	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.02
158	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.3
165	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	3419 KENTUCKY	LCP	1	0.05
172	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3419 KENTUCKY	LCP	1	0.02
173	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.02
177	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.03
178	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.6
179	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.01
181	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3419 KENTUCKY	LCP	1	0.01
186	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	3434 KENTUCKY	LCP	1	0.04
201	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3434 KENTUCKY	LCP	1	0.01
202	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3434 KENTUCKY	LCP	1	0.04
203	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3434 KENTUCKY	LCP	1	0.25
208	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.04
210	PAINT	MG / CM ^2	FINAL	TUB	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.13

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
211	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.15
212	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3434 KENTUCKY	LCP	1	0.03
214	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LCP	1	0.08
216	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3434 KENTUCKY	LCP	1	0.1
225	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LCP	1	0.02
229	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	LCP	1	0.02
239	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LCP	1	0.18
242	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	BLAINE ALLEY-758	LCP	1	0.16
247	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-758	LCP	1	0.12
248	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-758	LCP	1	0.3
250	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.3
251	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.07
252	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-758	LCP	1	0.11
258	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM2	BLAINE ALLEY-760	LCP	1	0.01
260	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	BLAINE ALLEY-760	LCP	1	0.02
261	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.04
262	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	BLAINE ALLEY-760	LCP	1	0.02
268	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LCP	1	0.21
270	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.3
272	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.3
273	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.6
274	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.27
275	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	BLAINE ALLEY-760	LCP	1	0.6
276	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	BLAINE ALLEY-760	LCP	1	0.25
278	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	BLAINE ALLEY-760	LCP	1	0.02
282	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.04
283	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.06
294	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.08
295	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	C	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	BLAINE ALLEY-760	LCP	1	0.01
304	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.02
305	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LCP	1	0.01
306	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.02
307	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3323	LCP	1	0.14
309	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
316	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UTAH ST-3323	LCP	1	0.03
317	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	UTAH ST-3323	LCP	1	0.01
318	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.6
320	PAINT	MG / CM ^2	FINAL	DOOR	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
323	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.3
324	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3323	LCP	1	0.5
327	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.5
334	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3323	LCP	1	0.01
336	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3323	LCP	1	0.07
338	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	UTAH ST-3321	LCP	1	0.01
342	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.04
344	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.02
347	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	UTAH ST-3321	LCP	1	0.04
351	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3321	LCP	1	0.7
352	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	KITCHEN	UTAH ST-3321	LCP	1	0.5
353	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	UTAH ST-3321	LCP	1	0.5
372	PAINT	MG / CM ^2	FINAL	PANELS ABOVE WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.08
373	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.6
378	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.5
379	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.4
381	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	B	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	UTAH ST-3321	LCP	1	0.06
385	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.07
387	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.04
389	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.03
390	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	A	INTACT	BEIGE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.03
392	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.01
393	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BEIGE	7076.1017.0	1	OUTSIDE	3446 AVOCADO	LCP	1	0.01
405	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	3446 AVOCADO	LCP	1	0.06
407	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	3446 AVOCADO	LCP	1	0.06
411	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LCP	1	0.6
416	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	3446 AVOCADO	LCP	1	0.01

TABLE 3.2 - LEAD XRF SA RESULTS  
 LEAD-CONTAINING PAINTS ( $\geq 0.01 \text{ mg/cm}^2$  and  $< 1.0 \text{ mg/cm}^2$ )  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
418	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 1	3446 AVOCADO	LCP	1	0.05
423	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.02
424	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.02
425	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.06
429	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.03
430	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	1	OUTSIDE	890 BLAINE	LCP	1	0.5
437	PAINT	MG / CM ^2	FINAL	WINDOW MULLION	WOOD	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.1
438	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.6
441	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	1	LIVING ROOM	890 BLAINE	LCP	1	0.01
442	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
444	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
445	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.01
446	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.4
448	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BATHROOM	890 BLAINE	LCP	1	0.03
450	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.6
452	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.13
453	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.06
454	PAINT	MG / CM ^2	FINAL	CLOTHE LINE	METAL	C	INTACT	SILVER	7076.1017.0	1	BEDROOM 2	890 BLAINE	LCP	1	0.05
465	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LCP	1	0.03
466	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	3452 AVOCADO	LCP	1	0.04
484	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	3452 AVOCADO	LCP	1	0.06
488	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	3452 AVOCADO	LCP	1	0.06
494	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.01
495	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.15
496	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	3452 AVOCADO	LCP	1	0.5
497	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LCP	1	0.4
498	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 2	3452 AVOCADO	LCP	1	0.18
504	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.01
506	PAINT	MG / CM ^2	FINAL	PORCH RAILING	WOOD	A	PEELING	TAN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.03
509	PAINT	MG / CM ^2	FINAL	ROOF FLASHING	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	OUTSIDE	810 PEACH	LCP	1	0.01
522	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LCP	1	0.06
523	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	810 PEACH	LCP	1	0.07
527	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	LCP	1	0.5
533	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	810 PEACH	LCP	1	0.28
535	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	810 PEACH	LCP	1	0.07
538	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	810 PEACH	LCP	1	0.08
542	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.06
543	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LCP	1	0.01
546	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.05
547	PAINT	MG / CM ^2	FINAL	CONDUIT	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.19
549	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.01
552	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.01
560	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3323	LCP	1	0.06
561	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.02
562	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3323	LCP	1	0.02
563	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	LCP	1	0.08
564	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3323	LCP	1	0.01
565	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3323	LCP	1	0.06
569	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.3
570	PAINT	MG / CM ^2	FINAL	WINDOW CENTER FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3323	LCP	1	0.21
577	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.05
585	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.15
589	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LCP	1	0.09
590	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3325	LCP	1	0.01
591	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3325	LCP	1	0.09
592	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3325	LCP	1	0.08
593	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3325	LCP	1	0.03
598	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
601	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.05
602	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.03
603	PAINT	MG / CM ^2	FINAL	WINDOW GUARD	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.4
611	PAINT	MG / CM ^2	FINAL	GATED DOOR	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.01
613	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
614	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.17
615	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.03

TABLE 3.2 - LEAD XRF SA RESULTS  
 LEAD-CONTAINING PAINTS ( $\geq 0.01 \text{ mg/cm}^2$  and  $< 1.0 \text{ mg/cm}^2$ )  
 CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS  
 UNIVERSITY OF CALIFORNIA, RIVERSIDE  
 RIVERSIDE, CALIFORNIA 92507

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
616	PAINT	MG / CM ^2	FINAL	WATER HEATER	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.02
617	PAINT	MG / CM ^2	FINAL	WATER HEATER PIPE	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3325	LCP	1	0.11
628	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.03
629	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.02
632	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.3
636	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.01
640	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.05
643	PAINT	MG / CM ^2	FINAL	CLOTHES LINE POLE	METAL	D	INTACT	SILVER	7076.1017.0	FIRST	EXTERIOR	IDAHO ST-3359,3361	LCP	1	0.04
645	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	IDAHO ST-3359	LCP	1	0.06
648	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.02
652	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.01
653	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.01
654	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.1
662	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.13
663	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3359	LCP	1	0.03
664	PAINT	MG / CM ^2	FINAL	DOOR FRAMEAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3359	LCP	1	0.08
667	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	IDAHO ST-3359	LCP	1	0.04
669	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3359	LCP	1	0.03
674	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	IDAHO ST-3361	LCP	1	0.21
676	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	IDAHO ST-3361	LCP	1	0.01
681	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3361	LCP	1	0.07
684	PAINT	MG / CM ^2	FINAL	DOOR JAMB	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	IDAHO ST-3361	LCP	1	0.11
686	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	IDAHO ST-3361	LCP	1	0.01
698	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.01
699	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	B	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.01
717	PAINT	MG / CM ^2	FINAL	WALL FLASHING	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.5
738	PAINT	MG / CM ^2	FINAL	WATER HEATER CABINET	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.02
739	PAINT	MG / CM ^2	FINAL	CLOTHES LINE	METAL	C	POOR	SILVER	7076.1017.0	FIRST	OUTSIDE	860 GRAPE	LCP	1	0.02
742	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	860 GRAPE	LCP	1	0.5
743	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	LCP	1	0.03
744	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	860 GRAPE	LCP	1	0.2
747	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	860 GRAPE	LCP	1	0.01
748	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	860 GRAPE	LCP	1	0.18
749	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.21
752	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.01
754	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.7
756	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	860 GRAPE	LCP	1	0.01
758	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	LCP	1	0.6
760	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM 1	860 GRAPE	LCP	1	0.12
768	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3411	LCP	1	0.04
772	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3411	LCP	1	0.18
777	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3411	LCP	1	0.7
778	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3411	LCP	1	0.06
780	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3411	LCP	1	0.21
781	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3411	LCP	1	0.5
786	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3413	LCP	1	0.05
787	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.03
790	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.11
791	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3413	LCP	1	0.3
792	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3413	LCP	1	0.24
797	PAINT	MG / CM ^2	FINAL	HANDRAILS	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.7
798	PAINT	MG / CM ^2	FINAL	EAVE	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.4
803	PAINT	MG / CM ^2	FINAL	WINDOW	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3411-3413	LCP	1	0.4
808	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.01
815	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.02
816	PAINT	MG / CM ^2	FINAL	WINDOW PANELS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.05
818	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3422-3424	LCP	1	0.01
819	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3424	LCP	1	0.02
822	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3424	LCP	1	0.4
824	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3424	LCP	1	0.08
830	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3422	LCP	1	0.02
833	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3422	LCP	1	0.04
834	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3422	LCP	1	0.6
835	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3422	LCP	1	0.26
836	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3422	LCP	1	0.4



**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
840	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.03
841	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.03
842	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	D	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.01
843	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3459-3461	LCP	1	0.01
852	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.01
853	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3459	LCP	1	0.04
855	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.04
856	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3459	LCP	1	0.13
860	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3459	LCP	1	0.3
863	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3461	LCP	1	0.3
865	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3461	LCP	1	0.02
866	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3461	LCP	1	0.7
867	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3461	LCP	1	0.5
869	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3461	LCP	1	0.26
870	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3461	LCP	1	0.01
879	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.02
880	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.02
881	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.04
886	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3489-3491	LCP	1	0.01
891	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	LCP	1	0.5
892	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3489	LCP	1	0.01
894	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3489	LCP	1	0.08
896	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3489	LCP	1	0.5
897	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3489	LCP	1	0.6
899	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	LCP	1	0.19
902	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3489	LCP	1	0.01
907	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3491	LCP	1	0.5
908	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3491	LCP	1	0.09
909	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3491	LCP	1	0.06
912	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3491	LCP	1	0.27
916	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	AVOCADO ST-3491	LCP	1	0.04
918	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.05
919	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.01
920	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.03
927	PAINT	MG / CM ^2	FINAL	SIDING PANELS	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	AVOCADO ST-3472-3474	LCP	1	0.01
929	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.3
930	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	AVOCADO ST-3474	LCP	1	0.3
932	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3474	LCP	1	0.13
933	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.02
934	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3474	LCP	1	0.08
935	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.4
937	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.01
939	PAINT	MG / CM ^2	FINAL	WAINSCOT	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3474	LCP	1	0.01
940	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3474	LCP	1	0.01
942	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3472	LCP	1	0.04
943	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	AVOCADO ST-3472	LCP	1	0.4
945	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.4
947	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	HALL	AVOCADO ST-3472	LCP	1	0.04
948	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.07
949	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	AVOCADO ST-3472	LCP	1	0.7
952	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	AVOCADO ST-3472	LCP	1	0.02
954	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.07
955	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.08
956	PAINT	MG / CM ^2	FINAL	FOUNDATION	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-747-749	LCP	1	0.04
963	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	LINDEN ST-747	LCP	1	0.3
965	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-747	LCP	1	0.2
966	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-747	LCP	1	0.5
968	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-747	LCP	1	0.25
974	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	LINDEN ST-749	LCP	1	0.08
975	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	HALL	LINDEN ST-749	LCP	1	0.22
976	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM2	LINDEN ST-749	LCP	1	0.02
978	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	LCP	1	0.17
982	PAINT	MG / CM ^2	FINAL	TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	LINDEN ST-749	LCP	1	0.01
985	PAINT	MG / CM ^2	FINAL	HANDRAILS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-749	LCP	1	0.11
986	PAINT	MG / CM ^2	FINAL	PANELS BELOW WINDOW	WOOD	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	LINDEN ST-749	LCP	1	0.18

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
994	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	A	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LCP	1	0.07
996	PAINT	MG / CM ^2	FINAL	STUCCO WALL	PLASTER	C	INTACT	BEIGE	7076.1017.0	FIRST	EXTERIOR	GRAPE ST-840-842	LCP	1	0.14
1006	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-842	LCP	1	0.06
1008	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	GARAGE	GRAPE ST-842	LCP	1	0.05
1009	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	LIVING ROOM	GRAPE ST-842	LCP	1	0.13
1010	PAINT	MG / CM ^2	FINAL	BASEBOARD	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-842	LCP	1	0.02
1011	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-842	LCP	1	0.4
1019	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	KITCHEN	GRAPE ST-840	LCP	1	0.11
1022	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	HALL	GRAPE ST-840	LCP	1	0.04
1023	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	BEDROOM1	GRAPE ST-840	LCP	1	0.09
1026	PAINT	MG / CM ^2	FINAL	TUB	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-840	LCP	1	0.21
1027	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	BATHROOM	GRAPE ST-840	LCP	1	0.01
1048	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890 892 PLUM	LCP	1	0.5
1057	PAINT	MG / CM ^2	FINAL	PORCH	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	COMMUNITY CENTER 890 892 PLUM	LCP	1	0.01
1072	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	FAIR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1073	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	FAIR	GRAY	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1074	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	FAIR	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.2
1075	PAINT	MG / CM ^2	FINAL	WALL COLUMN	WOOD	C	FAIR	BEIGE	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.09
1076	PAINT	MG / CM ^2	FINAL	WALL SKIRTING	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1077	PAINT	MG / CM ^2	FINAL	WALL SKIRTING TRIM	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1081	PAINT	MG / CM ^2	FINAL	WALL SKIRTING	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1082	PAINT	MG / CM ^2	FINAL	WALL SKIRTING TRIM	WOOD	A	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.08
1084	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1085	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1093	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.3
1103	PAINT	MG / CM ^2	FINAL	GARAGE DOOR FRAME	WOOD	C	FAIR	TAN	7076.1017.0	FIRST	OUTSIDE GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1108	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1111	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.12
1112	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	GARAGE	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.1
1117	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.08
1118	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	PEELING	BEIGE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.17
1122	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1123	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.04
1124	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.15
1125	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.4
1127	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1129	PAINT	MG / CM ^2	FINAL	CABINET	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1131	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	GREEN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.19
1132	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	B	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1133	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	GREEN	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.11
1134	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.28
1135	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	C	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.14
1136	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.24
1142	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	C	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.07
1143	PAINT	MG / CM ^2	FINAL	HVAC DUCT	METAL	C	INTACT	WHITE	7076.1017.0	FIRST	D	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.05
1144	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1145	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	E	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.13
1148	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1149	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.01
1150	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.05
1153	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.02
1155	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.29
1157	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.16
1158	PAINT	MG / CM ^2	FINAL	CEILING	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.13
1160	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	F	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.07
1163	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.03
1165	PAINT	MG / CM ^2	FINAL	RAMP RAILING	WOOD	A	INTACT	BROWN	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.1
1167	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	G	MAINTENANCE & GROUNDS3458AVOCAD	LCP	1	0.16
1184	PAINT	MG / CM ^2	FINAL	TOILET	METAL	A	INTACT	TAN	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.05
1185	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	A	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.05
1186	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.02
1187	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	WOMENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1195	PAINT	MG / CM ^2	FINAL	URINAL	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1198	PAINT	MG / CM ^2	FINAL	ELECT BRKR BOX	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.1
1200	PAINT	MG / CM ^2	FINAL	STALL BOX	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1201	PAINT	MG / CM ^2	FINAL	CEILING	WOOD	B	INTACT	BROWN	7076.1017.0	FIRST	MENS RR	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1213	PAINT	MG / CM ^2	FINAL	GUARDRAIL	METAL	B	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	PARKS&RECREATION RESTROOMS	LCP	1	0.01
1224	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.3
1227	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.04
1228	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1231	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1233	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	A	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1237	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1243	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1244	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1245	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1246	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1248	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	B	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1251	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	D	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.02
1263	PAINT	MG / CM ^2	FINAL	CEILING	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	E	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1272	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.16
1274	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1277	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	G	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.15
1281	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	H	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.07
1289	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.06
1292	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	A	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1293	PAINT	MG / CM ^2	FINAL	WALL TRIM	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.27
1294	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1296	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1297	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	B	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.01
1301	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.03
1302	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	I	COMMUNITY CENTER 890-892 PLUM	LCP	1	0.04
1318	PAINT	MG / CM ^2	FINAL	WALL	CONCRETE	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1322	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1331	PAINT	MG / CM ^2	FINAL	WALL SIDING	METAL	A	INTACT	BLACK	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.22
1340	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.29
1341	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1348	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.7
1354	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1360	PAINT	MG / CM ^2	FINAL	POSTS	METAL	B	INTACT	YELLOW	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1362	PAINT	MG / CM ^2	FINAL	CRAWL SPACE ACCESS	WOOD	B	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1369	PAINT	MG / CM ^2	FINAL	WALL	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.08
1370	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.01
1371	PAINT	MG / CM ^2	FINAL	STUDS	WOOD	A	INTACT	GRAY	7076.1017.0	FIRST	A	3358 UTAH CARPENTER SHOP	LCP	1	0.01
1400	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.08
1407	PAINT	MG / CM ^2	FINAL	SLIDING DOOR	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.27
1408	PAINT	MG / CM ^2	FINAL	SLIDING DOOR FRAME	WOOD	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.3
1410	PAINT	MG / CM ^2	FINAL	EVE FLASHING	METAL	D	INTACT	GREEN	7076.1017.0	FIRST	OUTSIDE	3358 UTAH CARPENTER SHOP	LCP	1	0.02
1420	PAINT	MG / CM ^2	FINAL	FASCIA	WOOD	B	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.18
1424	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.16
1425	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	METAL	D	INTACT	TAN	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.07
1432	PAINT	MG / CM ^2	FINAL	PATIO COLUMNS	METAL	C	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.12
1444	PAINT	MG / CM ^2	FINAL	PIPE	PLASTIC	D	INTACT	BEIGE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	LCP	1	0.01
1445	PAINT	MG / CM ^2	FINAL	SINK	PORCELAIN	C	INTACT	WHITE	7076.1017.0	FIRST	A	LAUNDRY BUILDING	LCP	1	0.01
1462	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	LAUNDRY BUILDING	LCP	1	0.01
1463	PAINT	MG / CM ^2	FINAL	VENT	METAL	A	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	LAUNDRY BUILDING	LCP	1	0.01
1472	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	A	INTACT	WHITE	7076.1017.0	FIRST	F	LAUNDRY BUILDING	LCP	1	0.01
1478	PAINT	MG / CM ^2	FINAL	TOILET	PORCELAIN	D	INTACT	WHITE	7076.1017.0	FIRST	E	LAUNDRY BUILDING	LCP	1	0.02
1498	PAINT	MG / CM ^2	FINAL	WALL	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1499	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1500	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1501	PAINT	MG / CM ^2	FINAL	WINDOW SILL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1504	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.6
1505	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	A	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1508	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1509	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.07
1510	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.09
1511	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	B	HDR FACILITIES WAREHOUSE	LCP	1	0.12
1513	PAINT	MG / CM ^2	FINAL	WALL	WOOD	B	INTACT	GRAY	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1515	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	C	INTACT	GRAY	7076.1017.0	FIRST	C	HDR FACILITIES WAREHOUSE	LCP	1	0.7

**TABLE 3.2 - LEAD XRF SA RESULTS**  
**LEAD-CONTAINING PAINTS ( $\geq 0.01$  mg/cm<sup>2</sup> and  $< 1.0$  mg/cm<sup>2</sup>)**  
**CANYON CREST FAMILY STUDENT HOUSING BUILDINGS AND SUPPORT BUILDINGS**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**RIVERSIDE, CALIFORNIA 92507**

READING NO	TYPE	UNITS	SEQUENCE	COMPONENT	SUBSTRATE	SIDE	CONDITION	COLOR	SITE	FLOOR	ROOM	MISC 1	RESULTS	ACTION LEVEL	PBC
1517	PAINT	MG / CM ^2	FINAL	COLUMN	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	A	HDR FACILITIES WAREHOUSE	LCP	1	0.05
1519	PAINT	MG / CM ^2	FINAL	WALL	WOOD	D	INTACT	YELLOW	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1521	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BROWN	7076.1017.0	FIRST	E	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1528	PAINT	MG / CM ^2	FINAL	WINDOW	METAL	D	INTACT	BLACK	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1529	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1530	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	H	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1531	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1532	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1533	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	I	HDR FACILITIES WAREHOUSE	LCP	1	0.03
1534	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	A	INTACT	WHITE	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LCP	1	0.05
1535	PAINT	MG / CM ^2	FINAL	WALL	DRYWALL	D	INTACT	WHITE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LCP	1	0.08
1537	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	BLUE	7076.1017.0	FIRST	K	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1543	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.23
1544	PAINT	MG / CM ^2	FINAL	DOOR	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.9
1545	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	N	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1546	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.4
1548	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	BROWN	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.6
1549	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	C	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1550	PAINT	MG / CM ^2	FINAL	WALL	PLASTER	D	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.04
1551	PAINT	MG / CM ^2	FINAL	WINDOW FRAME	WOOD	D	INTACT	WHITE	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1552	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	D	INTACT	BROWN	7076.1017.0	FIRST	Q	HDR FACILITIES WAREHOUSE	LCP	1	0.3
1553	PAINT	MG / CM ^2	FINAL	BASEBOARD	WOOD	B	INTACT	WHITE	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LCP	1	0.13
1556	PAINT	MG / CM ^2	FINAL	DOOR FRAME	METAL	A	INTACT	BROWN	7076.1017.0	FIRST	J	HDR FACILITIES WAREHOUSE	LCP	1	0.06
1566	PAINT	MG / CM ^2	FINAL	DOOR FRAME	WOOD	C	INTACT	TAN	7076.1017.0	FIRST	T	HDR FACILITIES WAREHOUSE	LCP	1	0.5
1568	PAINT	MG / CM ^2	FINAL	WALL	STUCCO	D	INTACT	BEIGE	7076.1017.0	FIRST	U	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1588	PAINT	MG / CM ^2	FINAL	DOOR	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1590	PAINT	MG / CM ^2	FINAL	HANDRAIL	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1592	PAINT	MG / CM ^2	FINAL	WALL FLASHING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.02
1597	PAINT	MG / CM ^2	FINAL	METER BOX	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01
1598	PAINT	MG / CM ^2	FINAL	STAIR RAILING	METAL	D	INTACT	BEIGE	7076.1017.0	FIRST	OUTSIDE	HDR FACILITIES WAREHOUSE	LCP	1	0.01

Summary	
File Name on Meter	LxT_Data.004
File Name on PC	SLM_0005667_LxT_Data_004.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT*
Firmware Version	2.302
User	JJ
Location	UCR Aberdeen Iverness
Job Description	UCR NDD
Note	

Measurement	
Description	
Start	2018-10-04 10:57:19
Stop	2018-10-04 11:12:19
Duration	00:15:00.0
Run Time	00:14:59.9
Pause	00:00:00.1
Pre Calibration	2018-07-12 08:32:20
Post Calibration	None
Calibration Deviation	---

Overall Settings	
RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	143.5 dB
	A C Z
Under Range Peak	99.8 96.8 101.8 dB
Under Range Limit	48.8 46.8 54.8 dB
Noise Floor	35.7 36.3 43.9 dB

Results	
LAeq	62.2 dB
LAE	91.8 dB
EA	167.016 µPa²h
EA8	5.345 mPa²h
EA40	26.726 mPa²h
LZpeak (max)	2018-10-04 10:57:45 100.4 dB
LASmax	2018-10-04 11:11:13 73.8 dB
LASmin	2018-10-04 11:01:03 45.1 dB
SEA	-99.9 dB

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LCeq	72.8 dB
LAeq	62.2 dB
LCeq - LAeq	10.6 dB
LAlaq	63.5 dB
LAeq	62.2 dB
LAlaq - LAeq	1.3 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	62.2		72.8			
Ls(max)	73.8	2018/10/04 11:11:13				
Ls(min)	45.1	2018/10/04 11:01:03				
LPeak(max)					100.4	2018/10/04 10:57:45

# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Dose Settings	
Dose Name	OSHA-1 OSHA-2
Exchange Rate	5 5 dB
Threshold	90 80 dB
Criterion Level	90 90 dB
Criterion Duration	8 8 h

Results	
Dose	-99.9 -99.9 %
Projected Dose	-99.9 -99.9 %
TWA (Projected)	-99.9 -99.9 dB
TWA (t)	-99.9 -99.9 dB
Lep (t)	47.2 47.2 dB

Statistics	
LAS5.00	67.2 dB
LAS10.00	65.4 dB
LAS33.30	62.3 dB
LAS50.00	60.3 dB
LAS66.60	57.6 dB
LAS90.00	50.3 dB

Summary	
File Name on Meter	LxT_Data.005
File Name on PC	SLM_0005667_LxT_Data_005.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT*
Firmware Version	2.302
User	JJ
Location	Child Development Center
Job Description	UCR NDD
Note	

Measurement	
Description	
Start	2018-10-04 11:23:44
Stop	2018-10-04 11:38:57
Duration	00:15:12.5
Run Time	00:15:10.5
Pause	00:00:02.0
Pre Calibration	2018-07-12 08:32:20
Post Calibration	None
Calibration Deviation	---

Overall Settings	
RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	143.5 dB
	A C Z
Under Range Peak	99.8 96.8 101.8 dB
Under Range Limit	48.8 46.8 54.8 dB
Noise Floor	35.7 36.3 43.9 dB

Results	
LAeq	55.5 dB
LAE	85.1 dB
EA	35.662 µPa²h
EA8	1.128 mPa²h
EA40	5.640 mPa²h
LZpeak (max)	2018-10-04 11:38:28 100.8 dB
LASmax	2018-10-04 11:37:11 75.7 dB
LASmin	2018-10-04 11:25:22 40.7 dB
SEA	-99.9 dB

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LCeq	76.0 dB
LAeq	55.5 dB
LCeq - LAeq	20.5 dB
LAlaq	60.9 dB
LAeq	55.5 dB
LAlaq - LAeq	5.4 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	55.5		76.0			
Ls(max)	75.7	2018/10/04 11:37:11				
Ls(min)	40.7	2018/10/04 11:25:22				
LPeak(max)					100.8	2018/10/04 11:38:28

# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Dose Settings	
Dose Name	OSHA-1 OSHA-2
Exchange Rate	5 5 dB
Threshold	90 80 dB
Criterion Level	90 90 dB
Criterion Duration	8 8 h

Results	
Dose	-99.9 -99.9 %
Projected Dose	-99.9 -99.9 %
TWA (Projected)	-99.9 -99.9 dB
TWA (t)	-99.9 -99.9 dB
Lep (t)	40.5 40.5 dB

Statistics	
LAS5.00	59.7 dB
LAS10.00	54.9 dB
LAS33.30	47.3 dB
LAS50.00	45.4 dB
LAS66.60	44.2 dB
LAS90.00	42.4 dB

Summary	
File Name on Meter	LxT_Data.007
File Name on PC	SLM_0005667_LxT_Data_007.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT*
Firmware Version	2.302
User	JJ
Location	Falkirk Student Apartments
Job Description	UCR NDD
Note	

Measurement	
<b>Description</b>	
Start	2018-10-04 12:12:58
Stop	2018-10-04 12:28:03
Duration	00:15:05.2
Run Time	00:15:01.7
Pause	00:00:03.5
Pre Calibration	2018-07-12 08:32:20
Post Calibration	None
Calibration Deviation	---

Overall Settings	
RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	143.5 dB
	<b>A</b> <b>C</b> <b>Z</b>
Under Range Peak	99.8 96.8 101.8 dB
Under Range Limit	48.8 46.8 54.8 dB
Noise Floor	35.7 36.3 43.9 dB

Results	
LAeq	59.6 dB
LAE	89.1 dB
EA	90.673 µPa²h
EA8	2.896 mPa²h
EA40	14.480 mPa²h
LZpeak (max)	2018-10-04 12:27:32 95.1 dB
LASmax	2018-10-04 12:27:32 72.0 dB
LASmin	2018-10-04 12:13:25 42.5 dB
SEA	-99.9 dB

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LCeq	71.8 dB
LAeq	59.6 dB
LCeq - LAeq	12.2 dB
LAlaq	61.0 dB
LAeq	59.6 dB
LAlaq - LAeq	1.5 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	59.6		71.8			
Ls(max)	72.0	2018/10/04 12:27:32				
Ls(min)	42.5	2018/10/04 12:13:25				
LPeak(max)					95.1	2018/10/04 12:27:32

# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Dose Settings	
Dose Name	OSHA-1 OSHA-2
Exchange Rate	5 5 dB
Threshold	90 80 dB
Criterion Level	90 90 dB
Criterion Duration	8 8 h

Results	
Dose	-99.9 -99.9 %
Projected Dose	-99.9 -99.9 %
TWA (Projected)	-99.9 -99.9 dB
TWA (t)	-99.9 -99.9 dB
Lep (t)	44.5 44.5 dB

Statistics	
LAS5.00	65.3 dB
LAS10.00	63.3 dB
LAS33.30	58.8 dB
LAS50.00	56.7 dB
LAS66.60	54.9 dB
LAS90.00	51.5 dB

Summary	
File Name on Meter	LxT_Data.006
File Name on PC	SLM_0005667_LxT_Data_006.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT*
Firmware Version	2.302
User	JJ
Location	Stonehaven Apartments
Job Description	UCR NDD
Note	

Measurement	
Description	
Start	2018-10-04 11:51:20
Stop	2018-10-04 12:06:20
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2018-07-12 08:32:20
Post Calibration	None
Calibration Deviation	---

Overall Settings	
RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	143.5 dB
	A C Z
Under Range Peak	99.8 96.8 101.8 dB
Under Range Limit	48.8 46.8 54.8 dB
Noise Floor	35.7 36.3 43.9 dB

Results	
LAeq	61.6 dB
LAE	91.1 dB
EA	144.377 µPa²h
EA8	4.620 mPa²h
EA40	23.100 mPa²h
LZpeak (max)	2018-10-04 11:56:38 100.5 dB
LASmax	2018-10-04 11:56:39 79.9 dB
LASmin	2018-10-04 12:03:07 48.6 dB
SEA	-99.9 dB

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LCeq	74.1 dB
LAeq	61.6 dB
LCeq - LAeq	12.5 dB
LAlaq	64.4 dB
LAeq	61.6 dB
LAlaq - LAeq	2.8 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	61.6		74.1			
Ls(max)	79.9	2018/10/04 11:56:39				
Ls(min)	48.6	2018/10/04 12:03:07				
LPeak(max)					100.5	2018/10/04 11:56:38

# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Dose Settings	
Dose Name	OSHA-1 OSHA-2
Exchange Rate	5 5 dB
Threshold	90 80 dB
Criterion Level	90 90 dB
Criterion Duration	8 8 h

Results	
Dose	-99.9 -99.9 %
Projected Dose	-99.9 -99.9 %
TWA (Projected)	-99.9 -99.9 dB
TWA (t)	-99.9 -99.9 dB
Lep (t)	46.5 46.5 dB

Statistics	
LAS5.00	65.8 dB
LAS10.00	63.7 dB
LAS33.30	60.1 dB
LAS50.00	58.0 dB
LAS66.60	55.9 dB
LAS90.00	52.2 dB



### UCR NDD - Construction Noise - Unmitigated

Reference Noise Distance 50

Reference Noise Level 89

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Child Development Center	50	6	83.0	55.5	83.0	27.5
Aberdeen-Iverness Apartments	90	6	77.9	62.2	78.0	15.8
Falkirk Apartments	115	6	75.8	59.6	75.9	16.3
Stonehaven Apartments	200	6	71.0	61.6	71.4	9.8
Gethsemane Lutheran Church	225	6	69.9	61.6	70.5	8.9
Pentland Hills Residence Halls	550	6	62.2	62.2	65.2	3.0
Highland Elementary School	800	6	58.9	55.5	60.5	5.0
Islamic Academy of Riverside	1000	6	57.0	59.6	61.5	1.9
REACH Leadership Academy	1200	6	55.4	59.6	61.0	1.4

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

### UCR NDD - Construction Noise - Mitigated

Reference Noise Distance 50

Reference Noise Level 89

Sensitive Receptor	Distance (feet)	Mitigation Factors	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Child Development Center	50	19	6	64.0	55.5	64.6	9.1
Aberdeen-Iverness Apartments	90	8	6	69.9	62.2	70.6	8.4
Falkirk Apartments	115	8	6	67.8	59.6	68.4	8.8
Stonehaven Apartments	200	8	6	63.0	61.6	65.3	3.7
Gethsemane Lutheran Church	225	8	6	61.9	61.6	64.8	3.2
Pentland Hills Residence Halls	550	8	6	64.6	62.2	66.6	4.4
Highland Elementary School	800	8	6	63.0	55.5	63.7	8.2
Islamic Academy of Riverside	1000	8	6	62.0	59.6	64.0	4.4
REACH Leadership Academy	1200	8	6	61.2	59.6	63.5	3.9

A 3 dBA reduction was given for mufflers.

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise

UCR NDD - HVAC Stationary Noise - Unmitigated

Reference Noise Distance 50

Reference Noise Level 72.7

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Child Development Center	50	15	57.7	55.5	59.7	4.2
Aberdeen-Iverness Apartments	90	21	46.6	62.2	62.3	0.1
Falkirk Apartments	115	21	44.5	59.6	59.7	0.1
Stonehaven Apartments	200	21	39.7	61.6	61.6	0.0
Gethsemane Lutheran Church	225	21	38.6	61.6	61.6	0.0
Pentland Hills Residence Halls	550	21	30.9	62.2	62.2	0.0
Highland Elementary School	800	21	27.6	55.5	55.5	0.0
Islamic Academy of Riverside	1000	21	25.7	59.6	59.6	0.0
REACH Leadership Academy	1200	21	24.1	59.6	59.6	0.0

A 6 dBA attenuation was given for a point source over a hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

HVAC noise shielding would reduce noise levels by approximately 15 dBA.

UCR NDD - Parking Lot Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level

60

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Parking Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Child Development Center	50	6	54.0	55.5	57.8	2.3
Aberdeen-Iverness Apartments	90	6	48.9	62.2	62.4	0.2
Falkirk Apartments	115	6	46.8	59.6	59.8	0.2
Stonehaven Apartments	200	6	42.0	61.6	61.6	0.0
Gethsemane Lutheran Church	225	6	40.9	61.6	61.6	0.0
Pentland Hills Residence Halls	550	6	33.2	62.2	62.2	0.0
Highland Elementary School	800	6	29.9	55.5	55.5	0.0
Islamic Academy of Riverside	1000	6	28.0	59.6	59.6	0.0
REACH Leadership Academy	1200	6	26.4	59.6	59.6	0.0

A 6 dBA attenuation was given for a point source over a hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

UCR NDD		Child Development Center
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	50	Distance from equipment to sensitive receptor
Equip=	0.031	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	50	Distance from equipment to sensitive receptor
Equip=	78	
Peak demolition vibration based on utilizing a large bulldozer.		
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.		

UCR NDD		Aberdeen Iverness Residences
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	90	Distance from equipment to sensitive receptor
Equip=	0.013	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	90	Distance from equipment to sensitive receptor
Equip=	70	
Peak demolition vibration based on utilizing a large bulldozer.		
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.		

UCR NDD		Falkirk Apartments
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	115	Distance from equipment to sensitive receptor
Equip=	0.009	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	115	Distance from equipment to sensitive receptor
Equip=	67	
Peak demolition vibration based on utilizing a large bulldozer.		
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.		

UCR NDD		Stonehaven Apartments
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	200	Distance from equipment to sensitive receptor
Equip=	0.004	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	200	Distance from equipment to sensitive receptor
Equip=	60	
Peak demolition vibration based on utilizing a large bulldozer.		
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.		

UCR NDD		Gethsemane Lutheran Church
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	225	Distance from equipment to sensitive receptor
Equip=	0.003	

UCR NDD		Pentland Hills Residences
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	550	Distance from equipment to sensitive receptor
Equip=	0.001	

Annoyance VdB

Ref= 87 Based on type of equipment  
RefD= 25  
D= 225 Distance from equipment to sensitive receptor  
Equip= 58

Peak demolition vibration based on utilizing a large bulldozer.  
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Annoyance VdB

Ref= 87 Based on type of equipment  
RefD= 25  
D= 550 Distance from equipment to sensitive receptor  
Equip= 47

Peak demolition vibration based on utilizing a large bulldozer.  
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

UCR NDD Highland Elementary School

Ref= Reference vibration level (PPV)  
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment  
RefD= 25  
D= 800 Distance from equipment to sensitive receptor  
Equip= 0.000

Annoyance VdB

Ref= 87 Based on type of equipment  
RefD= 25  
D= 800 Distance from equipment to sensitive receptor  
Equip= 42

Peak demolition vibration based on utilizing a large bulldozer.  
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

UCR NDD Islamic Academy of Riverside

Ref= Reference vibration level (PPV)  
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment  
RefD= 25  
D= 1000 Distance from equipment to sensitive receptor  
Equip= 0.000

Annoyance VdB

Ref= 87 Based on type of equipment  
RefD= 25  
D= 1000 Distance from equipment to sensitive receptor  
Equip= 39

Peak demolition vibration based on utilizing a large bulldozer.  
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

UCR NDD REACH Leadership Academy

Ref= Reference vibration level (PPV)  
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

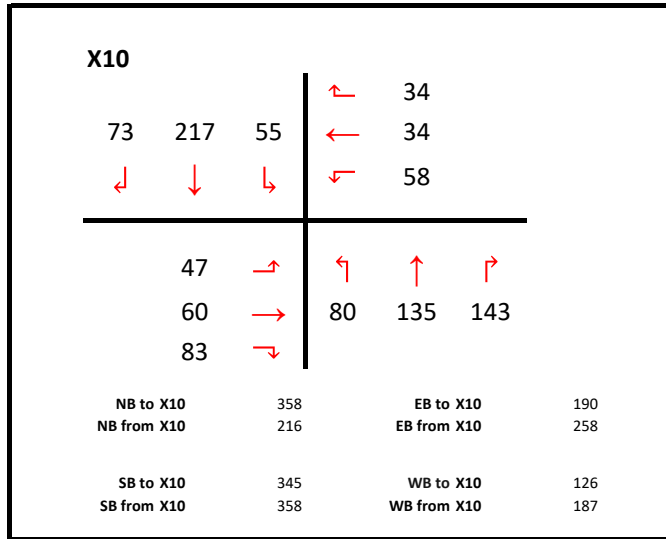
Ref= 0.089 Based on type of equipment  
RefD= 25  
D= 1200 Distance from equipment to sensitive receptor  
Equip= 0.000

Annoyance VdB

Ref= 87 Based on type of equipment  
RefD= 25  
D= 1200 Distance from equipment to sensitive receptor  
Equip= 37

Peak demolition vibration based on utilizing a large bulldozer.  
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

## North District Development AM Existing

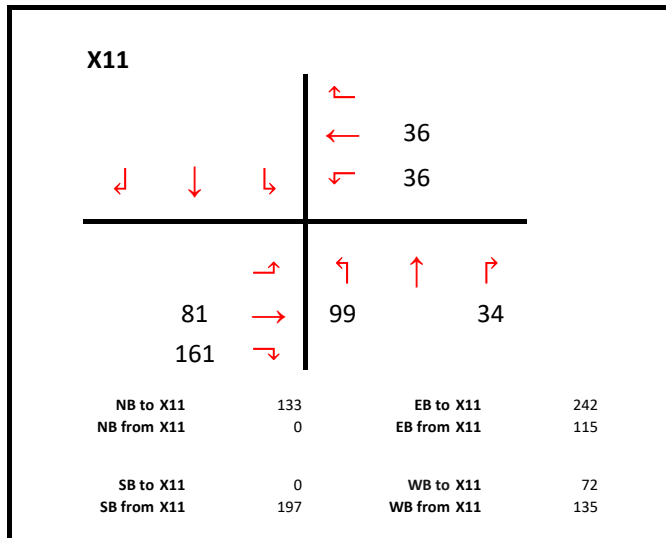


### X10 Canyon Crest Drive at Linden Street

NB to X10	347	7	4	EB to X10	184	4	2
NB from X10	210	4	2	EB from X10	250	5	3
SB to X10	335	7	3	WB to X10	122	3	1
SB from X10	347	7	4	WB from X10	181	4	2

#### Fleet Mix

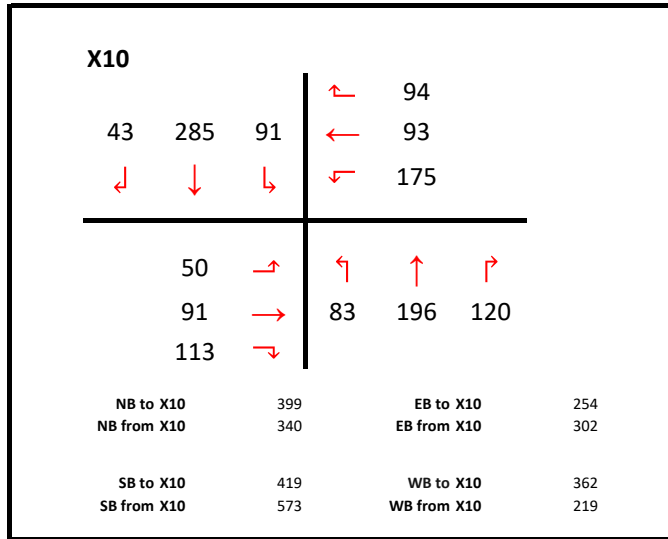
LDA	97%
MDT	2%
HDT	1%



### X11 Aberdeen Drive at Linden Street

NB to X11	129	3	1	EB to X11	235	5	2
NB from X11	0	0	0	EB from X11	112	2	1
SB to X11	0	0	0	WB to X11	70	1	1
SB from X11	191	4	2	WB from X11	131	3	1

## North District Development PM Existing

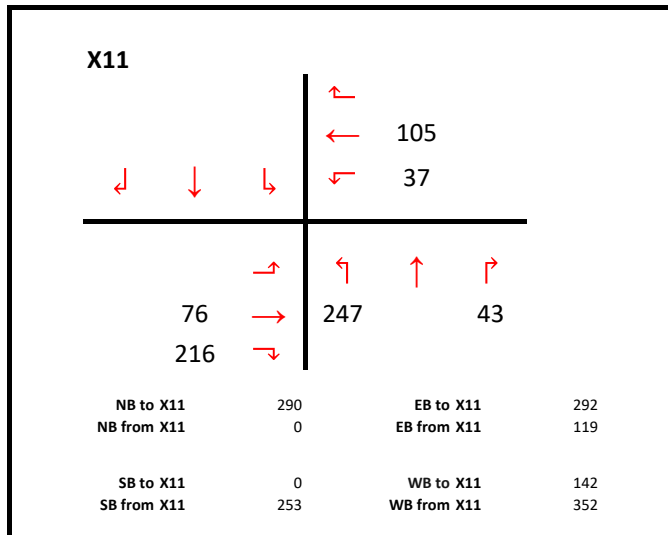


### X10 Canyon Crest Drive at Linden Street

NB to X10	387	8	4	EB to X10	246	5	3
NB from X10	330	7	3	EB from X10	293	6	3
SB to X10	406	8	4	WB to X10	351	7	4
SB from X10	556	11	6	WB from X10	212	4	2

#### Fleet Mix

LDA	97%
MDT	2%
HDT	1%

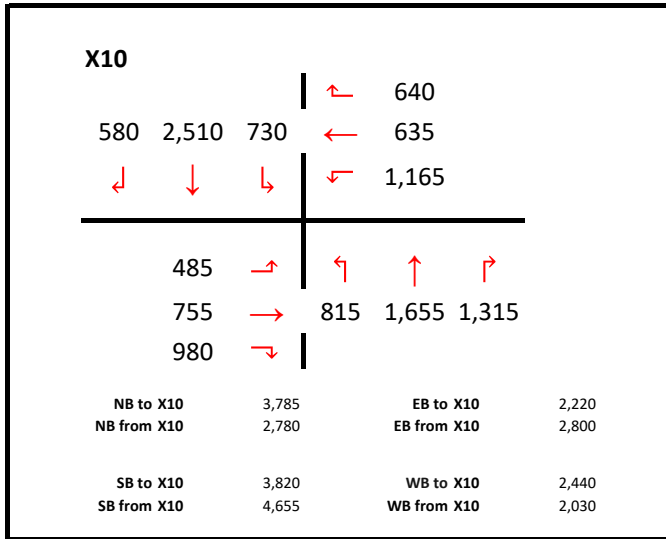


### X11 Aberdeen Drive at Linden Street

NB to X11	281	6	3	EB to X11	283	6	3
NB from X11	0	0	0	EB from X11	115	2	1
SB to X11	0	0	0	WB to X11	138	3	1
SB from X11	245	5	3	WB from X11	341	7	4



# North District Development Daily Existing

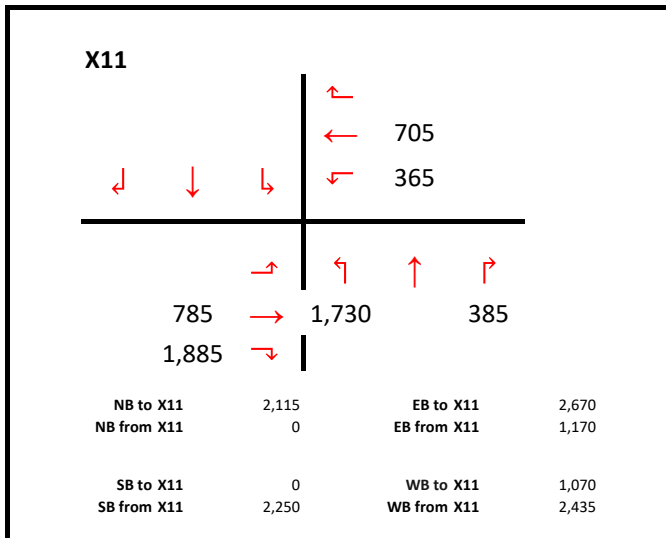


## X10 Canyon Crest Drive at Linden Street

	NB to X10	3671	76	38	EB to X10	2153	44	22	
2780	NB from X10	2697	56	28	EB from X10	2716	56	28	2,800
	SB to X10	3705	76	38	WB to X10	2367	49	24	
4655	SB from X10	4515	93	47	WB from X10	1969	41	20	2,030

### Fleet Mix

LDA	97%
MDT	2%
HDT	1%

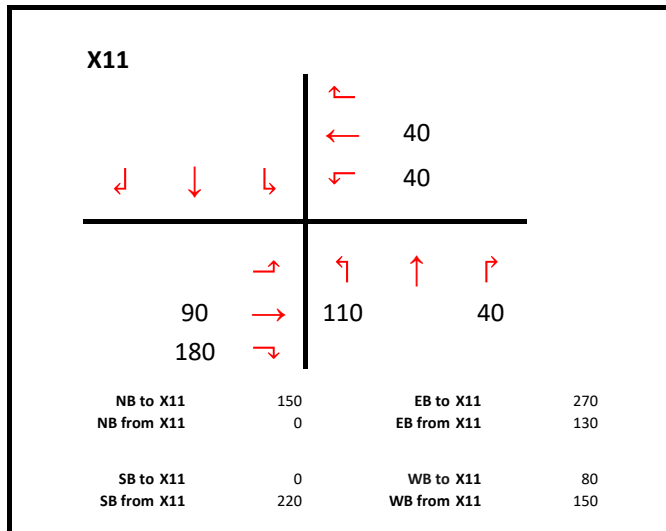
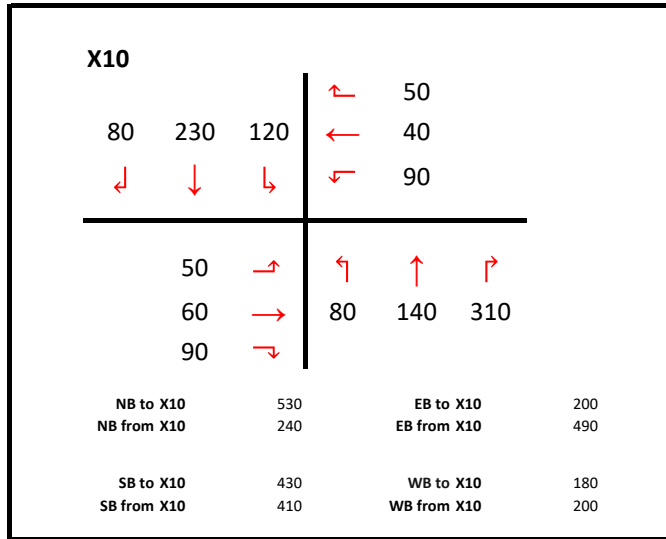


## X11 Aberdeen Drive at Linden Street

	NB to X11	2052	42	21	EB to X11	2590	53	27	
	NB from X11	0	0	0	EB from X11	1135	23	12	1170
	SB to X11	0	0	0	WB to X11	1038	21	11	
2250	SB from X11	2183	45	23	WB from X11	2362	49	24	2435

2618

## North District Development AM Future No Project



### X10 Canyon Crest Drive at Linden Street

NB to X10	514	11	5	EB to X10	194	4	2
NB from X10	233	5	2	EB from X10	475	10	5
SB to X10	417	9	4	WB to X10	175	4	2
SB from X10	398	8	4	WB from X10	194	4	2

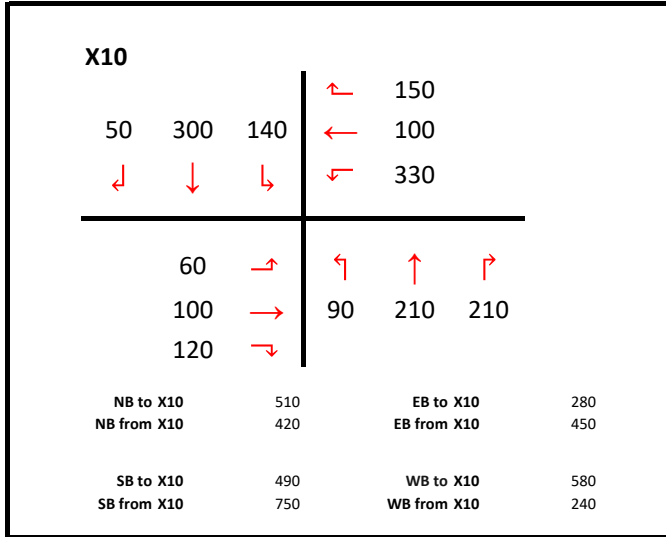
#### Fleet Mix

LDA	97%
MDT	2%
HDT	1%

### X11 Aberdeen Drive at Linden Street

NB to X11	146	3	2	EB to X11	262	5	3
NB from X11	0	0	0	EB from X11	126	3	1
SB to X11	0	0	0	WB to X11	78	2	1
SB from X11	213	4	2	WB from X11	146	3	2

# North District Development PM Future No Project

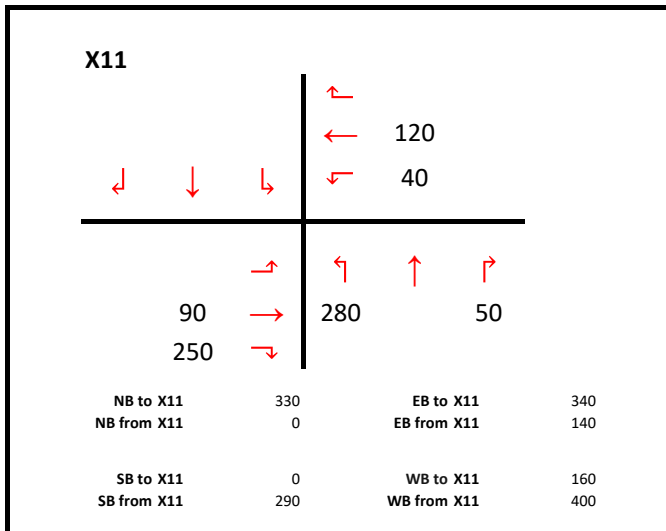


## X10 Canyon Crest Drive at Linden Street

NB to X10	495	10	5	EB to X10	272	6	3
NB from X10	407	8	4	EB from X10	437	9	5
SB to X10	475	10	5	WB to X10	563	12	6
SB from X10	728	15	8	WB from X10	233	5	2

### Fleet Mix

LDA	97%
MDT	2%
HDT	1%

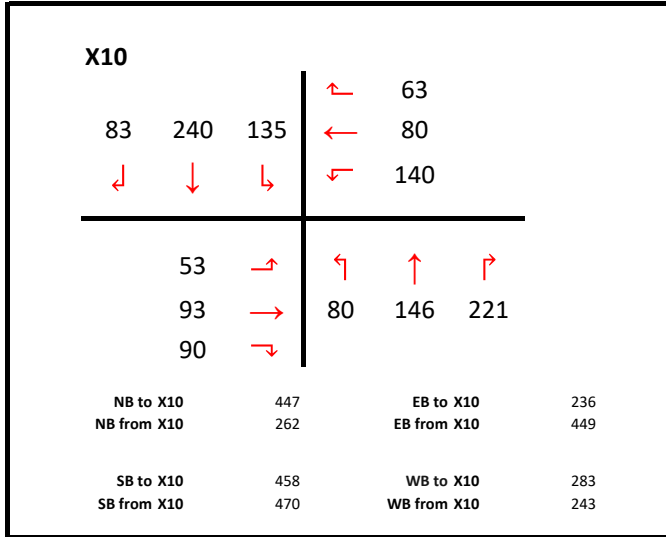


## X11 Aberdeen Drive at Linden Street

NB to X11	320	7	3	EB to X11	330	7	3
NB from X11	0	0	0	EB from X11	136	3	1
SB to X11	0	0	0	WB to X11	155	3	2
SB from X11	281	6	3	WB from X11	388	8	4



# North District Development AM Future Plus Project

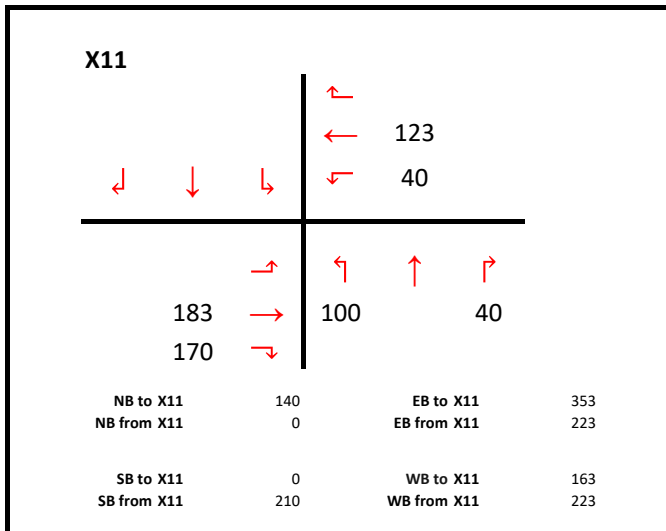


## X10 Canyon Crest Drive at Linden Street

NB to X10	434	9	4	EB to X10	229	5	2
NB from X10	254	5	3	EB from X10	436	9	4
SB to X10	444	9	5	WB to X10	275	6	3
SB from X10	456	9	5	WB from X10	236	5	2

### Fleet Mix

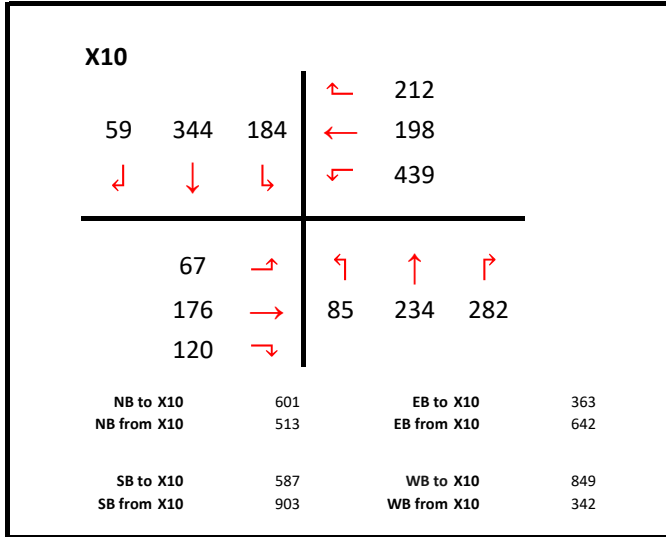
LDA	97%
MDT	2%
HDT	1%



## X11 Aberdeen Drive at Linden Street

NB to X11	136	3	1	EB to X11	342	7	4
NB from X11	0	0	0	EB from X11	216	4	2
SB to X11	0	0	0	WB to X11	158	3	2
SB from X11	204	4	2	WB from X11	216	4	2

# North District Development PM Future Plus Project

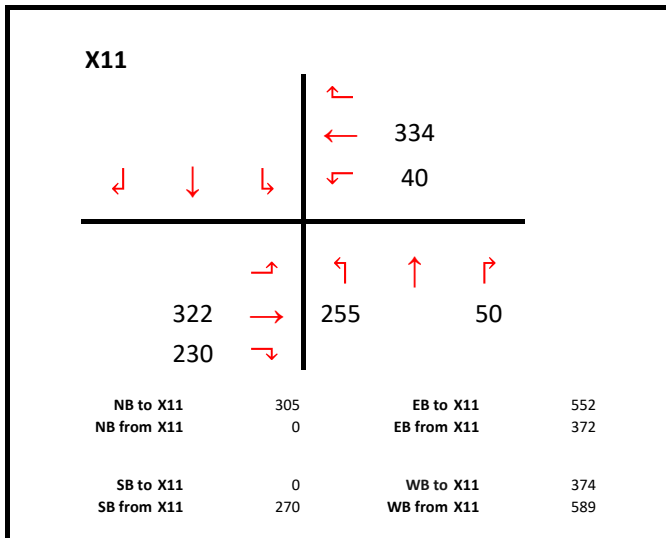


## X10 Canyon Crest Drive at Linden Street

NB to X10	583	12	6	EB to X10	352	7	4
NB from X10	498	10	5	EB from X10	623	13	6
SB to X10	569	12	6	WB to X10	824	17	8
SB from X10	876	18	9	WB from X10	332	7	3

### Fleet Mix

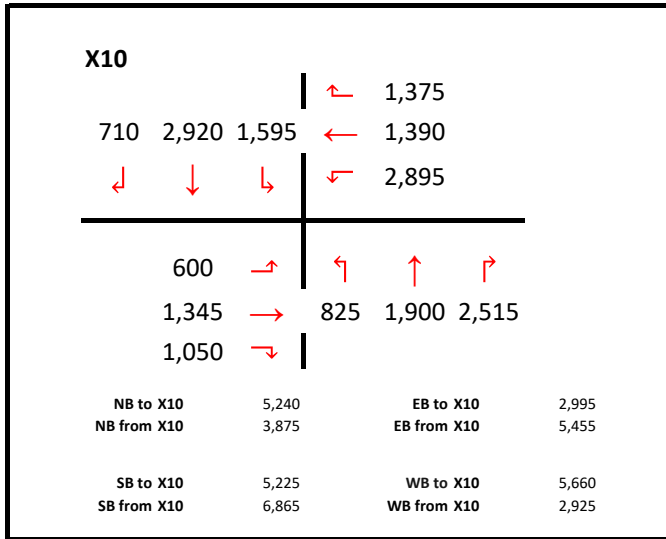
LDA	97%
MDT	2%
HDT	1%



## X11 Aberdeen Drive at Linden Street

NB to X11	296	6	3	EB to X11	535	11	6
NB from X11	0	0	0	EB from X11	361	7	4
SB to X11	0	0	0	WB to X11	363	7	4
SB from X11	262	5	3	WB from X11	571	12	6

# North District Development Daily Future Plus Project

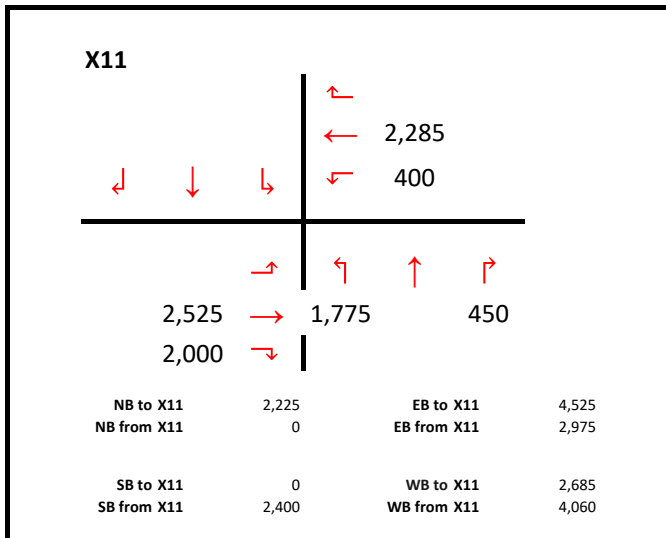


**X10 Canyon Crest Drive at Linden Street**

	NB to X10	5083	105	52	EB to X10	2905	60	30	
3875	NB from X10	3759	78	39	EB from X10	5291	109	55	5,455
	SB to X10	5068	105	52	WB to X10	5490	113	57	
6865	SB from X10	6659	137	69	WB from X10	2837	59	29	2,925

**Fleet Mix**

LDA	97%
MDT	2%
HDT	1%



**X11 Aberdeen Drive at Linden Street**

	NB to X11	2158	45	22	EB to X11	4389	91	45	
	NB from X11	0	0	0	EB from X11	2886	60	30	2975
	SB to X11	0	0	0	WB to X11	2604	54	27	
2400	SB from X11	2328	48	24	WB from X11	3938	81	41	4060

4758

ISI  
ISI

3-Oct-18  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

UCR NDD

RUN:

Existing Conditions

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS:

65 deg F, 65% RH

Receiver  
Name

Receiver Name	No.	#DUs	Existing			No Barrier			With Barrier			Calculated minus Goal dB
			Lden	Calculated	Crit'n	Lden	Calculated	Crit'n	Lden	Calculated	Goal	
			dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
Athletic Field	1	1	0	53.5	66	53.5	10 ----	53.5	0	8	-8	
Classrooms	2	1	0	56.5	66	56.5	10 ----	56.5	0	8	-8	
Aberdeen Inverness	3	1	0	54.4	66	54.4	10 ----	54.4	0	8	-8	
Student Housing NW Linden and CC	4	1	0	60.4	66	60.4	10 ----	60.4	0	8	-8	
Student Housing SW Linden and CC	5	1	0	60.6	66	60.6	10 ----	60.6	0	8	-8	

Dwelling Units

# DUs  
Noise Reduction  
Min Avg Max  
dB dB dB

All Selected	5	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0



ISI  
ISI

3-Oct-18  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

UCR NDD

RUN:

Future No Project Conditions

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS:

65 deg F, 65% RH

Receiver  
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing Type		With Barrier			Calculated minus Goal dB	
			Lden	Lden	Calculated	Crit'n	Calculated	Crit'n	Impact	Lden		Calculated
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Athletic Field	1	1	0	54.9	66	54.9	10	----	54.9	0	8	-8
Classrooms	2	1	0	57.9	66	57.9	10	----	57.9	0	8	-8
Aberdeen Inverness	3	1	0	55.2	66	55.2	10	----	55.2	0	8	-8
Student Housing NW Linden	4	1	0	61.2	66	61.2	10	----	61.2	0	8	-8
Student Housing SW Linden	5	1	0	61.7	66	61.7	10	----	61.7	0	8	-8

Dwelling Units

# DUs  
Noise Reduction  
Min Avg Max  
dB dB dB

All Selected	5	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

ISI  
ISI

3-Oct-18  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

UCR NDD

RUN:

Future Plus Project Conditions

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

65 deg F, 65% RH

Receiver  
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing Type		With Barrier			Calculated minus Goal dB	
			Lden	Lden	Calculated	Crit'n	Calculated	Crit'n	Impact	Lden		Calculated
			dB	dB	dB	dB	dB		dB	dB	dB	
Athletic Field	1	1	0	55.9	66	55.9	10	----	55.9	0	8	-8
Classrooms	2	1	0	59	66	59	10	----	59	0	8	-8
Aberdeen Inverness	3	1	0	57.4	66	57.4	10	----	57.4	0	8	-8
Student Housing NW Linden	4	1	0	62	66	62	10	----	62	0	8	-8
Student Housing SW Linden	5	1	0	62.6	66	62.6	10	----	62.6	0	8	-8

Dwelling Units

# DUs  
Noise Reduction  
Min Avg Max  
dB dB dB

All Selected	5	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

Receptor	Existing	Future No Project	Future Plus Project	No Project Minus Existing	Project Minus Existing
Athletic Field	53.5	54.9	55.9	1.4	2.4
Classrooms	56.5	57.9	59	1.4	2.5
Aberdeen Inverness	54.4	55.2	57.4	0.8	3
Student Housing NW Linden and CC	60.4	61.2	62	0.8	1.6
Student Housing SW Linden and CC	60.6	61.7	62.6	1.1	2

# **UC Riverside North District Development Transportation Impact Study**

**Prepared for:  
University of California, Riverside**

October 2018

OC17-0535

**FEHR  PEERS**

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## 1.0 EXECUTIVE SUMMARY

Fehr & Peers has completed a transportation impact analysis (TIA) for the proposed UC Riverside North District Development Project (Project) in Riverside, California. The project is a mixed-use project consisting of residence halls, student apartments and a mixed-use space. Phase 1 of the project consists of a 1,500-bed student apartment complex. The ultimate buildout of the proposed project consists of 4,500-beds of student apartments (including the 1,500-beds under Phase 1), 1,500-beds of residence halls and 62,800 square feet of mixed-use space.

As part of the TIA, and consistent with California Environmental Quality Act (CEQA) requirements, the following scenarios were analyzed:

- Existing (2017) Conditions: Analysis based on traffic volumes and lane geometries collected in November of 2017.
- Existing (2017) Plus Phase 1 Project Conditions: Analysis was based on the addition of Phase 1 Project trips to the Existing (2017) traffic volumes and lane geometries.
- Future (Year 2025) Conditions: Analysis based on traffic forecasts developed using the Riverside Traffic Analysis Model (RivTAM) for 2025, which is the year expected for buildout of the project site.
- Future (Year 2025) Plus Buildout Project Conditions: Analysis based on the addition of Project trips to the 2025 traffic forecasts.

## FINDINGS

Project impacts resulting from the planned development under Phase 1 were analyzed under existing conditions, and the ultimate buildout of the project site was analyzed under future (Year 2025) conditions. The student apartments constructed under Phase 1 are expected to generate approximately 6,000 daily vehicle trips, 145 AM peak hour trips and 330 PM peak hour trips. At buildout, the project will generate approximately 22,180 daily trips, 485 AM peak hour trips and 1,245 PM peak hour trips. However, as the Project will provide housing for 6,000 students at Buildout, adjustments were made to the future traffic forecasts to account for a shift of students from commuter students (students living off campus and commuting to campus) to resident students (students living on campus at the Project site).

Under Existing Conditions, only the Watkins Drive & Big Springs Road intersection was identified as operating unacceptably during peak travel hours. The following freeway facilities were identified as operating unacceptably during the AM peak hour:

- Eastbound diverge at University Avenue
- Eastbound merge at Blaine Street

Queueing was not found to exceed storage for any movement at the ramp terminal intersections.

Under Existing Plus Phase 1 conditions, all study intersections, except for the Watkins Drive & Big Springs Road intersection, operate acceptably. No freeway facilities operating unacceptably were degraded under Existing Plus Phase 1 conditions and queueing was not found to exceed storage for any movement at the ramp terminal intersections.

Under Future (Year 2025) conditions, the following intersections were found to operate unacceptably:

- Chicago Avenue & 3<sup>rd</sup> Street
- Watkins Drive & Big Springs Road

Under Future (Year 2025) Plus Buildout Project conditions, the following intersections were found to operate unacceptably with the Project in place:

- Chicago Avenue & 3<sup>rd</sup> Street
- Iowa Avenue & Blaine Street
- Aberdeen Drive & Linden Street
- Iowa Avenue & University Avenue
- Watkins Drive & Big Springs Road

No freeway facilities operating unacceptably were degraded with the Project in place and no facilities operating acceptably were degraded to unacceptable. Queueing does not exceed storage for any movements at the ramp terminal intersections with and without the project in place.

**Table ES-1** summarizes the significant impacts identified under the Existing Plus Phase 1 and Future Plus Buildout Project conditions. With the development of Phase 1, one significant intersection impact was identified, and no freeway impacts were found to occur. Under the Future Plus Buildout Project conditions, eight significant intersection impacts were found to occur, while no freeway impacts were identified.

**TABLE ES-1 - INTERSECTION IMPACT SUMMARY**

	<b>Intersection</b>	<b>Scenario(s) Under Which Impact Occurs</b>
2	Third Street & Chicago Avenue	Buildout Plus Project
5	Iowa Avenue & Blaine Street	Buildout Plus Project
7	Canyon Crest Drive & Blaine Street	Buildout Plus Project
9	Iowa Avenue & W Linden Street	Buildout Plus Project
10	Canyon Crest Drive & W Linden Street	Buildout Plus Project

**TABLE ES-1 - INTERSECTION IMPACT SUMMARY**

<b>Intersection</b>		<b>Scenario(s) Under Which Impact Occurs</b>
11	Aberdeen Drive & W Linden Street	Buildout Plus Project
12	University Avenue & Iowa Avenue	Buildout Plus Project
15	Watkins Drive & Big Springs Road	Existing Plus Phase 1 Buildout Plus Project

## 2.0 INTRODUCTION

Fehr & Peers has completed a transportation impact analysis (TIA) for the proposed University of California Riverside (UC Riverside) North District Development Project (Project) in Riverside, California. This report summarizes the methodology, findings and conclusions of the analysis, including identification of recommended mitigation measures necessary for Project impacts, where feasible. This chapter outlines the geographic scope of the transportation impact analysis, including the study area.

### PROJECT DESCRIPTION

The UC Riverside North District Development is located on the UC Riverside campus, three miles east of downtown Riverside and just west of the Box Springs Mountains. The campus is generally bounded by University Avenue and Blaine Street on the north, Watkins Drive and Valencia Hill Drive on the east, and Iowa Avenue on the west. The campus is bisected diagonally by the I-215/SR-60 freeway. The area to the east of I-215/SR-60 is referred to as the East Campus.

The Project proposes to redevelop an existing housing site on the East Campus with a new higher-density mixed-use student housing project. The Project site was previously the Canyon Crest Family Student Housing Complex, which included single-family dwellings. The housing units are now vacant, although some are used as storage and maintenance facilities, including permanent structures and modular units in the northwestern portion of the site. The Project designates land uses for the 55-acre site, and the Campus anticipates that the plan area will be developed in phases, beginning with Phase 1 in the southern portion of the site. The Project includes a mix of land use designations that would allow for the construction of student housing units (for first year, second year, transfer, and upper division undergraduate and graduate students), support spaces, site improvements, utilities and supporting infrastructure improvements, dining facilities, an athletic events center, and related parking. The site plan is provided on **Figure 1**.

The land uses for the Project are summarized below:

- Student Apartments with 1,500 beds, completed as Phase 1 by 2019/20
- Student Apartments with 3,000 beds and Residence Halls with 1,500 beds, completed as part of Project buildout by 2024/25
- Resident life amenity spaces, living and learning spaces, resident life support spaces and dining facilities as part of the residential spaces
- 62,800 KSF of mixed-use retail space
- Athletic Events Center with 5,000-7,000 seats

LEGEND

- APARTMENTS
- LIVING - LEARNING SPACES
- RESIDENT LIFE AMENITIES
- RESIDENT LIFE SUPPORT
- MIXED-USE RESIDENTIAL
- DINING FACILITIES
- ATHLETIC FACILITIES
- PARKING AREAS



NOT ACCORDING TO SCALE

SOURCE: Solomon Cordwell Buenz, 2018



Figure 1  
Project Site Plan

The site is surrounded by Blaine Street and a small shopping plaza to the north, Canyon Crest Drive and the Falkirk Apartments to the west, and the Campus to the south. The Plan area is bounded by Linden Street to the south along with the Police Facility, a track facility, the Student Recreation Center, and the Aberdeen-Inverness (A-I) Residence Halls. To the east of the site are parking lots, the UC Riverside Child Development Center, and the Campus Corporation Yard (which includes three campus support facility buildings [Corporation A, B, and C], two warehouses (Warehouse #1 and #2), the Mail Services building, the Transportation and Parking Services (TAPS) building and yard, a car shed, a gas storage building, and outdoor storage and parking areas).

Driveways from Linden Street, Blaine Street and Watkins Drive will provide vehicle access to the site. The driveways from Linden Street and Blaine Street will also be designated as Class III bicycle facilities for shared use with bicyclists. Bicycle access to the site will also be provided from Canyon Crest Drive and from two access points on Linden Street, one of which will provide a connection to the planned North Recreational Mall, which will extend from Linden Street to Lot 25 to the south.

Parking on site will be provided in two parking areas, the North Parking Area and South Parking Area and two additional lots for the UC Riverside Childcare Development Center. Under Phase 1 of the Project, 844 total parking spaces will be provided on site in surface lots. When Project Buildout occurs, the North Parking Area and South Parking Area surface lots will be reconfigured to parking structures and up to 2,164 parking spaces will be provided on site.

## STUDY AREA

The study area and analyzed intersections were determined based on preliminary trip generation, trip distribution, and trip assignment estimates developed for the Project, and input from staff at UC Riverside. The following 15 study intersections were identified and are included in this traffic study:

- 1) Iowa Avenue & Massachusetts Avenue
- 2) Chicago Avenue & 3<sup>rd</sup> Street
- 3) I-215 SB & 3<sup>rd</sup> Street
- 4) I-215 NB & 3<sup>rd</sup> Street
- 5) Iowa Avenue & Blaine Street
- 6) Rustin Avenue & Blaine Street
- 7) Canyon Crest Drive & Blaine Street
- 8) Watkins Dr & Blaine Street
- 9) Iowa Avenue & Linden Street
- 10) Canyon Crest Drive & Linden Street

- 11) Aberdeen Drive & Linden Street
- 12) Iowa Avenue & University Avenue
- 13) I-215 SB & University Avenue
- 14) I-215 NB & University Avenue
- 15) Watkins Drive & Big Springs Road

The study area and analyzed intersections are shown on **Figure 2**.



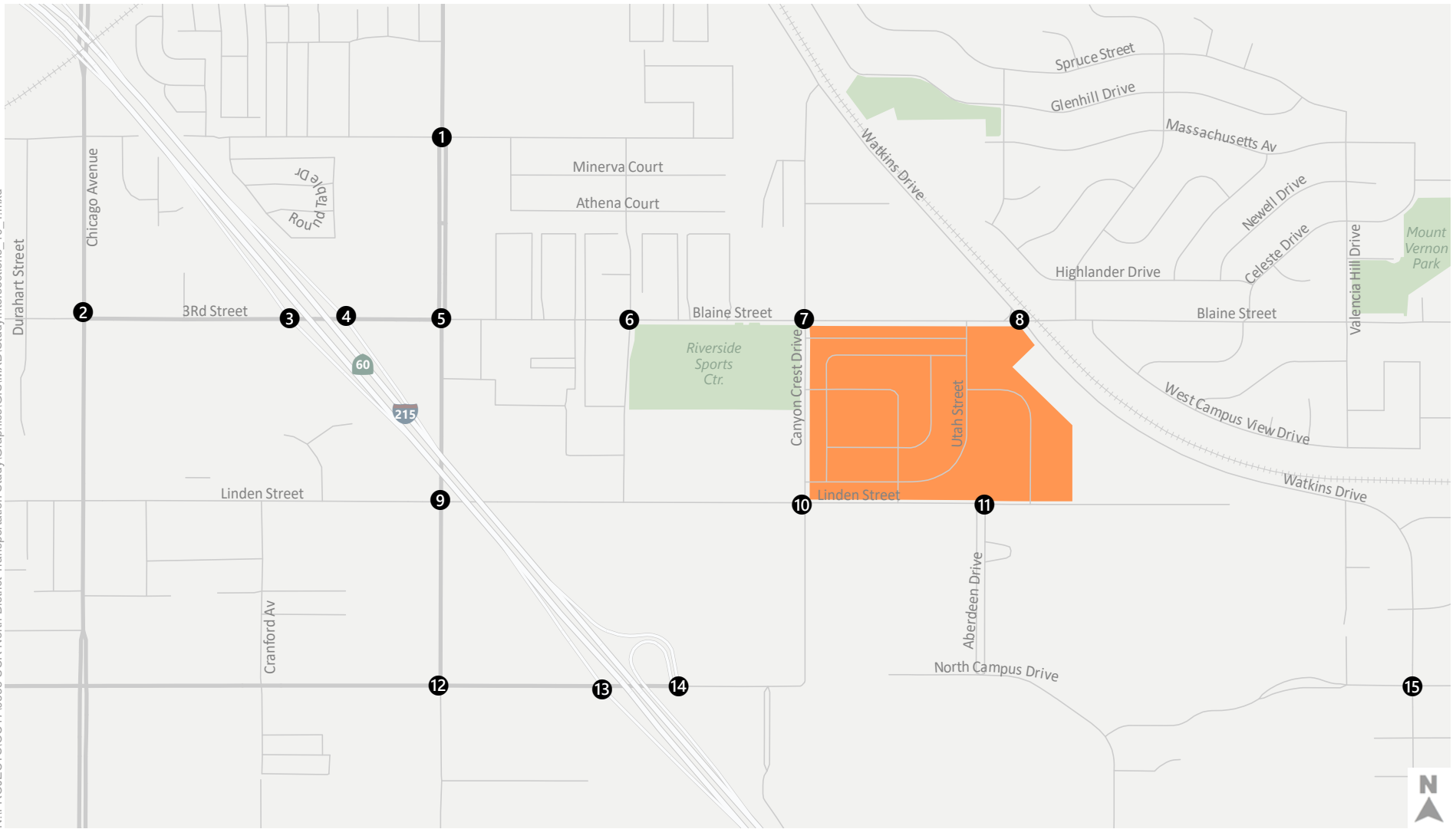
## ANALYSIS SCENARIOS

To identify potential significant Project impacts, the following four scenarios were analyzed:

- Existing (Year 2017) Conditions: Analysis based on traffic volumes and lane geometries collected in November of 2017.
- Existing (Year 2017) Plus Phase 1 Project Conditions: Analysis based on the addition of Phase 1 Project trips to the Existing (2017) traffic volumes and lane geometries.
- Future (Year 2025) Conditions: Analysis based on traffic forecasts developed using the Riverside Traffic Analysis Model (RivTAM) for 2025, which is the year that buildout of the project site is expected to occur.
- Future (Year 2025) Plus Buildout Project Conditions: Analysis based on the addition of Project trips to the forecasted 2025 traffic volumes.

The transportation impact analysis was performed during typical weekday AM and PM peak hour conditions.

N:\PROJECTS\OC170535 LCR North District Transportation Study\Graphics\GIS\MXD\StudyIntersections\_10\_4.mxd



Project Site ● Study Intersections



Figure 2  
Project Site & Study Intersections

## 3.0 ANALYSIS METHODOLOGY

This chapter discusses the analysis methodology and assumptions used to determine project impacts as documented in the *City of Riverside Traffic Impact Analysis Preparation Guidelines* (2017).

### LEVEL OF SERVICE CRITERIA

#### INTERSECTION ANALYSIS

Intersection operations analysis was performed using information collected in the field and provided by the City of Riverside. The analysis was completed using the Trafficware Synchro 10 software package. Synchro calculates vehicle delay and level of service (LOS) based on procedures identified in Chapter 19 Section 3 Approach A of the Highway Capacity Manual, 6th Edition (HCM) (Transportation Research Board, 2016), which is considered the state-of-the-practice methodology for evaluating intersection operations and is consistent with the City of Riverside guidelines.

LOS is a measure of traffic operating conditions, which varies from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity resulting in long queues and delays). These ratings represent the perspective of drivers and indicate the comfort and convenience associated with driving. Peak hour traffic volumes, lane configurations, and signal timing plans were used as inputs for the LOS calculations. **Table 1** summarizes the relationship between the average control delay per vehicle and LOS for signalized and unsignalized intersections. Results from Synchro were used to determine delay and LOS at all intersections. For signalized and all-way stop-controlled intersections, intersection LOS is determined based on average delay per the standard HCM 6th edition methodology. For two-way stop-controlled intersections, level of service is determined based on the worst-approach delay.

Queueing analysis was completed for all ramp terminal intersections in the study area using the Synchro software. Synchro reports the 95th percentile queue by movement, which was compared to available storage to determine if queueing for each movement would exceed available storage.

The following factors were applied in the intersection analysis:

- Peak Hour Factor (PHF) was based on traffic counts collected in the field for all analysis scenarios
- Heavy vehicle percentage was set to 2% for all analysis scenarios

**TABLE 1 – INTERSECTION LOS CRITERIA**

Level of Service	Description	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	< 10.0	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0	> 10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0	> 15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0	> 25.0 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0	> 35.0 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0	> 50.0

Source: *Highway Capacity Manual 6<sup>th</sup> Edition* (Transportation Research Board, 2016).

## FREEWAY ANALYSIS

Freeway mainline segments and ramps were evaluated using a HCS equivalent tool, which applies methodologies contained in the Highway Capacity Manual (HCM 6th Edition) (Transportation Research Board, 2016). The LOS was calculated for each study facility based on density in number of vehicles per hour per lane. **Table 2** below describes the LOS thresholds for freeway sections identified in the HCM 6th Edition.

**TABLE 2 – BASIC, MERGE, DIVERGE & WEAVE FREEWAY SEGMENT LOS THRESHOLD**

Level of Service	Description	Density (vplpm) <sup>1</sup>	
		Mainline (Basic)	Ramp / Weave
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11	≤ 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 to 18	> 10 to 20

**TABLE 2 – BASIC, MERGE, DIVERGE & WEAVE FREEWAY SEGMENT LOS THRESHOLD**

Level of Service	Description	Density (vplpm) <sup>1</sup>	
		Mainline (Basic)	Ramp / Weave
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 to 26	> 20 to 28
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 to 35	> 28 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 to 45	> 35 to 45 <sup>2</sup>
F	Represents a breakdown in flow.	> 45	> 45 <sup>2</sup>

Notes:

1. Density is reported in vehicles per lane per mile.
  - 2 The maximum density for ramp junctions and weaving sections under LOS E is not defined in the HCM.
  - 3.The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections.
- Source: Highway Capacity Manual 6th Edition (Transportation Research Board, 2016)

The following factors were used in the freeway analysis:

- PHF for Existing Conditions were determined based on existing traffic volumes collected from Caltrans Performance Measurement System (PeMS)
- Heavy vehicle percentage was determined using Caltrans average daily traffic (ADT) information

## PERFORMANCE CRITERIA AND THRESHOLDS OF SIGNIFICANCE

With the exception of Intersection 11 which falls within the control of UC Riverside, all other study intersections are within the jurisdiction of the City of Riverside or the California Department of Transportation (Caltrans). Therefore, significance criteria based on the traffic impact analysis guidelines for those agencies were applied in this assessment. The following performance criteria and thresholds of significance were used to determine impacts at study facilities:

- **City of Riverside:** The city has adopted LOS “D” as the minimum acceptable standard for roadways of Collector or higher classification. For projects that propose uses or intensities above that contained in the General Plan, the following impact criteria apply:

- If the addition of project related traffic causes either peak hour LOS to degrade from acceptable (LOS A thru D) to unacceptable levels (E or F) or the peak hour delay increases as follows:
  - LOS A/B – 10.0 Seconds
  - LOS C – 8.0 Seconds
  - LOS D – 5.0 Seconds
  - LOS E - 2.0 Seconds
  - LOS F- 1.0 Second
- **Caltrans:** Caltrans identifies a project as causing a significant impact when there is degradation in LOS D or better, or the project causes an increase in delay at an intersection operating at an unacceptable level.

## RIVERSIDE TRAFFIC ANALYSIS MODEL (RIVTAM)

The Riverside Traffic Analysis Model (RivTAM) was used to develop traffic forecasts for this study. The current RivTAM uses a 2008 base year, a 2035 future year, and Socioeconomic Data (SED) consistent with the Southern California Associated Governments (SCAG) 2008 Regional Transportation Plan (RTP) model. As the current version of RIVTAM is not consistent with the 2016 SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the roadway networks and SED were reviewed for consistency with the 2016 RTP/SCS in the study area as described below.

### **Socio-Economic Data (SED)**

The Western Riverside Council of Governments (WRCOG) has completed an SED update within the WRCOG boundaries to maintain consistency with the 2016 SCAG RTP/SCS. Consistent with the SCAG model, this SED has a 2012 base year and a 2040 future year. This WRCOG SED information was utilized in the RivTAM model for both the base year and future year modeling efforts.

Campus growth information was provided by UC Riverside for use in this project. The future year land uses in RivTAM were updated to reflect growth consistent with expectations provided by UC Riverside. A list of approved and pending developments was also requested from the City of Riverside. This list was then reviewed with land use assumptions in the future year model to ensure that all reasonably foreseeable projects within a five-mile radius of UC Riverside were accounted for in the land uses assumed in the model. A list of approved and pending developments in the City of Riverside is provided in **Appendix B**.

## Roadway Network

As part of the RivTAM review, both the base year and future year roadway networks were examined for consistency with existing conditions and planned roadway improvements. The future year roadway network was compared to the 2016 SCAG RTP/SCS to verify that only projects planned to be in place before 2025 were assumed in the network. One project listed in the Constrained RTP Project List that is planned to be complete prior to 2025 and likely to impact traffic patterns in the study area is the widening Iowa Avenue from four lanes to six lanes from Blaine Street to the north City Limit (Opening Year (2021) to the north of the Project study area. The RTP also identifies a project that will add two High-Occupancy-Vehicle (HOV) lanes on I-215 from Nuevo Road to Box Springs Road; however, the Opening Year for that project is 2030. Therefore, it was not assumed in place under Year 2025 conditions when Project buildout is expected to occur.

## Model Forecasts

For this study, a method known as the difference method was applied to develop Future (Year 2025) traffic forecasts. This method is a state-of-the-practice approach consistent with NCHRP Report 765: Analytical Travel Forecasting Approaches for Project Level Planning and Design (Transportation Research Board, 2014) methodologies. Using this method, growth between the future year (2040) and base year (2012) model was determined. As the Buildout for the Project is 2025, interpolation was then used to develop growth representing eight years (2017 to 2025). This growth was then applied to existing peak hour traffic counts collected in 2017 to develop Future (2025) traffic volumes.

## PROJECT TRAFFIC VOLUMES

The methodology used to estimate changes in traffic volumes in the study area under Phase 1 and Buildout conditions is described below.

## PROJECT TRIP GENERATION

The estimated project trips were obtained by applying trip generation rates from two sources: the 2005 UC Riverside LRDP Traffic Impact Study and the 10<sup>th</sup> edition of the *Institute of Traffic Engineers Trip Generation Manual* (ITE).

To determine the appropriate source for trip generation rates for the new student housing, the trip generation rates collected as part of the 2005 UC Riverside LRDP were compared to other data readily available. For comparison purposes, the UC Riverside student housing rates were compared to trip

generation rates for housing at UC Santa Barbra (UCSB) and rates recently published by ITE for Off-Campus Student apartments. The trip rate comparison is summarized in **Table 3**.

**TABLE 3 – COMPARISON OF TRIP GENERATION RATES**

Land Use	Daily			AM			PM		
	UCSB	UCR	ITE	UCSB	UCR	ITE	UCSB	UCR	ITE
Apartments	2.737	4.004	3.65	0.08	0.088	0.13	0.19	0.220	0.28
Residence Halls	2.160	2.153	-	0.06	0.047	-	0.15	0.120	-

Source:

1. UCSB trip rates: *2005 UCSB LRDP Traffic Impact Study*.
2. UCR trip rates: *2005 UCR LRDP Traffic Impact Study*.
3. ITE trip rates: *ITE Trip Generation Manual 10<sup>th</sup> Edition*.

As shown above, the trip generation rates for UC Riverside and UCSB were found to be comparable during the AM and PM peak hours, whereas the UC Riverside rates were higher on a daily basis for student apartment uses. The ITE rates for off-campus student apartments are higher than those collected at UC Riverside and UCSB during the AM and PM peak hours, and lower than UC Riverside on a daily basis. The higher peak hour rates published by ITE are to be expected since the rates are for Off-Campus Student apartments that are likely further from main campus uses. As the data at UC Riverside was found to be reasonable compared to other sources, and is the best available local data, it was determined to be the most appropriate source for trip generation rates for the proposed Project.

Trips generated by the mixed-use space were estimated using the ITE trip generation rate for shopping centers. A trip credit was then applied to account for the mixed-use nature of the site and the proximity to the Campus for users traveling to the site using transit or active transportation (biking or walking). **Table 4** shows the percent reduction for transit and walking/biking trips applied to the trip generation. The National Household Travel Survey completed in 2009 and Campus Mode Split information from 2015 were used to determine the appropriate mode share percentages for trips in the area using transit and active transportation.

Given the mix of residential and retail land uses, some trips generated by the project would remain internal to the project site (i.e. a resident from the residence hall making a trip to the retail use). To determine the number of internal trips, the Mixed-Use Development (MXD) model was used to determine an appropriate internalization rate. The MXD model, developed through collaboration with the EPA and consultant experts, estimates internal capture by considering geographic factors, land use in the surrounding area, and site/surrounding area demographics. Internalization rates applied for the Project trip generation are



summarized in **Table 4**. During the PM peak hour, a 25 percent credit for pass-by trips was also assumed for trips generated by the retail use to account for trips that may already be occurring in the study area but will also utilize the retail component of the Project.

**TABLE 4 – TRIP CREDIT SUMMARY**

Trip Credit	Daily	AM	PM
Transit	6%	9%	10%
Walk/Bike	8%	9%	7%
Internalization	5%	7%	8%

Source:

1. *Bike/walk trip credit: National Household Travel Survey 2009*
2. *Internalization trip credit: Fehr and Peers MXD+ web-based tool*

The trip generation estimates are summarized in **Table 5** below. The trip generation estimates reflect the new housing and mixed-use portion of the Project site under Phase 1 and Buildout conditions. The Athletics Event Center would host soccer competitions, convocations, and graduations and is not expected to generate new vehicle trips during typical weekday peak hour operations.

**TABLE 5 – UC RIVERSIDE NORTH DISTRICT DEVELOPMENT PLAN TRIP GENERATION**

Land Use	Size	Units	ITE Code	Trip Generation Estimates						
				Daily Trips	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
<b>Phase 1</b>										
Student Apartments	1500	Beds	[1]	6,006	58	74	132	145	185	330
<b>Buildout</b>										
UCR Student Apartments	3000	Beds	[2]	12,012	116	148	264	296	376	672
UCR Residence Halls	1500	Beds	[1]	3,230	32	39	71	79	101	180
Shopping Center	62.8	KSF	820	2,371	37	22	59	115	124	239
<b>Total Buildout Project Trips (Unadjusted)</b>				<b>23,618</b>	<b>243</b>	<b>283</b>	<b>526</b>	<b>635</b>	<b>786</b>	<b>1,421</b>
<i>Bike/Walk Reduction for Shopping Center [a]</i>				187	3	2	6	8	9	17
<i>Internalization for Mixed Housing/Commercial Site</i>				1,210	22	14	36	58	62	120
<b>Adjusted Vehicle Trips (Total Trips- Bike/Walk- Internalization)</b>				<b>22,221</b>	<b>217</b>	<b>267</b>	<b>484</b>	<b>569</b>	<b>715</b>	<b>1,284</b>
<i>Pass-by for Shopping Center [b]</i>				40	0	0	0	19	21	40
<b>Net Total Trips at Buildout</b>				<b>22,181</b>	<b>217</b>	<b>267</b>	<b>484</b>	<b>550</b>	<b>694</b>	<b>1,244</b>

Notes:

[1] Source of Student Apartments trip rates: 2005 UCR LRDP Traffic Impact Study.

[2] Source of Residence Hall Housing trip rates: 2005 UCR LRDP Traffic Impact Study.

[a] National Household Travel Survey 2009 used for walk/bike data.

[b] Internalization is due to the mix of housing and commercial uses on site and calculated based on mixed-use trip generation.

[c] Pass-by trips is assumed to be 25% and applicable only for the PM Peak hour for the Shopping Center use.

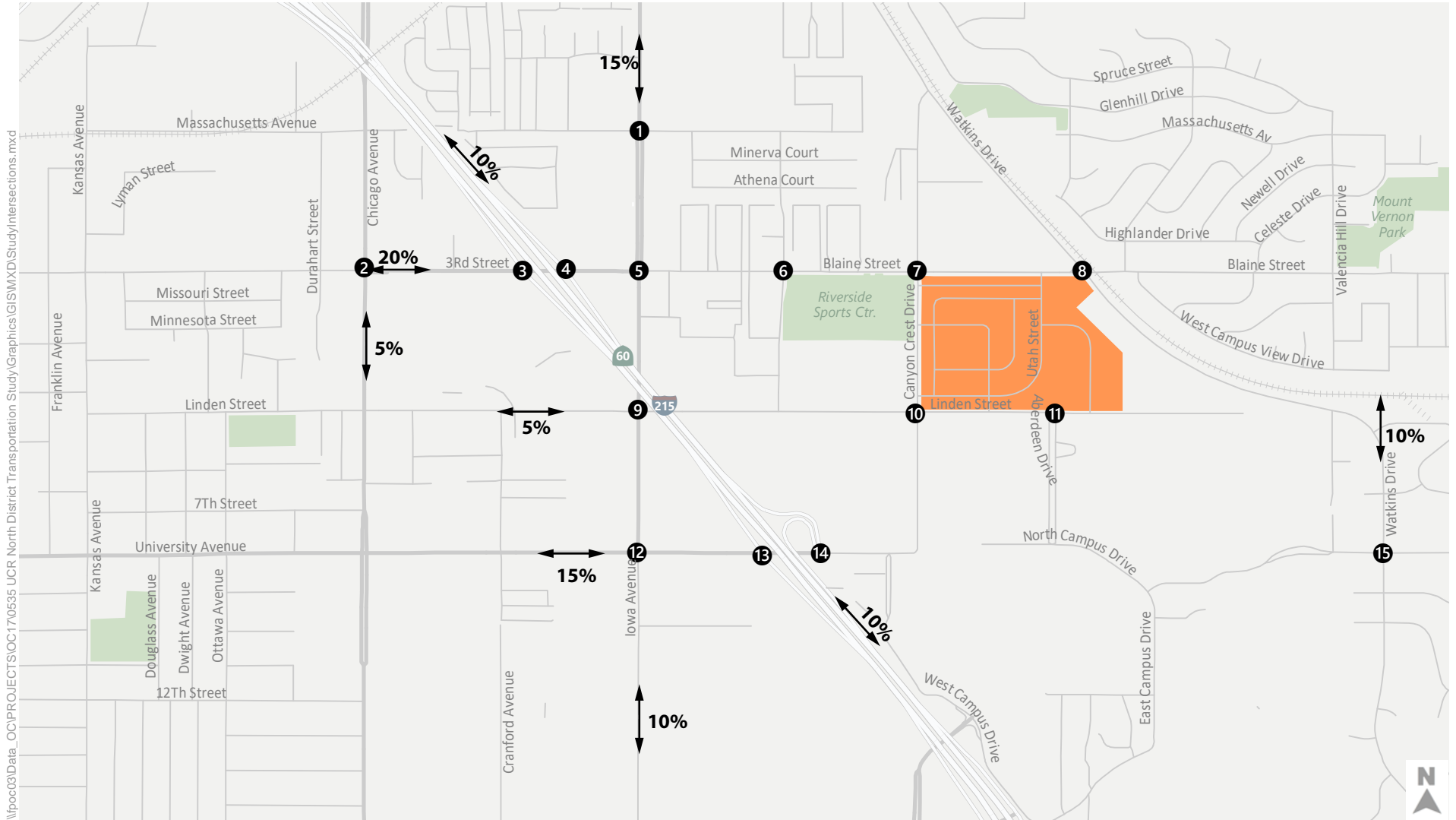
## PROJECT TRIP DISTRIBUTION

The Project trip distribution reflects the regional distribution of trips traveling to and from the Project site. To determine where trips traveling to and from the Project site would originate and end, a select zone analysis was performed for a traffic analysis zone (TAZ) near the proposed Project that had a similar land use mix to the Project. The results of the select zone analysis and local knowledge were combined to develop the regional distribution. The Project trip distribution is described below and shown on **Figure 3**:

- 20% - 3<sup>rd</sup>/Blaine Street
- 15% - University Avenue
- 10% - Watkins Drive
- 25 % - Iowa Avenue
- 5% - Chicago Avenue
- 10% - I-215 SB
- 10% - I-215 NB
- 5% - Linden Street

## PROJECT TRIP ASSIGNMENT

Based on the trip generation and trip distribution estimates developed and described above, Project trips were assigned to the study area roadway network. The assignment of "Project only" trips for the development took into consideration two scenarios: Phase 1 and Buildout. These are shown on **Figure 4** and **Figure 5**.



Project Site
  Study Intersections



Figure 3  
Project Trip Distribution



1. Iowa Avenue/Massachusetts Ave	2. Chicago Avenue/3rd Street	3. I-215 SB /3rd Street	4. I-215 NB/3rd Street
<p>Iowa Avenue</p> <p>Massachusetts Ave</p> <p>9 (33)</p>	<p>Chicago Avenue</p> <p>3rd Street</p> <p>15 (54) 4 (13)</p> <p>12 (43)</p> <p>3 (11)</p>	<p>I-215 SB</p> <p>Blaine Street</p> <p>6 (22)</p> <p>19 (67)</p> <p>15 (54)</p>	<p>I-215 NB</p> <p>Blaine Street</p> <p>4 (13) 19 (67)</p> <p>21 (76)</p>
5. Iowa Avenue/Blaine Street	6. Rustin Avenue/Blaine Street	7. Canyon Crest Drive/Blaine Street	8. Watkins Drive/Blaine Street
<p>Iowa Avenue</p> <p>Blaine Street</p> <p>2 (6) 7 (25)</p> <p>8 (30) 23 (80) 5 (17)</p> <p>21 (76)</p> <p>3 (10) 4 (14)</p>	<p>Rustin Avenue</p> <p>Blaine Street</p> <p>36 (127)</p> <p>32 (115)</p>	<p>Canyon Crest Drive</p> <p>Blaine Street</p> <p>29 (104) 7 (23)</p> <p>25 (90) 7 (25)</p> <p>7 (23) 4 (14)</p>	<p>Watkins Drive</p> <p>Blaine Street</p> <p>2 (7)</p> <p>2 (6)</p>
9. Iowa Avenue/Linden Street	10. Canyon Crest Drive/Linden Street	11. Aberdeen Drive/Linden Street	12. Iowa Avenue/Unviersity Avenue
<p>Iowa Avenue</p> <p>Linden Street</p> <p>5 (17) 2 (8)</p> <p>3 (10) 4 (13) 5 (20)</p> <p>3 (11)</p> <p>4 (14) 5 (17)</p>	<p>Canyon Crest Drive</p> <p>Linden Street</p> <p>1 (3) 6 (20) 7 (25)</p> <p>7 (23) 11 (40) 14 (50)</p> <p>1 (3) 9 (33)</p> <p>3 (11) 10 (36)</p>	<p>Aberdeen Drive</p> <p>Linden Street</p> <p>32 (103)</p> <p>26 (93)</p>	<p>Iowa Avenue</p> <p>Unviersity Avenue</p> <p>3 (10) 7 (27)</p> <p>8 (30)</p> <p>2 (8) 7 (25)</p> <p>6 (22)</p>

Figure 4

Phase 1 Project Only Vehicle Trips





13. I-215 SB /Unviersity Avenue	14. I-215 NB/Unviersity Avenue	15. Big Springs Road/Watkins Drive
<p style="text-align: center;">I-215 SB</p> <p style="text-align: center;">← 8 (30) ← 7 (27)</p> <hr/> <p>University Avenue</p> <p style="text-align: center;">7 (25) →</p>	<p style="text-align: center;">I-215 NB</p> <p style="text-align: center;">↙ 6 (22)</p> <p style="text-align: center;">↖ 4 (13) ↖ 15 (57)</p> <hr/> <p>University Avenue</p> <p style="text-align: center;">7 (25) →</p>	<p style="text-align: center;">Big Springs Road</p> <p style="text-align: center;">↓ 7 (27)</p> <hr/> <p>Watkins Drive</p> <p style="text-align: center;">↑ 6 (22)</p>

Figure 4  
Phase 1 Project Only Vehicle Trips





1. Iowa Avenue/Massachusetts Ave	2. Chicago Avenue/3rd Street	3. I-215 SB /3rd Street	4. I-215 NB/3rd Street
<p>Iowa Avenue</p> <p>Massachusetts Ave</p> <p>33 (85)</p> <p>Chicago Avenue</p> <p>3rd Street</p> <p>43 (114)</p> <p>40 (107)</p> <p>11 (28)</p>	<p>Chicago Avenue</p> <p>3rd Street</p> <p>54 (141)</p> <p>13 (36)</p> <p>54 (142)</p> <p>11 (28)</p>	<p>I-215 SB</p> <p>Blaine Street</p> <p>22 (67)</p> <p>67 (177)</p> <p>54 (142)</p>	<p>I-215 NB</p> <p>Blaine Street</p> <p>13 (36)</p> <p>67 (177)</p> <p>76 (199)</p>
5. Iowa Avenue/Blaine Street	6. Rustin Avenue/Blaine Street	7. Canyon Crest Drive/Blaine Street	8. Watkins Drive/Blaine Street
<p>Iowa Avenue</p> <p>Blaine Street</p> <p>8 (21)</p> <p>25 (64)</p> <p>30 (80)</p> <p>80 (213)</p> <p>17 (45)</p> <p>76 (199)</p> <p>10 (27)</p> <p>14 (36)</p>	<p>Rustin Avenue</p> <p>Blaine Street</p> <p>127 (338)</p> <p>115 (298)</p>	<p>Canyon Crest Drive</p> <p>Blaine Street</p> <p>104 (276)</p> <p>23 (63)</p> <p>90 (234)</p> <p>25 (64)</p> <p>23 (62)</p> <p>14 (36)</p>	<p>Watkins Drive</p> <p>Blaine Street</p> <p>7 (18)</p> <p>6 (14)</p>
9. Iowa Avenue/Linden Street	10. Canyon Crest Drive/Linden Street	11. Aberdeen Drive/Linden Street	12. Iowa Avenue/Unviersity Avenue
<p>Iowa Avenue</p> <p>Linden Street</p> <p>17 (45)</p> <p>8 (21)</p> <p>10 (27)</p> <p>13 (36)</p> <p>20 (54)</p> <p>11 (28)</p> <p>14 (36)</p> <p>17 (43)</p>	<p>Canyon Crest Drive</p> <p>Linden Street</p> <p>3 (9)</p> <p>20 (54)</p> <p>25 (64)</p> <p>23 (62)</p> <p>40 (108)</p> <p>50 (134)</p> <p>3 (7)</p> <p>33 (85)</p> <p>11 (28)</p> <p>36 (92)</p>	<p>Aberdeen Drive</p> <p>Linden Street</p> <p>113 (305)</p> <p>93 (241)</p>	<p>Iowa Avenue</p> <p>Unviersity Avenue</p> <p>10 (27)</p> <p>27 (72)</p> <p>30 (80)</p> <p>8 (21)</p> <p>25 (64)</p> <p>22 (57)</p>

Figure 5

Buildout Project Only Vehicle Trips





13. I-215 SB /Unviersity Avenue	14. I-215 NB/Unviersity Avenue	15. Big Springs Road/Watkins Drive
<p style="text-align: center;">I-215 SB</p> <p style="text-align: center;">← 30 (80) ← 27 (72)</p> <hr/> <p>University Avenue</p> <p style="text-align: center;">25 (64) →</p>	<p style="text-align: center;">I-215 NB</p> <p style="text-align: center;">← 22 (57)</p> <p style="text-align: center;">← 13 (36) ← 57 (152)</p> <hr/> <p>University Avenue</p> <p style="text-align: center;">25 (64) →</p>	<p style="text-align: center;">Big Springs Road</p> <p style="text-align: center;">← 27 (72)</p> <hr/> <p>Watkins Drive</p> <p style="text-align: center;">22 (57) →</p>

Figure 5  
Buildout Project Only Vehicle Trips



## 4.0 EXISTING CONDITIONS

This chapter summarizes the Existing (2017) Conditions in the Project study area including the roadway, transit, bicycle, and pedestrian networks to document the current travel against which the Project will be assessed.

### EXISTING ROADWAY FACILITIES

#### REGIONAL ROADS

Regional roads in the Project vicinity include:

- Interstate 215 Freeway (I-215): I-215 is an interstate highway in the Inland Empire region of Southern California. It runs as an auxiliary route of I-215 in the north/south direction from Murrieta to northern San Bernardino. I-215 is located west of the Project site. Near the Project study area, it is generally an eight-lane facility (four lanes in each direction). Access to I-15 near the Project study area is provided at Blaine/3<sup>rd</sup> Street and University Avenue.

#### LOCAL ACCESS ROADS

Local access roads in the Project vicinity include:

- Iowa Avenue: Iowa Avenue is a four-lane facility between Massachusetts Avenue and University Avenue. Iowa Avenue is designated as an Arterial by the City of Riverside General Plan. It has a speed limit of 45 miles per hour (mph).
- Canyon Crest Drive: Canyon Crest is a north-south 66-ft two-lane collector that widens into an 88 ft four-lane Arterial. Access to the Project is provided by this roadway. It has a variable speed limit ranging between 25 and 40 miles per hour (mph).
- University Avenue: This is an east-west road four-lane facility. It is designated as a parkway in the City of Riverside General Plan. Access to the Project is provided by this roadway. It has a speed limit of 35 miles per hour (mph).
- Linden Street: This is an east-west roadway facility. It is designated as a two-lane 80 ft collector in the City of Riverside General Plan. Access to the Project is provided by this roadway. It has a speed limit of 40 miles per hour (mph).



## BICYCLE FACILITIES

Bicycle facilities in the City of Riverside are classified as follows:

### CLASS I BIKEWAYS (BIKE PATHS)

Class I bicycle facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed. A Class I Bike Path may parallel a roadway (within the parkway) or may be a completely separate right-of-way that meanders through a neighborhood or along a flood control channel or utility right-of-way.

### CLASS II BIKEWAYS (BIKE LANES)

Class II bicycle facilities are striped lanes that provide bike travel and can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a bike lane adjacent to a parking lane can be four feet in width. Bike lanes are exclusively for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.

### CLASS III BIKEWAYS (BIKE ROUTES)

Class III Bikeways are streets providing for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage both by the side of the street and stenciled on the roadway surface alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route.

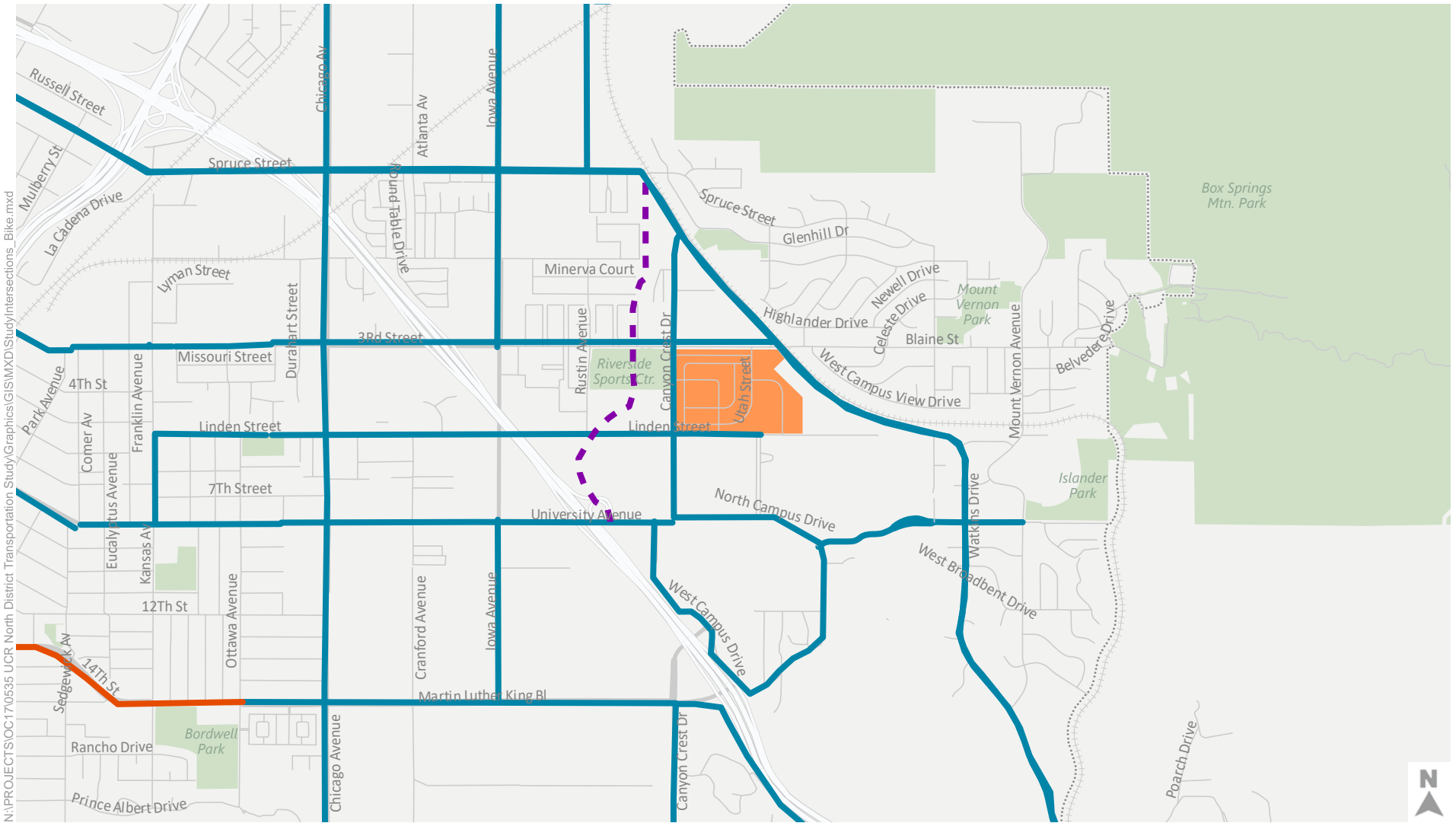
### CLASS IV BIKEWAYS (CYCLE TRACKS)

Class IV bicycle facilities, sometimes called cycle tracks or separated bikeways, provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and are protected from vehicular traffic via separations (e.g. grade separation, flexible posts, inflexible physical barriers, on-street parking). California Assembly Bill 1193 (AB 1193) legalized and established design standards for Class IV bikeways in 2015.

As shown in **Figure 6**, Riverside's existing bikeway network is comprised of Class II bike lanes along many major streets. According to the Riverside Bicycle Master Plan (adopted in May 2007), there is a total of 56.4 miles of existing bike lanes.

Within the study area, the following Class II bike lanes are provided:

- Blaine/3<sup>rd</sup> Street: Bike lanes are provided on Blaine/3<sup>rd</sup> street. These occur on both sides of the roadway.
- Linden Street: Bike lanes are provided on Linden street between Chicago Drive and Canyon Crest Drive. In the eastbound direction bike lanes are provided for the entire segment; however, in the westbound direction the dedicated striping ends at Niki Way.
- University Avenue: Bike lanes are provided on University Avenue on both sides of the roadway.
- Watkins Drive: Bike lanes are provided on Watkins Drive on both sides of the roadway.
- Big Springs Road: Bike lanes are provided on Big Springs Road on both sides of the roadway.
- Iowa Avenue: Bike lanes are provided on Iowa between Blaine and University Drive on both sides of the road.
- Canyon Crest: There are bike lanes Canyon Crest between Blaine and University Drive on both sides of the road.



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### Bicycle Classes

- - - Proposed Class1
- Class 2
- Class 3
- Project Site



Figure 6  
Bicycle Facilities

## PEDESTRIAN FACILITIES

Interconnectivity of land uses, coupled with the provision of adequate pedestrian and bicycle facilities, is an important component of Riverside's future circulation network. The City seeks to expand pedestrian and bike path network to provide connections between schools, activity centers, parks and residential areas. A comprehensive trails system is intended to link residential areas, schools, parks and commercial centers so that residents can travel within the community without driving (City of Riverside General Plan, 2012).

Within the Project study area, sidewalks are provided generally adequately provided on the following streets:

- Blaine/3<sup>rd</sup> Street
- Linden Street
- University Drive
- Watkins Drive
- Big Springs Road
- Iowa Avenue
- Canyon Crest

The major streets that provide access to the Project include Blaine Street, Canyon Crest Drive and Linden Street. These roadways have well-connected and maintained sidewalk networks near the Project. These streets currently provide access for pedestrians to the bus stops nearby.

## TRANSIT FACILITIES

The transit facilities provided in the City of Riverside are described below.

### METROLINK

Commuter train service in the City of Riverside is provided by Metrolink, which operates seven commuter rail lines throughout Southern California. The UC Riverside /Riverside Hunter Park Metrolink Station is located north-west of the intersection between Malborough Avenue and Rustin Avenue, 3 miles north of the UC Riverside campus. UC Riverside is served by the 91/Perris Valley Line, which links Perris-South to LA Union Station on weekdays, and on weekends from downtown Riverside to LA Union Station.

## BUS TRANSIT

Riverside Transit Agency (RTA) provides fixed route, commuter and dial-a-ride bus service within western Riverside County, including the Cities of Riverside, Corona, Norco, Jurupa, Grand Terrace, Loma Linda, Moreno Valley, Perris, San Jacinto, Hemet, Lake Elsinore and Temecula. ADA services within the City of Riverside are provided by the City's Riverside Special Services. All buses on fixed-routes are equipped with bike racks that hold two bicycles.

RTA routes that serve areas closest to the UC Riverside campus include the following: Route 10, 13, 14, 51, and 204.

Route 10: (Big Springs & Watkins – Downtown Riverside – Galleria at Tyler) This route runs from Galleria at Tyler to the intersection between Big Springs and Watkins. It operates Monday thru Friday from 5:25 AM to 9:06 PM with 45- and 60-minute headways and on weekends from 8:00 AM to 7:40 PM. A bus stop is located near the project at the corner of Big Springs Road and Watkins Drive.

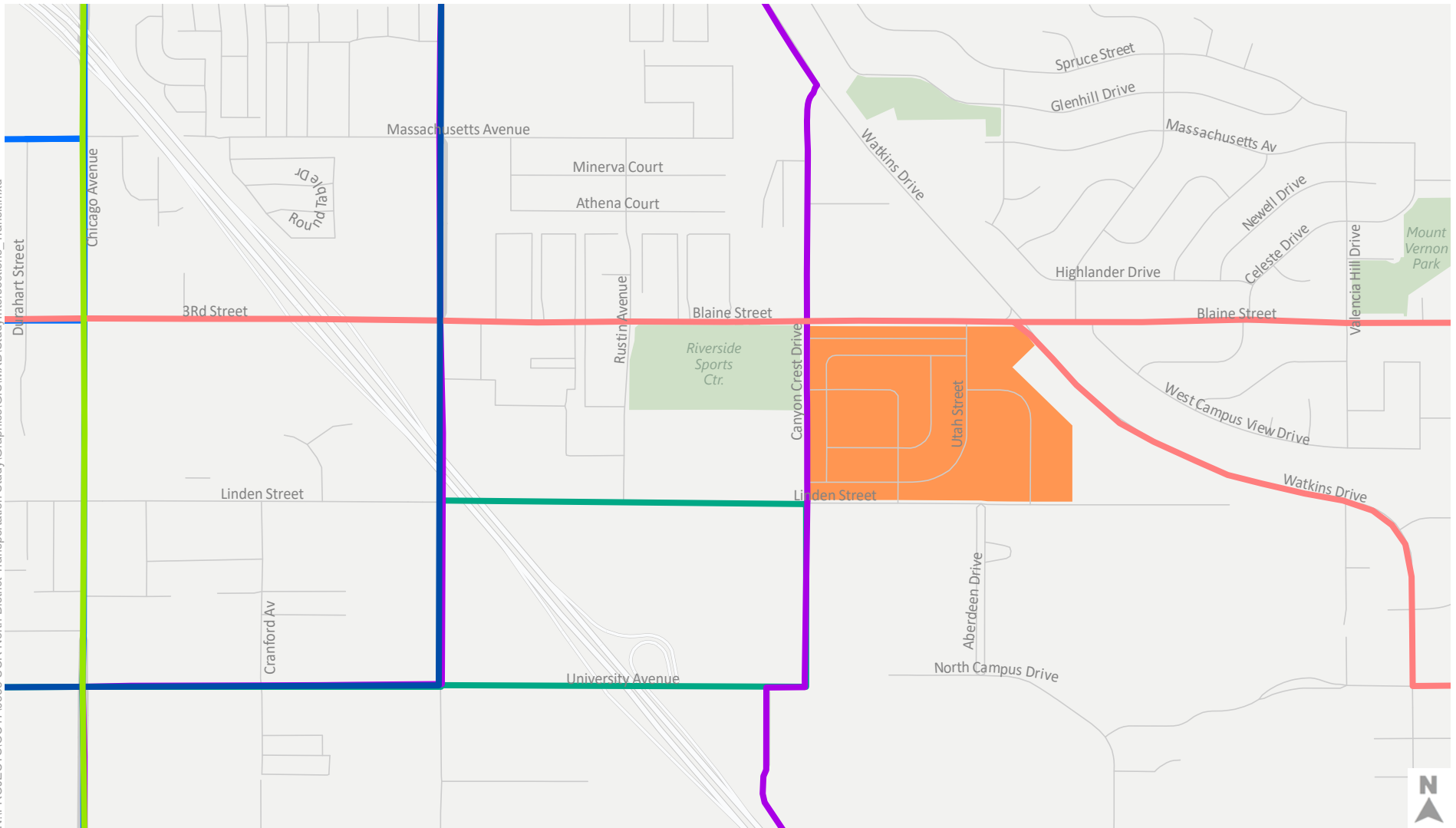
Route 13: (Hunter Park/UCR Metrolink Station – Downtown Riverside – Galleria at Tyler) This route runs from Galleria at Tyler to Hunter Park/UCR Metrolink Station. It operates Monday thru Friday from 4:00 AM to 9:00 PM with headways of about an hour and on weekends from 6:50 AM to 7:00 PM. A bus stop is located near the project at the corner of Chicago Avenue and Blaine Street.

Route 14: (Galleria at Tyler – Downtown Riverside – Loma Linda VA hospital) This route runs from Galleria at Tyler to the VA Hospital at Loma Linda. It operates Monday thru Friday from 5:50 AM to 7:40 PM with headways of about an hour and on weekends from 7:00 AM to 6:20 PM, with some exceptions for Sundays where trips do not run until about 9 AM. A bus stop is located near the project at the corner of Chicago Iowa Avenue and Blaine Street.

Route 51: (UC Riverside – Canyon Crest Town Center) This route runs from the University Village and Village Tower Apartments to the intersection between Chicago and Central. It operates Monday thru Friday from approximately 7:00 AM to 6:00 PM with 40-minute headways. A bus stop is located near the project at the corner of Blaine Street and Canyon Crest Drive.

Route 204: (UCR – Downtown Riverside – Ontario Mills Mall – Montclair Transit Center) This route runs from UCR Bannockburn to the Montclair Transit Center. It operates Monday thru Friday from 4:20 AM to 7:20 PM with headways of about an hour. A bus stop is located near the project at the corner of Linden Street and Canyon Crest Drive.

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### Transit Routes








-  Route 10
-  Route 13
-  Route 13 Alternate
-  Route 14
-  Route 204
-  Route 51 Crest Cruiser (UCR)
-  Project Site



Figure 7  
Transit Facilities

## TRAFFIC VOLUMES AND CONFIGURATIONS

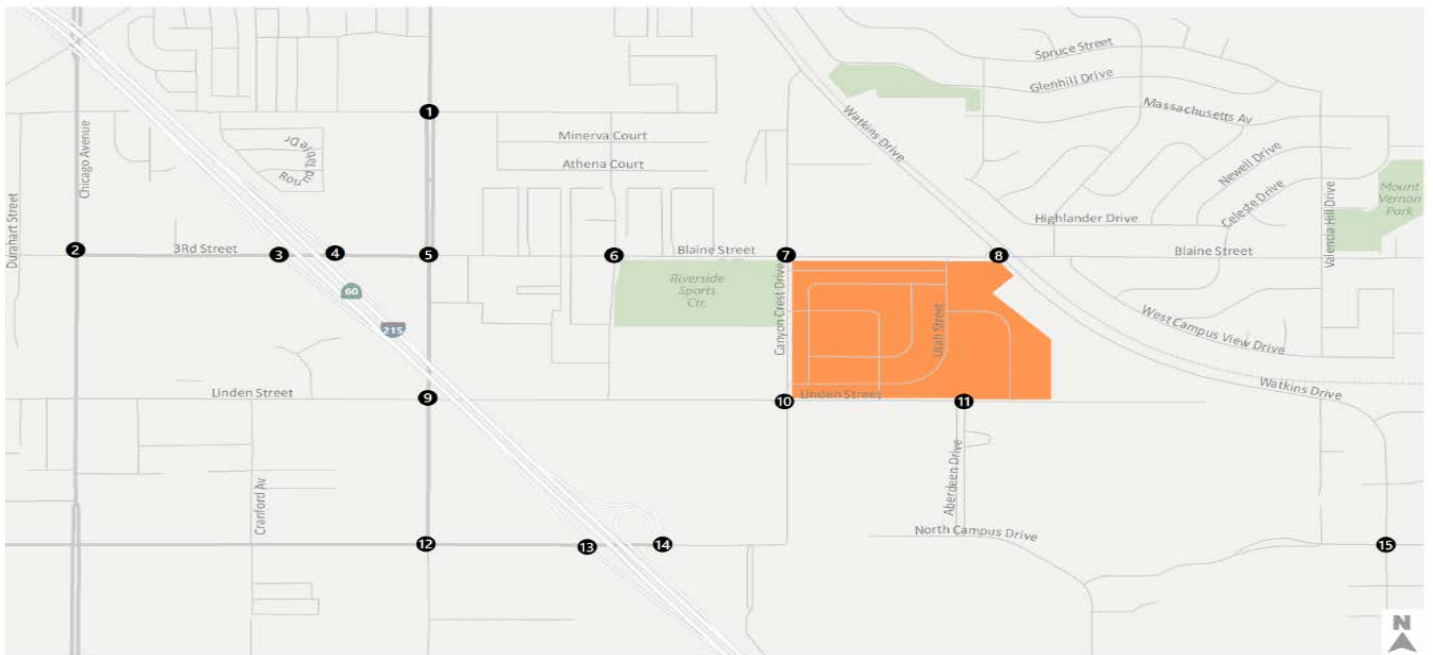
Existing AM peak period (7:00 to 9:00 AM) and PM peak period (4:00 to 6:00 PM) intersection counts were collected at the fifteen study intersections on November 14, 2017. Existing (2017) peak hour traffic volumes for the study intersections are shown on **Figure 8**. Existing traffic counts are provided in **Appendix A**.

As part of the field inventory, Fehr & Peers also collected the following information:

- Lane configurations
- Signal phasing
- Pedestrian and bicycle facilities

## INTERSECTION OPERATIONS

Existing traffic volumes, lane configurations, and signal timings were used to evaluate operations at the study intersections for Existing (2017) AM and PM peak hour conditions. The results are summarized in **Table 6**, showing LOS and delay at the study intersections. With the exception of Watkins Drive and Big Springs Road (Intersection 15), which operates at LOS E in both the AM and PM peak hours, all intersections operate acceptably at LOS D or better. Technical calculations are provided in **Appendix C**.



1. Iowa Avenue/Massachusetts Ave	2. Chicago Avenue/3rd St	3. I-215 SB/3rd St	4. I-215 NB/3rd St
<p>Massachusetts Ave</p> <p>Iowa Avenue</p> <p>38 (65) 648 (1,192) 151 (103)</p> <p>198 (49) 38 (22) 243 (85)</p> <p>89 (96) 50 (35) 81 (99)</p> <p>61 (87) 843 (674) 152 (79)</p>	<p>Chicago Avenue</p> <p>Third St</p> <p>59 (99) 234 (761) 190 (266)</p> <p>251 (107) 357 (213) 150 (153)</p> <p>98 (101) 356 (640) 64 (149)</p> <p>184 (119) 638 (377) 240 (168)</p>	<p>I-215 SB</p> <p>Blaine St</p> <p>439 (132) 491 (334)</p> <p>653 (547) 162 (600)</p> <p>470 (410) 190 (319)</p>	<p>I-215 NB</p> <p>Blaine St</p> <p>794 (652) 497 (577)</p> <p>280 (209) 850 (656)</p> <p>162 (149) 282 (303)</p>
5. Iowa Avenue/Blaine St	6. Rustin Ave/Blaine St	7. Canyon Crest Dr/Blaine St	8. Watkins Dr/Blaine St
<p>Iowa Avenue</p> <p>Blaine St</p> <p>352 (416) 487 (763) 116 (147)</p> <p>109 (144) 612 (534) 144 (111)</p> <p>432 (295) 468 (343) 156 (159)</p> <p>162 (172) 586 (460) 110 (130)</p>	<p>Rustin Ave</p> <p>Blaine St</p> <p>85 (43) 42 (28) 72 (73)</p> <p>85 (45) 523 (592) 52 (33)</p> <p>125 (48) 475 (477) 108 (51)</p> <p>172 (86) 75 (26) 70 (39)</p>	<p>Canyon Crest Dr</p> <p>Blaine St</p> <p>47 (60) 84 (110) 8 (15)</p> <p>13 (17) 526 (463) 142 (132)</p> <p>44 (40) 427 (408) 141 (126)</p> <p>46 (114) 44 (89) 88 (143)</p>	<p>Watkins Dr</p> <p>Blaine St</p> <p>25 (43) 122 (449) 24 (147)</p> <p>66 (17) 368 (220) 46 (37)</p> <p>6 (12) 245 (300) 175 (239)</p> <p>283 (259) 496 (249) 48 (56)</p>
9. Iowa Avenue/Linden St	10. Canyon Crest Dr/Linden St	11. Aberdeen Dr/Linden St	12. Iowa Avenue/University Avenue
<p>Iowa Avenue</p> <p>Linden St</p> <p>252 (110) 428 (858) 125 (96)</p> <p>68 (73) 93 (87) 67 (133)</p> <p>105 (98) 95 (122) 33 (100)</p> <p>141 (51) 585 (587) 155 (149)</p>	<p>Canyon Crest Dr</p> <p>Linden St</p> <p>73 (43) 217 (285) 55 (91)</p> <p>34 (94) 34 (93) 58 (175)</p> <p>47 (50) 60 (91) 83 (113)</p> <p>80 (83) 135 (196) 143 (120)</p>	<p>Linden St</p> <p>Aberdeen Dr</p> <p>36 (105) 36 (37)</p> <p>81 (76) 161 (216)</p> <p>99 (247) 34 (43)</p>	<p>Iowa Avenue</p> <p>University Avenue</p> <p>111 (179) 248 (688) 123 (235)</p> <p>139 (113) 199 (308) 42 (117)</p> <p>157 (249) 268 (692) 37 (131)</p> <p>84 (132) 641 (349) 182 (111)</p>

Figure 8  
Existing (2017) Conditions





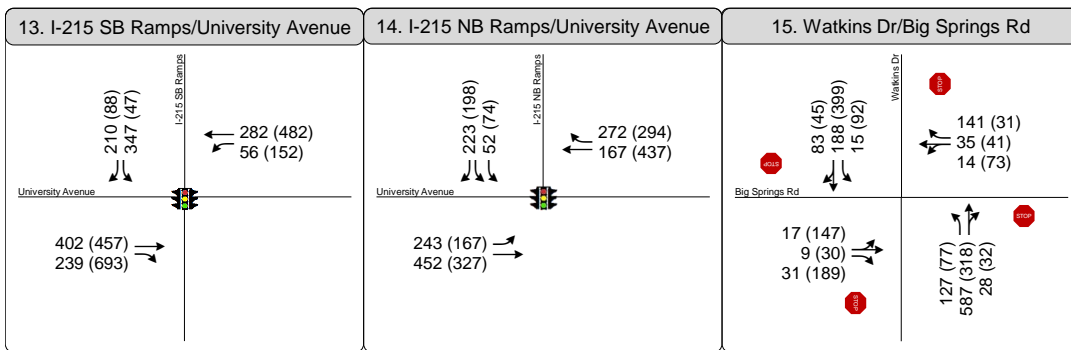
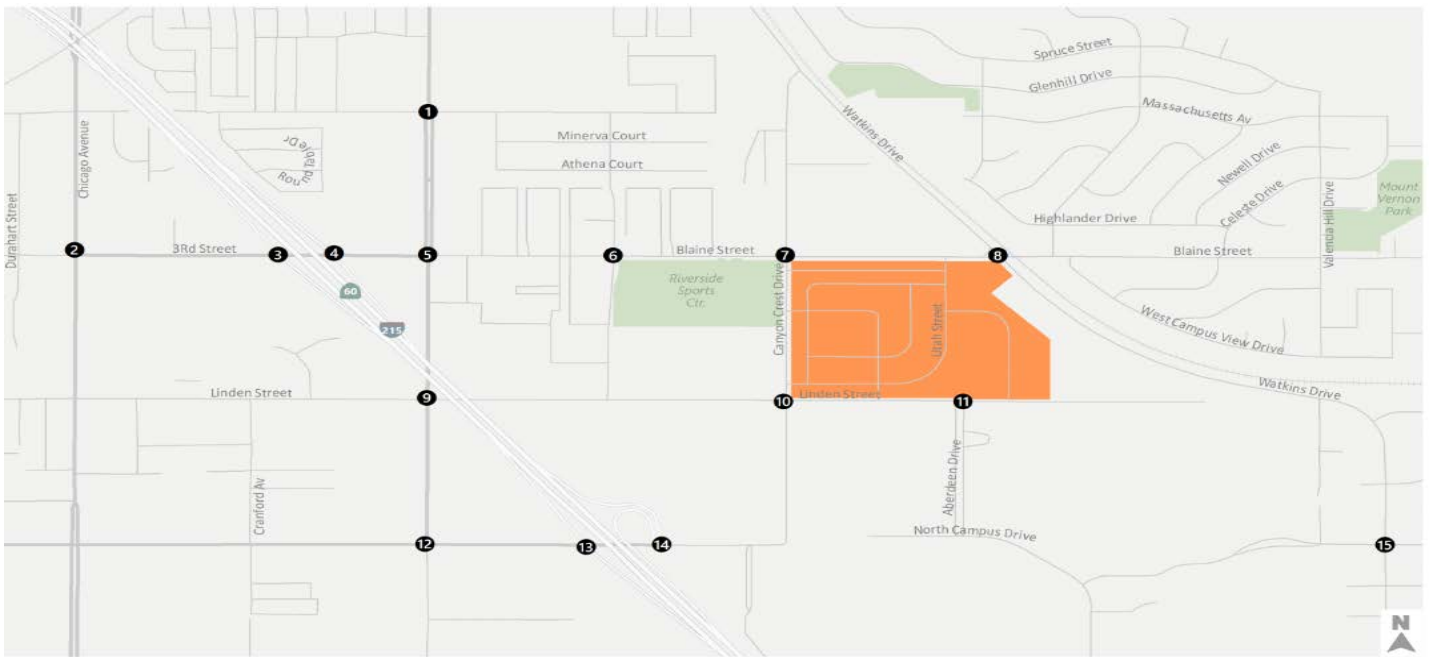


Figure 8  
Existing (2017) Conditions



**TABLE 6 – EXISTING (2017) CONDITIONS INTERSECTION OPERATIONS**

	Intersection	Jurisdiction	Control	Peak Hour	Existing	
					Delay	LOS
1	Iowa Avenue & Massachusetts Avenue	City of Riverside	Signal	AM	27.6	C
				PM	18.7	B
2	Chicago Avenue & 3rd Street	City of Riverside	Signal	AM	41	D
				PM	36.9	D
3	I-215 SB & 3rd Street	Caltrans	Signal	AM	28.7	C
				PM	11.8	B
4	I-215 NB & 3rd Street	Caltrans	Signal	AM	14.8	B
				PM	10.5	B
5	Iowa Avenue & Blaine Street	City of Riverside	Signal	AM	33.9	C
				PM	26.8	C
6	Rustin Avenue & Blaine Street	City of Riverside	Signal	AM	13	B
				PM	9	A
7	Canyon Crest Drive & Blaine Street	City of Riverside	Signal	AM	10.8	B
				PM	13.7	B
8	Watkins Drive & Blaine Street	City of Riverside	Signal	AM	25.9	C
				PM	36.2	D
9	Iowa Avenue & Linden Street	City of Riverside	Signal	AM	21.3	C
				PM	17.7	B
10	Canyon Crest Drive & Linden Street	City of Riverside	Signal	AM	19.3	B
				PM	21.4	C
11	Aberdeen Drive & Linden Street	UC Riverside	AWSC	AM	8.9	A
				PM	13.9	B
12	Iowa Avenue & University Avenue	City of Riverside	Signal	AM	16.4	B
				PM	27.4	C
13	I-215 SB & University Avenue	Caltrans	Signal	AM	20.4	C
				PM	12.2	B
14	I-215 NB & University Avenue	Caltrans	Signal	AM	15.7	B
				PM	11.3	B
15	Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	<b>57.2</b>	<b>F</b>
				PM	<b>52.2</b>	<b>F</b>

Notes:

1. Delay is calculated using Synchro HCM 6<sup>th</sup> Edition Methodology, except for Intersection 10 where HCM 2000 is used due to the presence of a pedestrian scramble phase.
2. **Bold** type indicates an unacceptable LOS based on the City's significance criteria.
3. AWSC indicates that this is an all-way stop control where all approaches have stop signs.

## FREEWAY ANALYSIS

The operations analysis for the freeway facilities in the study area is summarized in **Table 7**. Under Existing (2017) conditions, the following locations were found to operate at LOS E or LOS F:

- Northbound Diverge at University Avenue (AM peak hour)
- Northbound Merge at Blaine Street (AM peak hour)

**TABLE 7 – EXISTING (2017) FREEWAY OPERATIONS**

Location	Segment Type	Existing			
		AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS
<b>Northbound I-215</b>					
Diverge at University Avenue	Weave	37	E	28	C
Merge at University Avenue	Weave	25	C	20	B
Diverge at Blaine Street	Weave	25	C	20	B
Merge at Blaine Street	Weave	-	F	25	C
<b>Southbound I-215</b>					
Diverge at Blaine Street	Weave	16	B	22	C
Merge at Blaine Street	Weave	11	B	24	C
Diverge at University Avenue	Weave	11	B	24	C
Merge at University Avenue	Weave	10	B	30	D

Notes:

1. Density is reported in vehicles per lane per mile.
2. The maximum density for ramp junctions and weaving sections under LOS E is not defined in the HCM.
3. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections.

## Queuing

Queuing results for the Existing (2017) conditions are summarized in **Table 8** below. As shown in the table, queuing was not found to exceed storage at any ramp terminal intersection.

**TABLE 8 – EXISTING (2017) QUEUING ANALYSIS**

Intersection		Ramp length (ft)	Movement	Length (ft)	AM Peak Hour		PM Peak Hour	
					Lane (ft)	Total (ft)	Lane (ft)	Total (ft)
3	I-215 SB & 3rd Street	1,430	SBTL	1,430	550	550	252	252
			SBR	920	199		36	
4	I-215 NB & 3rd Street	850	NBTL	850	164	175	94	94
			NBR	760	175		70	
13	I-215 SB & University Avenue	1,245	SBL	1,245	257	257	50	50
			SBR	440	46		36	
14	I-215 NB & University Avenue	1,990	SBL	750	25	57	30	52
			SBR	1,990	57		52	

## 5.0 EXISTING (2017) PLUS PROJECT CONDITIONS

Traffic volumes for the Existing (Year 2017) Plus Project (Phase 1) Conditions scenario consist of volumes from the Existing (Year 2017) conditions plus Phase 1 volumes generated by the proposed Project as described in Chapter 3. The Existing (Year 2017) Plus Project traffic volumes are shown in **Figure 9**.

### INTERSECTION OPERATIONS

The intersection LOS results are summarized in **Table 9** for Existing Year (2017) Plus Project Conditions. With the exception of Watkins Drive and Big Springs Road (Intersection 15), which operates at LOS F in the AM and PM peak hour, all intersections operate acceptably at LOS D or better. Technical calculations for the Existing (2017) Plus Phase 1 conditions are provided in **Appendix C**.

### INTERSECTION IMPACTS

As shown in **Table 9**, using the significance criteria discussed in Chapter 3, the Project causes one significant impact to occur at Intersection 15, Watkins Drive and Big Springs Road.



1. Iowa Avenue/Massachusetts Ave	2. Chicago Avenue/3rd Street	3. I-215 SB/3rd Street	4. I-215 NB/3rd Street
5. Iowa Avenue/Blaine St	6. Rustin Ave/Blaine St	7. Canyon Crest Dr/Blaine St	8. Watkins Dr/Blaine St
9. Iowa Avenue/Linden St	10. Canyon Crest Dr/Linden St	11. Aberdeen Dr/Linden St	12. Iowa Avenue/University Avenue

Figure 9  
Existing Plus Phase 1 Conditions





13. I-215 SB Ramps/University Avenue	14. I-215 NB Ramps/University Avenue	15. Watkins Dr/Big Springs Rd
<p>           I-215 SB Ramps            University Avenue            210 (88) ←            347 (47) ←            290 (503) ←            63 (171) ←            409 (474) →            239 (693) →         </p>	<p>           I-215 NB Ramps            University Avenue            223 (198) ↓            58 (89) ↓            276 (303) ←            182 (477) ←            243 (167) →            459 (344) →         </p>	<p>           Watkins Dr            Big Springs Rd            83 (45) ↓            195 (418) ↓            15 (92) ↓            141 (31) ←            35 (41) ←            14 (73) ←            17 (147) ↓            9 (30) ↓            31 (189) ↓            127 (77) ↑            593 (333) ↑            28 (32) ↑         </p>

Figure 9  
Existing Plus Phase 1 Conditions



**TABLE 9 – EXISTING PLUS PHASE 1 INTERSECTION OPERATIONS**

Intersection	Jurisdiction	Control	Peak Hour	Existing (2017)		Existing Plus Phase 1		Delay Change	Significant Impact
				Delay	LOS	Delay	LOS		
1 Iowa Avenue & Massachusetts Avenue	City of Riverside	Signal	AM	27.6	C	29.7	C	+2.1	No
			PM	18.7	B	18.8	B	+0.1	No
2 Chicago Avenue & 3rd Street	City of Riverside	Signal	AM	41	D	42.2	D	+1.2	No
			PM	36.9	D	37.1	D	+0.2	No
3 I-215 SB & 3rd Street	Caltrans	Signal	AM	28.7	C	29.4	C	+0.7	No
			PM	11.8	B	12	B	+0.2	No
4 I-215 NB & 3rd Street	Caltrans	Signal	AM	14.8	B	14.6	B	-0.2	No
			PM	10.5	B	10.9	B	+0.4	No
5 Iowa Avenue & Blaine Street	City of Riverside	Signal	AM	33.9	C	35.9	D	+2.0	No
			PM	26.8	C	26.8	C	+0.0	No
6 Rustin Avenue & Blaine Street	City of Riverside	Signal	AM	13	B	13.3	B	+0.3	No
			PM	9	A	8.9	A	-0.1	No
7 Canyon Crest Drive & Blaine Street	City of Riverside	Signal	AM	10.8	B	11.5	B	+0.7	No
			PM	13.7	B	13.6	B	-0.1	No
8 Watkins Drive & Blaine Street	City of Riverside	Signal	AM	25.9	C	26	C	+0.1	No
			PM	36.2	D	36.2	D	+0.0	No
9 Iowa Avenue & Linden Street	City of Riverside	Signal	AM	21.3	C	22	C	+0.7	No
			PM	17.7	B	18.3	B	+0.6	No
10 Canyon Crest Drive & Linden Street	City of Riverside	Signal	AM	19.3	B	19.9	C	+0.6	No
			PM	21.4	C	24.2	C	+2.8	No
11 Aberdeen Drive & Linden Street	UC Riverside	AWSC	AM	8.9	A	9.3	A	+0.4	No
			PM	13.9	B	13.9	B	+0.0	No
12 Iowa Avenue & University Avenue	City of Riverside	Signal	AM	16.4	B	16.5	B	+0.1	No
			PM	27.4	C	27.6	C	+0.2	No
13 I-215 SB & University Avenue	Caltrans	Signal	AM	20.4	C	20.5	C	+0.1	No
			PM	12.2	B	12	B	-0.2	No
14 I-215 NB & University Avenue	Caltrans	Signal	AM	15.7	B	15.3	B	-0.4	No
			PM	11.3	B	11	B	-0.3	No
15 Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	57.2	F	60.2	F	+3.0	<b>Yes</b>
			PM	52.2	F	52.2	F	+0.0	No

Notes:

1. Delay is calculated using Synchro HCM 6<sup>th</sup> Edition Methodology, except for Intersection 10 where HCM 2000 is used due to the presence of a pedestrian scramble phase.
2. **Bold** type indicates an unacceptable LOS based on the City's significance criteria.
3. AWSC indicates that this is an all-way stop control where all approaches have stop signs.



## FREEWAY ANALYSIS

Operations analysis for the freeway facilities in the study area is summarized in **Table 10**. Under Existing (2017) Plus Phase 1 conditions, the following locations were found to operate at LOS E or LOS F:

- Northbound Diverge at University Avenue (AM peak hour)
- Northbound Merge at Blaine Street (AM peak hour)

**TABLE 10 – EXISTING PLUS PHASE 1 FREEWAY OPERATIONS**

Location	Segment Type	Existing				Existing Plus Phase 1			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS	Density	LOS	Density	LOS
<b>Northbound I-215</b>									
Diverge at University Avenue	Weave	37	E	28	C	37	E	28	D
Merge at University Avenue	Weave	25	C	20	B	25	C	20	C
Diverge at Blaine Street	Weave	25	C	20	B	25	C	20	C
Merge at Blaine Street	Weave	-	F	25	C	-	F	26	C
<b>Southbound I-215</b>									
Diverge at Blaine Street	Weave	16	B	22	C	16	B	22	C
Merge at Blaine Street	Weave	11	B	24	C	11	B	24	C
Diverge at University Avenue	Weave	11	B	24	C	11	B	24	C
Merge at University Avenue	Weave	10	B	30	D	11	B	31	D

Notes:

1. Density is reported in vehicles per lane per mile.
2. The maximum density for ramp junctions and weaving sections under LOS E is not defined in the HCM.
3. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections.

## Queuing

Queueing results for the Existing Plus Phase 1 conditions are summarized in **Table 11** below. As shown in the table, queuing was not found to exceed storage at any ramp terminal intersection.

**TABLE 11 – EXISTING PLUS PHASE 1 QUEUING ANALYSIS**

Intersection		Ramp length (ft)	Move	Length (ft)	Existing		Existing Plus Phase 1	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
					Lane (ft)	Lane (ft)	Lane (ft)	Lane (ft)
3	I-215 SB & 3rd Street	1,431	SBTL	1,430	550	252	559	267
			SBR	920	199	36	211	36
4	I-215 NB & 3rd Street	850	NBTL	850	164	94	161	93
			NBR	760	175	70	181	83
13	I-215 SB & University Avenue	1,245	SBL	1,245	257	50	248	50
			SBR	440	46	36	43	36
14	I-215 NB & University Avenue	1,990	SBL	750	25	30	27	36
			SBR	1,990	57	52	57	55 [a]

Notes: [a] 95<sup>th</sup> percentile volume exceeds capacity. Queues may be longer.

## 6.0 FUTURE (2025) CONDITIONS

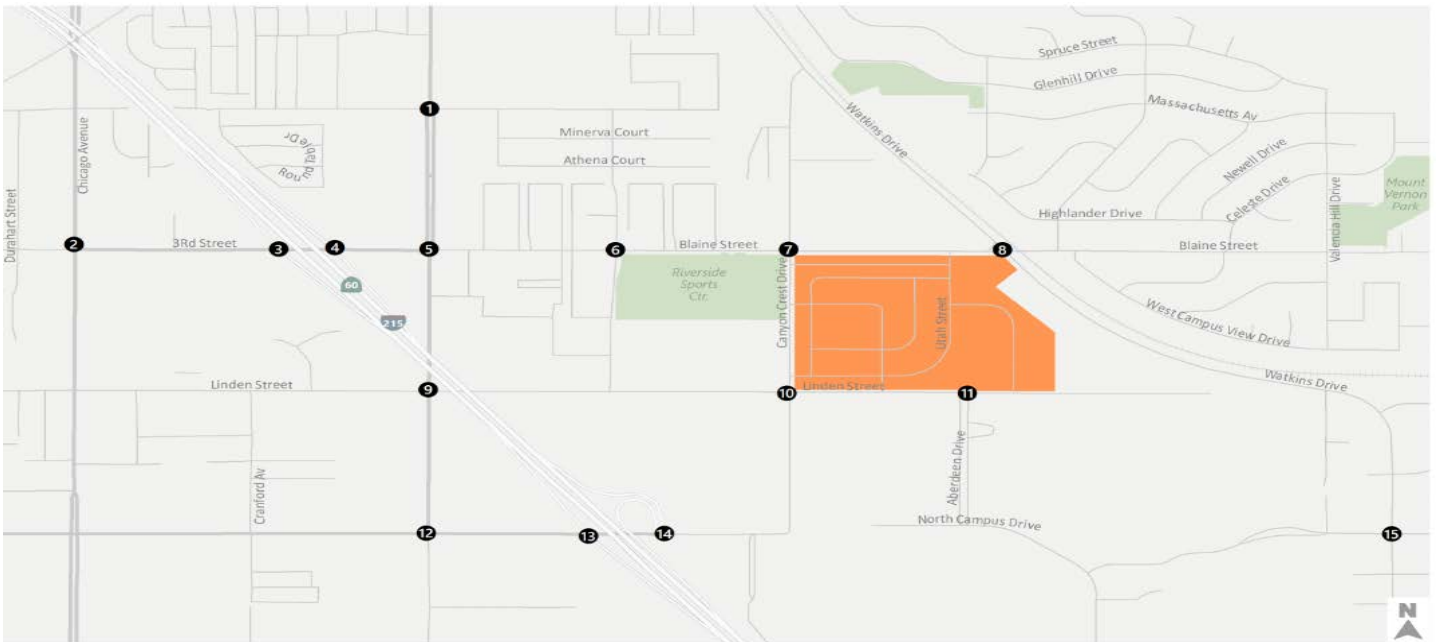
This chapter summarizes the Future (2025) Conditions as outlined in Chapter 3. The traffic forecasts and operations analysis for this scenario reflect eight years growth derived from RivTAM without the Project. The Future (2025) Conditions traffic forecasts are shown on **Figure 10**.

### PLANNED INTERSECTION IMPROVEMENTS

No roadway improvements are assumed to be in place by buildout of the Project, which will occur by 2025. Traffic signal timing adjustments are considered standard maintenance for local and state agencies and it is assumed that the owner/operators of the study intersections would regularly optimize the traffic signals depending on the traffic volumes in the study area. Therefore, signal timing was optimized under Future (2025) conditions.

### INTERSECTION OPERATIONS

The intersection results for Future (2025) conditions without the Project are summarized in **Table 12**. As shown, two intersections were identified as operating unacceptably by 2025: 1) Third Street & Chicago Avenue and 2) Watkins Drive & Big Springs Road.



1. Iowa Avenue/Massachusetts Ave	2. Chicago Avenue/3rd St	3. I-215 SB/3rd St	4. I-215 NB/3rd St
5. Iowa Avenue/Blaine St	6. Rustin Ave/Blaine St	7. Canyon Crest Dr/Blaine St	8. Watkins Dr/Blaine St
9. Iowa Avenue/Linden St	10. Canyon Crest Dr/Linden St	11. Aberdeen Dr/Linden St	12. Iowa Avenue/University Avenue

Figure 10

Future (2025) Conditions





13. I-215 SB Ramps/University Avenue	14. I-215 NB Ramps/University Avenue	15. Watkins Dr/Big Springs Rd
<p>           I-215 SB Ramps            University Avenue            210 (90) ←            490 (100) ←            370 (550) ←            60 (170) ←            460 (520) →            270 (790) →         </p>	<p>           I-215 NB Ramps            University Avenue            250 (230) ↓            60 (80) ↓            350 (470) ←            180 (460) ←            290 (190) →            660 (390) →         </p>	<p>           Watkins Dr            Big Springs Rd            90 (50) ↓            210 (440) ↓            20 (100) ↓            160 (40) ←            40 (50) ←            20 (80) ←            20 (160) →            10 (30) →            40 (210) →            140 (80) ↓            650 (350) ↓            30 (40) ↓         </p>

Figure 10  
Future (2025) Conditions



**TABLE 12 – FUTURE (2025) CONDITIONS INTERSECTION OPERATIONS**

	Intersection	Jurisdiction	Control	Peak Hour	Future (2025)	
					Delay	LOS
1	Iowa Avenue & Massachusetts Avenue	City of Riverside	Signal	AM	31.0	C
				PM	21.7	C
2	Chicago Avenue & 3rd Street	City of Riverside	Signal	AM	<b>58.5</b>	<b>E</b>
				PM	<b>57.9</b>	<b>E</b>
3	I-215 SB & 3rd Street	Caltrans	Signal	AM	41.2	D
				PM	31.4	C
4	Iowa Avenue & 3rd Street	Caltrans	Signal	AM	20.4	C
				PM	12.3	B
5	Iowa Avenue & Blaine Street	City of Riverside	Signal	AM	51.5	D
				PM	45.6	D
6	Rustin Avenue & Blaine Street	City of Riverside	Signal	AM	19.8	B
				PM	11.8	B
7	Canyon Crest Drive & Blaine Street	City of Riverside	Signal	AM	27.8	C
				PM	15.2	B
8	Watkins Drive & Blaine Street	City of Riverside	Signal	AM	31.9	C
				PM	48.6	D
9	Iowa Avenue & Linden Street	City of Riverside	Signal	AM	27.4	C
				PM	24.4	C
10	Canyon Crest Drive & Linden Street	City of Riverside	Signal	AM	19.1	B
				PM	28.7	C
11	Aberdeen Drive & Linden Street	UC Riverside	AWSC	AM	9.3	A
				PM	14.2	B
12	Iowa Avenue & University Avenue	City of Riverside	Signal	AM	19.3	B
				PM	51.1	D
13	I-215 SB & University Avenue	Caltrans	Signal	AM	27.7	C
				PM	12.7	B
14	I-215 NB & University Avenue	Caltrans	Signal	AM	11.6	B
				PM	12.6	B
15	Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	<b>91.7</b>	<b>F</b>
				PM	<b>72.0</b>	<b>F</b>

Notes:

1. Delay is calculated using Synchro HCM 6<sup>th</sup> Edition Methodology, except for Intersection 10 where HCM 2000 is used due to the presence of a pedestrian scramble phase.
2. **Bold** type indicates an unacceptable LOS based on the City's significance criteria.
3. AWSC indicates that this is an all-way stop control where all approaches have stop signs.

## FREEWAY ANALYSIS

The operations analysis for the freeway facilities in the study area is summarized in **Table 13**. Under Future (2025) conditions, the following locations were found to operate at LOS E or LOS F:

- Northbound Diverge at University Avenue (AM peak hour)
- Northbound Merge at Blaine Street (AM peak hour)
- Southbound Diverge at Blaine Street (AM peak hour)

**TABLE 13 – FUTURE (2025) FREEWAY OPERATIONS**

Location	Segment Type	Future (2025)			
		AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS
<b>Northbound I-215</b>					
Diverge at University Avenue	Weave	-	F	28	C
Merge at University Avenue	Weave	30	D	21	C
Diverge at Blaine Street	Weave	30	D	21	C
Merge at Blaine Street	Weave	-	F	27	C
<b>Southbound I-215</b>					
Diverge at Blaine Street	Weave	-	F	22	C
Merge at Blaine Street	Weave	17	B	25	C
Diverge at University Avenue	Weave	17	B	25	C
Merge at University Avenue	Weave	16	B	33	D

Notes:

1. Density is reported in vehicles per lane per mile.
2. The maximum density for ramp junctions and weaving sections under LOS E is not defined in the HCM.
3. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections.

## Queuing

Queuing results for Future (2025) conditions are summarized in **Table 14** below. As shown, queuing is not expected to exceed storage capacity for any movements.

**TABLE 14 – FUTURE (2025) QUEUING ANALYSIS**

Intersection		Ramp length (ft)	Move	Length (ft)	AM Peak Hour		PM Peak Hour	
					Lane (ft)	Total (ft)	Lane (ft)	Total (ft)
3	I-215 SB & 3rd Street	1,430	SBTL	1,430	671	671	401	401
			SBR	920	267		38	
4	I-215 NB & 3rd Street	850	NBTL	850	226	444	121	231
			NBR	760	444		231	
13	I-215 SB & University Avenue	1,245	SBL	1,245	345	345	112	112
			SBR	440	40		45	
14	I-215 NB & University Avenue	1,990	SBL	750	34	67	48	70
			SBR	1,990	67		70	



## 7.0 FUTURE (2025) PLUS BUILDOUT PROJECT CONDITIONS

This chapter summarizes the Future (2025) Plus Buildout Project Conditions within the study area.

### TRAFFIC VOLUMES

Traffic volumes for the Future (2025) Plus Buildout Project Conditions scenario consist of volumes from the Future (2025) Conditions plus volumes generated by the proposed Project as described in Chapter 3. However, as the Project will provide housing for 6,000 students at Buildout, adjustments were made to the 2025 traffic forecasts to account for a shift of students from commuter students (students living off campus and commuting to campus) to resident students (students living on campus at the Project site).

To determine the appropriate shift from commuter student to resident student, the number of trips generated by the 6,000 commuter students was developed using trip generation rates from the UC Riverside LRDP, consistent with rates used for resident student trip generation. Based on the rates documented in the LRDP, one commuter student generates 0.08 trips during the AM peak hour and 0.068 trips during the PM peak hour. Based on those trip generation rates, 6,000 students would generate 480 AM peak hour trips and 408 PM peak hour trips. As those trips are accounted for in the trip generation for Buildout of the Project, routes into campus and out of campus were identified and manually adjusted based on the commuter student trips generated by those students. This adjustment ensures that the resident students were not accounted for twice in the Buildout Plus Project traffic forecasts.

Adjustments were made along the following paths to and from Campus:

- University Drive
- Canyon Crest Drive
- 3<sup>rd</sup> Street/Blaine Street
- Watkins Drive
- Big Springs Road

Traffic volumes and lane configurations for Future (2025) Plus Buildout Project conditions are shown on **Figure 11**.

## ROADWAY IMPROVEMENTS

Future (2025) Plus Buildout Project intersection lane configurations are assumed to include the same lane geometries as Future (2025) Conditions.

## INTERSECTION OPERATIONS

**Table 15** summarizes the LOS and delay for the study intersections under Future (2025) Plus Buildout Project conditions. The following intersections were found to operate unacceptably under this scenario:

- 2) Third Street & Chicago Avenue – LOS E during the AM and PM peak hours
- 5) Iowa Avenue & Blaine Street – LOS E during the AM and PM peak hours
- 11) Aberdeen Drive & Linden Street – LOS E during the PM peak hour
- 12) University Avenue & Iowa Avenue- LOS E during the PM peak hour
- 15) Watkins Drive & Big Springs Road – LOS F during the AM and PM peak hours

All other study intersections operate acceptably at LOS D or better during both peak hours.

## INTERSECTION IMPACTS

When compared to the significance thresholds outlined in Chapter 3, the Project results in the following impacts under Future (2025) Plus Buildout Project conditions:

- 2) Third Street & Chicago Avenue
- 5) Iowa Avenue & 3<sup>rd</sup> Street
- 7) Canyon Crest Drive & Blaine Street
- 9) Iowa Avenue & Linden Street
- 10) Canyon Crest Drive & Linden Street
- 11) Aberdeen Drive & Linden Street
- 12) Iowa Avenue & University Avenue
- 15) Watkins Drive & Big Springs Road

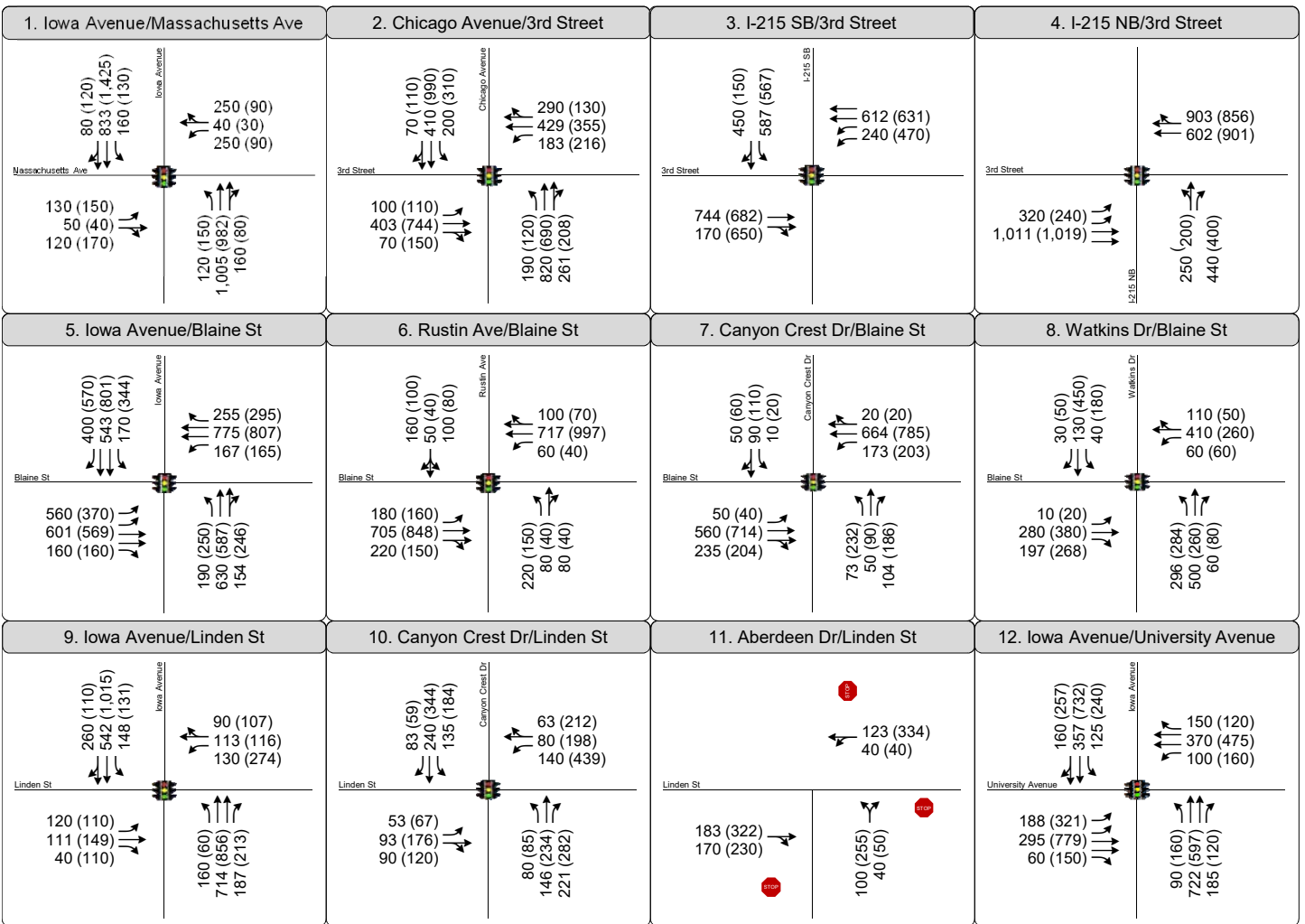


Figure 11

Future (2025) Plus Buildout Conditions





13. I-215 SB Ramps/University Avenue	14. I-215 NB Ramps/University Avenue	15. Watkins Dr/Big Springs Rd
<p>             I-215 SB Ramps              University Avenue              210 (90)              375 (50)              390 (615)              87 (237)              465 (579)              270 (790)         </p>	<p>             I-215 NB Ramps              University Avenue              250 (230)              82 (137)              293 (446)              227 (592)              290 (190)              550 (399)         </p>	<p>             Watkins Dr              Big Springs Rd              85 (45)              237 (512)              20 (100)              160 (40)              35 (45)              20 (80)              17 (150)              9 (30)              34 (190)              130 (80)              672 (407)              30 (40)         </p>

Figure 11  
Future (2025) Plus Buildout Conditions



**TABLE 15 - FUTURE (2025) PLUS BUILDOUT PROJECT INTERSECTION OPERATIONS**

	Intersection	Jurisdiction	Control	Peak Hour	Future (2025)		Future (2025) Plus Buildout Project		Delay Change	Significant Impact
					Delay	LOS	Delay	LOS		
1	Iowa Avenue & Massachusetts Avenue	City of Riverside	Signal	AM	31.0	C	33.0	C	+2.0	No
				PM	21.7	C	22.7	C	+1.0	No
2	Chicago Avenue & 3rd Street	City of Riverside	Signal	AM	<b>58.5</b>	<b>E</b>	<b>61.4</b>	<b>E</b>	+2.9	<b>Yes</b>
				PM	<b>57.9</b>	<b>E</b>	<b>68.1</b>	<b>E</b>	+10.2	<b>Yes</b>
3	I-215 SB & 3rd Street	Caltrans	Signal	AM	41.2	D	44.7	D	+3.5	No
				PM	31.4	C	41.7	D	+10.3	No
4	Iowa Avenue & Blaine Street	Caltrans	Signal	AM	20.4	C	20.3	C	-0.1	No
				PM	12.3	B	13.1	B	+0.8	No
5	Iowa Avenue & Blaine Street	City of Riverside	Signal	AM	51.5	D	<b>57.6</b>	<b>E</b>	+6.1	<b>Yes</b>
				PM	45.6	D	<b>62.5</b>	<b>E</b>	+16.9	<b>Yes</b>
6	Rustin Avenue & Blaine Street	City of Riverside	Signal	AM	19.8	B	24.8	C	+5.0	No
				PM	11.8	B	14.8	B	+3.0	No
7	Canyon Crest Drive & Blaine Street	City of Riverside	Signal	AM	27.8	C	35.5	D	+7.7	<b>Yes</b>
				PM	15.2	B	33.1	C	+17.9	<b>Yes</b>
8	Watkins Drive & Blaine Street	City of Riverside	Signal	AM	31.9	C	32.0	C	+0.1	No
				PM	48.6	D	51.1	D	+2.5	No
9	Iowa Avenue & Linden Street	City of Riverside	Signal	AM	27.4	C	32.8	C	+5.4	No
				PM	24.4	C	37.5	D	+13.1	<b>Yes</b>
10	Canyon Crest Drive & Linden Street	City of Riverside	Signal	AM	19.1	B	23.7	C	+4.6	No
				PM	28.7	C	44.1	D	+15.4	<b>Yes</b>
11	Aberdeen Drive & Linden Street	UC Riverside	AWSC	AM	9.3	A	11	B	+1.7	No
				PM	14.2	B	<b>46.3</b>	<b>E</b>	+32.1	<b>Yes</b>
12	Iowa Avenue & University Avenue	City of Riverside	Signal	AM	19.3	B	19.7	B	+0.4	No
				PM	51.1	D	<b>60.1</b>	<b>E</b>	+9.0	<b>Yes</b>
13	I-215 SB & University Avenue	Caltrans	Signal	AM	27.7	C	23.8	C	-3.9	No
				PM	12.7	B	13	B	+0.3	No
14	I-215 NB & University Avenue	Caltrans	Signal	AM	11.6	B	13.3	B	+1.7	No
				PM	12.6	B	14.4	B	+1.8	No
15	Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	<b>91.7</b>	<b>F</b>	<b>102.3</b>	<b>F</b>	+10.6	<b>Yes</b>
				PM	<b>72.0</b>	<b>F</b>	<b>106.6</b>	<b>F</b>	+34.6	<b>Yes</b>

Notes:

1. Delay is calculated using Synchro HCM 6<sup>th</sup> Edition Methodology, except for Intersection 10 where HCM 2000 is used due to the presence of a pedestrian scramble phase.
2. **Bold** type indicates an unacceptable LOS based on the City's significance criteria.
3. AWSC indicates that this is an all-way stop control where all approaches have stop signs.

## FREEWAY ANALYSIS

The operations analysis for the freeway facilities in the study area is summarized in **Table 16**. Under Future Plus Buildout (2025) conditions, the following locations were found to operate at LOS E or LOS F:

- Northbound Diverge at University Avenue (AM peak hour)
- Northbound Merge at Blaine Street (AM peak hour)
- Southbound Diverge at Blaine Street (AM peak hour)

**TABLE 16 – FUTURE (2025) PLUS BUILDOUT PROJECT FREEWAY OPERATIONS**

Location	Segment Type	Future (2025)				Future + Buildout			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS	Density	LOS	Density	LOS
<b>Northbound I-215</b>									
Diverge at University Avenue	Weave	-	F	28	C	-	F	-	F
Merge at University Avenue	Weave	30	D	21	C	29	D	21	C
Diverge at Blaine Street	Weave	30	D	21	C	29	D	21	C
Merge at Blaine Street	Weave	-	F	27	C	-	F	-	F
<b>Southbound I-215</b>									
Diverge at Blaine Street	Weave	-	F	22	C	-	F	22	C
Merge at Blaine Street	Weave	17	B	25	C	17	B	25	C
Diverge at University Avenue	Weave	17	B	25	C	17	B	25	C
Merge at University Avenue	Weave	16	B	33	D	16	B	16	B

Notes:

1. Density is reported in vehicles per lane per mile.
2. The maximum density for ramp junctions and weaving sections under LOS E is not defined in the HCM.
3. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections.

## Queuing

Queuing results for Future (2025) Plus Buildout Project conditions are summarized in **Table 17** below. As shown, queuing is not expected to exceed storage capacity for any movements under Buildout (2025) conditions.

**TABLE 17 – FUTURE (2025) QUEUING ANALYSIS**

Intersection	Ramp length (ft)	Movement	Length (ft)	Future (2025)		Future (2025) Plus Buildout Project	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
				Lane (ft)	Lane (ft)	Lane (ft)	Lane (ft)
3 I-215 SB & 3rd Street	1,431	SBTL	1,430	671	401	703	454
		SBR	920	267	38	314	38
4 I-215 NB & 3rd Street	850	NBTL	850	226	121	226	122
		NBR	760	444	231	462	270
13 I-215 SB & University Avenue	1,245	SBL	1,245	345	112	245	53
		SBR	440	40	45	40	37
14 I-215 NB & University Avenue	1,990	SBL	750	34	48	42	74
		SBR	1,990	67	70	67	69

## 11.0 SITE PLAN REVIEW

This chapter provides an overview of the Project site plan, related to internal and external circulation for the Project. Considerations include site access, parking, and on-site circulation.

### ON-SITE CIRCULATION

On-site circulation will be provided by a series of multi-modal paths connecting the buildings located on the Project site to the internal parking structures and adjacent street network. Two paths will provide north/south circulation through the site, including access to the North Parking Area and Blaine Street driveway. Another path will provide east/west connectivity across the site, including access to the South Parking Area and the Watkins Street driveway.

### PROJECT SITE ACCESS

#### VEHICLE ACCESS

Access to the Project is provided by three full access driveways. The driveways will access the site from Linden Street, Blaine Street, and Watkins Drive. The driveways from Watkins Drive and Linden Street will provide access to the East Parking Area, while the Blaine Street driveway will provide access to the North Parking Area.

#### EMERGENCY VEHICLE ACCESS

Another consideration related to the Project site plan review is the provision of adequate emergency vehicle access. Providing adequate emergency vehicle access ensures that these vehicles are able to quickly respond to service calls. Direct emergency access will be provided to all buildings. Emergency access will be provided by the surrounding streets and the multi-modal paths throughout the project site. All multi-modal paths will be designed to meet the requirements for emergency vehicle access.

#### PEDESTRIAN ACCESS

The Project provides pedestrian access to buildings on site, parking areas, and the Campus through a system of walkways and plazas to create a pedestrian friendly environment. The network of off-street paths will be designated as shared walkways and bikeways. Under Phase 1, one north/south walkway will be provided from the Blaine Street driveway to Linden Street and one east/west walkway will be provided from the Watkins Street driveway to the project boundary. Under Buildout conditions, the east/west walkway will be



extended to Canyon Crest Drive and an additional north/south walkway will be added, providing a connection to the planned North Recreational Mall.

## BICYCLE ACCESS

Along with pedestrian facilities, the Project will encourage the use of bicycling as an active and sustainable mode of transportation. Access to the Project site from surrounding streets is provided by shared facilities on the Blaine Street and Watkins Street driveways. Access from Campus is provided by the Class IV facility that will connect to the planned North Recreational Mall.

## TRANSIT ACCESS

Transit facilities are currently located on Blaine Street and Canyon Crest Drive. UC Riverside is currently in the process, with cooperation from RTA, of creating a Mobility Hub on Campus to provide a central location for all transit and other pick-up/drop-off trips to and from Campus. The planned Mobility Hub will be located at the Canyon Crest Drive/University Avenue intersection and will be accessible from the Project by the planned connection to the North Recreational Mall.

## PARKING

The Project will provide parking in two areas, the North Parking Area and the South Parking Area. Under Phase 1, both areas will be developed as surface parking providing 775 total spaces. The North Parking Area will provide 451 spaces under Phase 1, while the South Parking Area will provide 324 parking spaces. Two other surface lots will also be provided to serve the UC Riverside Child Development Center, which is located adjacent to the site (69 parking spaces).

Under Buildout conditions, parking structures will be constructed on the surface parking lots to provide 2,164 total spaces with no more than 1,200 spaces in either structure.

Bicycle parking will also be provided, including inside buildings and in secure outdoor parking facilities throughout the site.

## 12.0 IMPACTS & MITIGATION MEASURES

This chapter reviews project related impacts on the transit system, bicycle and pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians, bicycles and transit.

### PEDESTRIAN NETWORK

#### DISRUPTIONS TO EXISTING FACILITIES

##### **Significance Criteria**

The following significance criteria were applied:

A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic at locations experiencing pedestrian safety concerns such as an adjacent crosswalk or school, particularly if the added traffic reduces the number of pedestrian acceptable gaps at an unsignalized crossing or causes queues to spillback through pedestrian crossings.

##### **Project Impact**

A review of the project per the significance criteria described indicates that there are no conflicts with existing pedestrian facilities. Therefore, no significant impact occurs.

#### PROJECT INTERFERES WITH PLANNED PEDESTRIAN FACILITIES

##### **Significance Criteria**

The following significance criteria were applied to determine if the project conflicts with planned facilities:

A significant impact occurs if a project interferes with pedestrian facilities. In existing or planned urbanized areas, main streets or pedestrian districts, this can include impacts to the quality of the walking environment.

### **Project Impact**

No conflicts with any planned pedestrian facilities that would be affected by the project. Therefore, no significant impact occurs.

### **PROJECT CONFLICTS WITH ADOPTED PEDESTRIAN SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS**

#### **Significance Criteria**

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

### **Project Impact**

Similar to bicycling, the City of Riverside General Plan contains several references to pedestrians in the policy statements including:

- Policy CCM-10.2: Incorporate bicycle and pedestrian trails and bicycle racks in future development projects
- Policy CCM-10.5: Promote the health benefits of using a bicycle or walking as a means of transportation
- Policy CCM-10.6: Encourage pedestrian travel through the creation of sidewalks and street crossings

The project is entirely consistent with these policy statements through the implementation of facilities which would contain pedestrian walkways in addition to any bicycle facilities. The project also restricts vehicular traffic within several areas of the Campus east of Iowa Avenue to promote pedestrian travel. Therefore, it is concluded that the project impact related to this item is less than significant.

## **BICYCLE NETWORK**

### **DISRUPTIONS TO EXISTING FACILITIES**

#### **Significance Criteria**

The following significance criteria were applied:

A significant impact occurs if a project disrupts existing bicycle facilities.

### **Project Impact**

As noted in the review of existing facilities, there are several bicycle routes within the study area. It is anticipated that the project would not affect the operation of any of these existing facilities. Therefore, no significant impact would occur.

## **PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES**

### **Significance Criteria**

The following significance criteria were applied to determine if the project conflicts with planned facilities:

A significant impact occurs if a project interferes with planned bicycle facilities. This includes failure to dedicate right-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Master Plan or to contribute towards construction of planned bicycle facilities along the project frontage.

### **Project Impact**

Based on the review of available documents, the project will provide connections to planned facilities in the study area; therefore, the impact is less than significant.

## **PROJECT CONFLICTS WITH ADOPTED BICYCLE SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS**

### **Significance Criteria**

The following significance criteria were applied to determine if the project conflicts with planned facilities:

A significant impact occurs if the project conflicts or creates inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards.

## **Project Impact**

The City of Riverside General Plan contains several policy statements related to bicycles including:

- Policy CCM-10.2: Incorporate bicycle and pedestrian trails and bicycle racks in future development projects
- Policy CCM-10.5: Promote the health benefits of using a bicycle or walking as a means of transportation
- Policy CCM-10.12: Encourage bicycling as a commute mode to school, work, etc.

The proposed project incorporates numerous measures which are consistent with the policies outlined above. For example, the Project proposes both extensive bicycle and pedestrian facilities. The Project is also proposed to include bicycle racks, and bicycle storage in all buildings to promote active transportation. Therefore, it is concluded that there is no conflict with these policy statements. Therefore, no significant impact occurs.

## **TRANSIT SYSTEM**

### **DISRUPTIONS TO EXISTING TRANSIT SERVICE**

#### **Significance Criteria**

The following significance criteria were applied to determine if the project is responsible for a disruption of existing transit services or facilities:

A significant impact occurs if a project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions caused by proposed project driveways on transit streets and impacts to transit stops/shelters; and impacts to transit operations from traffic improvements proposed or resulting from a project.

#### **Project Impact**

As noted in the review of existing transit routes, there are a number of routes which currently run through and around the campus. From the review of the proposed land use changes, it can be concluded that none of the proposed land use configurations would significantly disrupt any of the existing transit routes. Therefore, the impact is less than significant.

## INTERFERENCE WITH PLANNED TRANSIT SERVICES

### **Significance Criteria**

The following significance criteria were applied:

A significant impact occurs if a project interferes with planned transit services or facilities.

### **Project Impact**

This project would not interfere with the planned Campus Mobility Hub, which is planned to be developed at the University Avenue/Canyon Crest Drive intersection; therefore, no significant impact is expected to occur.

## PROJECT CONFLICTS OR CREATES INCONSISTENCIES WITH ADOPTED TRANSIT SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

### **Significance Criteria**

The following significance criteria regarding consistency with adopted transit plans, guidelines, policies, or standards were applied:

A significant impact occurs if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

### **Project Impact**

Based on the review of the proposed project, it can be concluded that the project does not conflict with these policies or other policies related to transit. The impact is therefore less than significant, and no mitigation is required.

## DEMAND FOR PUBLIC TRANSIT SERVICES ABOVE CAPACITY

### **Significance Criteria**

The following significance criteria were applied:

A significant impact occurs if the project creates demand for public transit service above the capacity which is provided or planned.

## Project Impact

As the Project will transition students from commuter students to residential students, it is anticipated that the Project would contribute to a decrease in student commuters utilizing transit to commute to Camps. Therefore, no significant impact is anticipated to occur.

## ROADWAY NETWORK

Mitigation measures for the Existing Plus Project and Future (2025) Project scenario are summarized below.

### EXISTING PLUS PROJECT

The impacts identified for the Existing Plus Project scenario are summarized in **Table 18**. Mitigation measures identified for the impacted intersection are summarized below.

**TABLE 18 – EXISTING PLUS PHASE 1 MITIGATION SUMMARY**

Intersection	Jurisdiction	Control	Peak Hour	Existing Plus Phase 1		Existing Plus Phase 1 Mitigation		Significant Impact
				Delay	LOS	Delay	LOS	
15 Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	60.2	F	13.0	B	Yes
			PM	52.2	F	12.0	B	No

#### 15) Big Springs Road & Watkins Drive

**Impact:** With the addition of Phase 1 vehicle-trips, this intersection operates at LOS F during the AM peak hour. As delay is increased by more than 1.0 seconds, a significant impact occurs based on the City's significance thresholds.

**Mitigation:** As this intersection does not meet signal warrants under existing conditions or with the development of Phase 1, mitigating this impact would require reconfiguring the intersection to a single-lane roundabout. Under roundabout control, this intersection would operate acceptably at LOS B during both the AM and PM peak hours.

While this mitigation measure is considered feasible and would improve intersection operations, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

**FUTURE (2025) PLUS BUILDOUT PROJECT**

The impacts identified for the Future (2025) Plus Buildout Project scenario are summarized in **Table 19**. Mitigation measures identified for the impacted intersections are summarized below.

**TABLE 19 – FUTURE (2025) PLUS BUILDOUT PROJECT MITIGATION SUMMARY**

	Intersection	Jurisdiction	Control	Peak Hour	Future Plus Buildout Project		Future Plus Buildout Project with Mitigation		Significant Impact
					Delay	LOS	Delay	LOS	
2	Chicago Avenue & 3rd Street	City of Riverside	Signal	AM	<b>61.4</b>	<b>E</b>	41.3	D	<b>Yes</b>
				PM	<b>68.1</b>	<b>E</b>	53	D	<b>Yes</b>
5	Iowa Avenue & Blaine Street	City of Riverside	Signal	AM	<b>57.6</b>	<b>E</b>	42.8	D	<b>Yes</b>
				PM	<b>62.5</b>	<b>E</b>	49.7	D	<b>Yes</b>
7	Canyon Crest Drive & Blaine Street	City of Riverside	Signal	AM	35.5	D	29.2	C	<b>Yes</b>
				PM	33.1	C	20.2	C	<b>Yes</b>
9	Iowa Avenue & Linden Street	City of Riverside	Signal	AM	27.4	C	32.8	C	No
				PM	24.4	C	24.5	C	<b>Yes</b>
10	Canyon Crest Drive & Linden Street	City of Riverside	Signal	AM	23.7	C	9.6	A	No
				PM	44.1	D	17.4	C	<b>Yes</b>
11	Aberdeen Drive & Linden Street	UC Riverside	AWSC	AM	11.0	B	11.8	B	No
				PM	<b>46.3</b>	<b>E</b>	20.2	C	<b>Yes</b>
12	Iowa Avenue & University Avenue	City of Riverside	Signal	AM	19.7	B	9.6	A	No
				PM	<b>60.1</b>	<b>E</b>	17.4	C	<b>Yes</b>
15	Watkins Drive & Big Springs Road	City of Riverside	AWSC	AM	<b>102.3</b>	<b>F</b>	15.0	C	<b>Yes</b>
				PM	<b>106.6</b>	<b>F</b>	13.0	B	<b>Yes</b>

2) Third Street & Chicago Avenue

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS E during both the AM and PM peak hours. As delay is increased by more than 2.0 seconds under the Plus Project scenario, a significant impact occurs based on the City’s significance thresholds.

**Mitigation:** Mitigating this impact would require reconfiguring the northbound and southbound intersection approaches to provide a dedicated northbound right-turn pocket with 200 feet of storage and a dedicated southbound right-turn pocket with 200 feet of storage, along with optimizing signal timing. With the mitigation in place, the northbound and southbound approaches would provide a dedicated left-turn lane, two through lanes, and a dedicated right-turn lane. As bicycle facilities are not provided on



Chicago Avenue in this area and the improvements could be accommodated within the existing cross-section, this mitigation would not impact bicyclists or pedestrians.

While this mitigation measure is considered feasible and would improve intersection operations, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

5) Iowa Avenue & Blaine Street

**Impact:** With the addition of the Project under Buildout conditions, this intersection is degraded from acceptable operations (LOS D) to unacceptable operations (LOS E), causing a significant impact to occur based on the City's significance thresholds.

**Mitigation:** Mitigating this impact would require the addition of a southbound left-turn lane and reconfiguring the northbound approach to provide a dedicated right turn-lane with 200 feet of storage. Optimizing signal-timings with the geometric improvements would also be required to mitigate this impact.

7) Canyon Crest Drive & Blaine Street

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS D during the AM peak hour and LOS C during the PM peak hour. The impact occurs based on the increase in delay with the project (8 seconds during the AM, and 18 seconds during the PM peak hour) exceeding the City's significance criteria for intersections operating at LOS D and LOS C.

**Mitigation:** Mitigating this impact would require converting the eastbound approach from the current configuration with a left-turn lane, a through lane, and a shared through-right lane to having a left-turn lane, two through lanes, and a dedicated right-turn lane. While these improvements could be implemented within the existing right-of-way, they would require removal of the existing Class II bike lane on Linden Street, creating a secondary impact to bicyclists.

In addition to the secondary impacts that would occur as a result of removing a Class II bike lane, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

9) Iowa Avenue & Linden Street

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS C during the AM peak hour and LOS D during the PM peak hour. As delay during the PM peak hour is increased by more than 5.0 seconds with the Project in place, an impact occurs based on the City's significance thresholds.

**Mitigation:** Mitigating this impact can be achieved by retiming the signal to better serve movements with higher delay. While this mitigation measure is considered feasible and would improve intersection operations, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

10) Canyon Crest Drive & Linden Street

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS C during the AM peak hour and LOS D during the PM peak hour. As delay under with Project conditions is increased by more than 5.0 seconds, an impact is triggered based on the City's significance thresholds.

**Mitigation:** Mitigating this impact would require the addition of a dedicated eastbound right-turn lane with 150 feet of storage. This would reconfigure the eastbound approach to provide a dedicated left-turn lane, a through lane, and a dedicated right-turn lane. Currently, a Class II bike lane is provided along Linden Street. As the mitigation measure would require removing striping for the bike lane, this would result in a secondary impact to bicyclists.

In addition to the secondary impacts that would occur as a result of removing a Class II bike lane, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

### 11) Aberdeen Drive & Linden Street

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS B during the AM peak hour and LOS E during the PM peak hour. As the intersection is degraded from acceptable operations (LOS D or better) to unacceptable (LOS E) with buildout of the Project during the PM peak hour, an impact occurs based on the City's significance thresholds.

**Mitigation:**

This intersection is expected to experience high bicyclist and pedestrian volumes with buildout of the Project as well as other planned housing and campus growth expected by 2025 in the area. Based upon the site access assumed under buildout conditions as part of this study, intersection signalization with a pedestrian only phase could be considered as an ultimate improvement at this intersection. With a traffic signal in place, the intersection operations are improved to LOS C during the PM peak hour under Buildout conditions. This improvement would require the addition of marked crosswalks, pedestrian scramble markings and a four-phase signal. However, as the traffic volumes and pedestrian flows at this intersection are highly dependent on the final site plan and site access configuration, the need for signalization should be reexamined once Phase 1 is complete and operational, and the remaining phases of the project are under final design. The need for a traffic signal should be based on existing and projected traffic volumes and bicycle and pedestrian crossings during peak travel hours upon project Buildout.

As the intersection is within the Campus and thus controlled by UC Riverside, this impact is considered less than significant.

**Significance after Mitigation:** *Less Than Significant*

### 12) University Avenue & Iowa Avenue

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS B during the AM peak hour and LOS D during the PM peak hour. As the intersection is degraded from acceptable operations (LOS D or better) to unacceptable operations (LOS E) during the PM peak hour an impact occurs based on the City's significance thresholds.

**Mitigation:** Mitigating this impact would require reconfiguring the southbound approach to provide a dedicated right-turn lane with 150 feet of dedicated storage. With the mitigation in place, the southbound approach would provide a dedicated left-turn lane, two through lanes, and a dedicated right-turn lane.

These mitigations could be accommodated within the existing right-of-way; however, the existing Class II bicycle lane could not be accommodated with the improvements, creating a secondary impact for bicyclists.

In addition to the secondary impacts that would occur as a result of removing a Class II bike lane, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

15) Big Springs Road & Watkins Drive

**Impact:** With the addition of the Project under Buildout conditions, this intersection operates at LOS F during both the AM and PM peak hours. As delay is increased by more than 1.0 seconds, a significant impact occurs based on the City's significance thresholds.

**Mitigation:** As this intersection does not meet signal warrants under this scenario, mitigating this impact would require reconfiguring the intersection to a single-lane roundabout. Under roundabout control, this intersection would operate acceptably at LOS C during the AM peak hour and LOS B during the PM peak hour.

While this mitigation measure is considered feasible and would improve intersection operations, UC Riverside does not have jurisdictional control over the identified intersection. As the intersection is controlled by the City of Riverside, any physical improvements would require agreement from the City and as the implementation of the identified mitigation cannot be guaranteed, this impact is found to be significant and unavoidable.

**Significance after Mitigation:** *Significant and Unavoidable*

## 13.0 VEHICLE MILES OF TRAVEL (VMT)

As a result of Senate Bill 743 (SB 743), the new recommended metric in the draft CEQA guidelines for transportation impacts is VMT per capita. Since the update to the CEQA guidelines is not yet final, a traditional LOS analysis has been completed for the study area. The VMT assessment is provided for informational purposes to meet the intention of SB 743 guidelines.

The California Governor's Office of Planning and Research (OPR) Proposed CEQA guidelines are documented below. Guidelines from the Proposed CEQA Guidelines Section 115064.3 are:

- **Land Use Projects:** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.
- **Transportation Projects:** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

When a transportation impact is evaluated, the recommended significance criteria is:

- The project-generated VMT would be considered significant if the VMT per household, service population, or commuter student, as applicable, does not meet the state recommended threshold of 15% less than the existing regional or citywide VMT per household, service population or commuter student.

For both the Existing Plus Phase 1 and Buildout scenarios, the Project is expected to reduce VMT due to the fact that the new student housing would eliminate the "commute trip" because commuter students would instead reside on campus and be close to academic as well as other support uses. In addition, the mixed-use amenities on the Project site would provide local retail and dining options for the residents under Buildout conditions.

While a VMT impact is not expected and the Project could likely be screened out of requiring a VMT analysis under SB 743 guidance, VMT metrics were compiled with the RivTAM model to compare the Project to Citywide VMT characteristics in Riverside. The metric for assessing VMT impacts that was identified as most appropriate for this project is the Home-Based Work and the Home-Based Other production trip lengths.

**Table 20** summarizes the VMT impact assessment and the comparison between the Citywide VMT per service population and the Project VMT per service population.

**TABLE 20 – PROJECT VMT IMPACT ASSESSMENT**

<b>VMT per Service Population</b>	<b>2012 (Model Baseline)</b>	<b>Existing (2017)</b>	<b>2025 (Project Buildout)</b>
Riverside	7.7	7.4	7.0
Project	2.1	1.9	1.6

As shown, VMT per service population in 2025 for the Project is 77 percent lower than VMT per service population for the City of Riverside. As the threshold for a VMT impact is 15 percent lower than the citywide VMT, no impact occurs under 2025 conditions.



## **APPENDIX A: TRAFFIC COUNTS**

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Chicago Ave & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-001  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Chicago Ave				Chicago Ave				3rd St				3rd St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	51	158	70	0	14	37	10	0	12	55	19	0	30	56	28	0					540
7:15 AM	39	127	51	0	43	49	12	0	19	78	17	1	25	68	57	0					586
7:30 AM	57	153	67	0	69	67	8	0	20	103	13	1	33	85	59	0					735
7:45 AM	47	195	77	0	49	62	23	0	27	117	18	0	49	126	66	0					856
8:00 AM	41	163	45	0	29	56	16	0	30	58	16	0	43	78	69	0					644
8:15 AM	32	156	42	0	26	48	14	0	24	42	16	0	31	38	50	0					519
8:30 AM	28	119	26	0	27	53	13	0	16	40	12	0	37	50	35	0					456
8:45 AM	24	116	32	0	14	61	12	2	12	47	17	0	33	48	44	0					462
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
	319	1187	410	0	271	433	108	2	160	540	128	2	281	549	408	0					4798
<b>APPROACH %'s:</b>	16.65%	61.95%	21.40%	0.00%	33.29%	53.19%	13.27%	0.25%	19.28%	65.06%	15.42%	0.24%	22.70%	44.35%	32.96%	0.00%					
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																				TOTAL
<b>PEAK HR VOL:</b>	184	638	240	0	190	234	59	0	96	356	64	2	150	357	251	0					2821
<b>PEAK HR FACTOR:</b>	0.807	0.818	0.779	0.000	0.688	0.873	0.641	0.000	0.800	0.761	0.889	0.500	0.765	0.708	0.909	0.000					0.824
			0.832				0.839				0.799				0.786						
PM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
4:00 PM	29	107	42	0	72	161	20	0	16	147	38	0	51	63	30	0	776				
4:15 PM	24	76	49	0	65	165	23	0	15	133	52	0	53	76	17	0	748				
4:30 PM	27	97	40	0	78	170	16	0	23	183	38	0	31	53	36	0	792				
4:45 PM	38	91	38	0	53	165	18	0	28	173	35	0	29	58	25	0	751				
5:00 PM	26	91	49	0	69	216	36	0	20	99	31	0	50	53	24	0	764				
5:15 PM	28	98	41	0	66	210	29	0	30	185	45	0	43	49	22	0	846				
5:30 PM	21	103	41	0	62	177	24	0	23	162	45	0	25	75	28	0	786				
5:45 PM	18	69	30	0	67	163	14	0	14	178	38	0	31	55	25	0	702				
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL				
	211	732	330	0	532	1427	180	0	169	1260	322	0	313	482	207	0	6165				
<b>APPROACH %'s:</b>	16.58%	57.50%	25.92%	0.00%	24.87%	66.71%	8.42%	0.00%	9.65%	71.96%	18.39%	0.00%	31.24%	48.10%	20.66%	0.00%					
<b>PEAK HR:</b>	04:30 PM - 05:30 PM																TOTAL				
<b>PEAK HR VOL:</b>	119	377	168	0	266	761	99	0	101	640	149	0	153	213	107	0	3153				
<b>PEAK HR FACTOR:</b>	0.783	0.962	0.857	0.000	0.853	0.881	0.688	0.000	0.842	0.865	0.828	0.000	0.765	0.918	0.743	0.000	0.932				
			0.994				0.877				0.856				0.931						



# National Data & Surveying Services Intersection Turning Movement Count

**Location:** I-215 SB & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-002  
**Date:** 11/14/2017

## Total

NS/EW Streets:	I-215 SB				I-215 SB				3rd St				3rd St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	95	1	85	0	0	122	34	0	39	59	0	0	435
7:15 AM	0	0	0	0	132	0	96	0	0	136	39	0	47	88	0	0	538
7:30 AM	0	0	0	0	138	0	118	0	0	210	30	0	30	133	0	0	659
7:45 AM	0	0	0	0	127	2	124	0	0	208	47	0	60	146	0	0	714
8:00 AM	0	0	0	0	94	1	101	0	0	99	46	0	53	103	0	0	497
8:15 AM	0	0	0	0	93	1	72	0	0	92	25	0	46	69	0	0	398
8:30 AM	0	0	0	0	86	1	58	0	0	77	33	0	44	81	0	0	380
8:45 AM	0	0	0	0	83	0	83	0	0	74	30	0	48	69	0	0	387
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s:</b>	0	0	0	0	848	6	737	0	0	1018	284	0	367	748	0	0	4008
					53.30%	0.38%	46.32%	0.00%	0.00%	78.19%	21.81%	0.00%	32.91%	67.09%	0.00%	0.00%	
<b>PEAK HR:</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	0	0	0	0	491	3	439	0	0	653	162	0	190	470	0	0	2408
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.889	0.375	0.885	0.000	0.000	0.777	0.862	0.000	0.792	0.805	0.000	0.000	0.843
							0.911				0.799				0.801		
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	0	0	0	0	96	9	36	0	0	126	146	0	65	105	0	0
4:15 PM	0	0	0	0	77	3	45	0	0	122	155	0	80	117	0	0	599
4:30 PM	0	0	0	0	87	5	30	0	0	156	162	0	82	85	0	0	607
4:45 PM	0	0	0	0	74	2	21	0	0	143	137	0	92	103	0	0	572
5:00 PM	0	0	0	0	80	5	41	0	0	116	122	0	82	86	0	0	532
5:15 PM	0	0	0	0	62	6	26	0	0	167	133	0	87	100	0	0	581
5:30 PM	0	0	0	0	55	8	17	0	0	139	145	0	88	104	0	0	556
5:45 PM	0	0	0	0	57	7	19	0	0	130	173	0	68	102	0	0	556
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s:</b>	0	0	0	0	588	45	235	0	0	1099	1173	0	644	802	0	0	4586
					67.74%	5.18%	27.07%	0.00%	0.00%	48.37%	51.63%	0.00%	44.54%	55.46%	0.00%	0.00%	
<b>PEAK HR:</b>	<b>04:00 PM - 05:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	0	0	0	0	334	19	132	0	0	547	600	0	319	410	0	0	2361
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.870	0.528	0.733	0.000	0.000	0.877	0.926	0.000	0.867	0.876	0.000	0.000	0.972
							0.860				0.902				0.925		

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** I-215 NB & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-003  
**Date:** 11/14/2017

## Total

NS/EW Streets:	I-215 NB				I-215 NB				3rd St				3rd St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0.5	0.5	1	0	0	0	0	0	2	2	0	0	0	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	0	8	0	0	0	0	0	77	137	0	0	0	101	256	0	581
7:15 AM	26	0	31	0	0	0	0	0	70	188	0	0	0	108	242	0	665
7:30 AM	47	1	52	0	0	0	0	0	89	252	0	0	0	118	197	0	756
7:45 AM	43	2	102	0	0	0	0	0	69	259	0	0	0	163	187	0	825
8:00 AM	46	1	97	0	0	0	0	0	52	151	0	0	0	108	168	0	623
8:15 AM	36	0	71	0	0	0	0	0	49	138	0	0	0	88	183	0	565
8:30 AM	34	0	43	0	0	0	0	0	33	131	0	0	0	86	173	0	500
8:45 AM	37	0	54	0	0	0	0	0	36	120	0	0	0	91	113	0	451
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	271	4	458	0	0	0	0	0	475	1376	0	0	0	863	1519	0	4966
	36.97%	0.55%	62.48%	0.00%					25.66%	74.34%	0.00%	0.00%	0.00%	36.23%	63.77%	0.00%	
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																
<b>PEAK HR VOL:</b>	162	4	282	0	0	0	0	0	280	850	0	0	0	497	794	0	2869
<b>PEAK HR FACTOR:</b>	0.862	0.500	0.691	0.000	0.000	0.000	0.000	0.000	0.787	0.820	0.000	0.000	0.000	0.762	0.820	0.000	0.869
	0.762								0.828				0.922				
PM	0.5	0.5	1	0	0	0	0	0	2	2	0	0	0	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	49	0	50	0	0	0	0	0	52	169	0	0	0	122	145	0	587
4:15 PM	49	0	57	0	0	0	0	0	52	159	0	0	0	153	132	0	602
4:30 PM	40	1	82	0	0	0	0	0	58	176	0	0	0	137	157	0	651
4:45 PM	42	0	80	0	0	0	0	0	41	167	0	0	0	136	159	0	625
5:00 PM	31	0	70	0	0	0	0	0	67	138	0	0	0	151	156	0	613
5:15 PM	36	0	71	0	0	0	0	0	43	175	0	0	0	153	180	0	658
5:30 PM	43	0	64	0	0	0	0	0	48	148	0	0	0	161	180	0	644
5:45 PM	44	0	76	0	0	0	0	0	29	150	0	0	0	112	145	0	556
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	334	1	550	0	0	0	0	0	390	1282	0	0	0	1125	1254	0	4936
	37.74%	0.11%	62.15%	0.00%					23.33%	76.67%	0.00%	0.00%	0.00%	47.29%	52.71%	0.00%	
<b>PEAK HR:</b>	04:30 PM - 05:30 PM																
<b>PEAK HR VOL:</b>	149	1	303	0	0	0	0	0	209	656	0	0	0	577	652	0	2547
<b>PEAK HR FACTOR:</b>	0.887	0.250	0.924	0.000	0.000	0.000	0.000	0.000	0.780	0.932	0.000	0.000	0.000	0.943	0.906	0.000	0.968
	0.921								0.924				0.923				

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Iowa Ave & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-004  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Iowa Ave				Iowa Ave				3rd St				3rd St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	3	0	0	2	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	52	192	18	0	26	50	86	0	39	64	21	0	20	196	20	0	784
7:15 AM	47	160	17	0	25	78	90	2	63	92	51	0	23	176	23	0	847
7:30 AM	45	165	37	0	30	155	83	0	108	132	37	0	50	140	27	0	1009
7:45 AM	31	118	24	0	27	158	91	0	151	159	41	0	54	174	37	0	1065
8:00 AM	39	143	32	0	30	96	88	2	110	85	27	0	17	122	22	0	813
8:15 AM	43	121	26	0	19	73	78	3	84	73	20	0	20	113	31	0	704
8:30 AM	46	114	10	0	23	92	67	1	59	73	22	0	12	101	15	0	635
8:45 AM	36	93	13	0	24	70	69	1	56	63	19	0	33	80	17	0	574
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	339	1106	177	0	204	772	652	9	670	741	238	0	229	1102	192	0	6431
	20.90%	68.19%	10.91%	0.00%	12.46%	47.16%	39.83%	0.55%	40.63%	44.94%	14.43%	0.00%	15.04%	72.36%	12.61%	0.00%	
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	162	586	110	0	112	487	352	4	432	468	156	0	144	612	109	0	3734
<b>PEAK HR FACTOR:</b>	0.862	0.888	0.743	0.000	0.933	0.771	0.967	0.500	0.715	0.736	0.765	0.000	0.667	0.869	0.736	0.000	0.877
	0.868				0.865				0.752				0.816				
PM	1	2	0	0	1	3	0	0	2	2	1	0	1	2	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	33	73	22	1	35	168	100	1	67	76	27	1	24	110	37	0	775
4:15 PM	47	115	34	0	40	163	104	3	62	90	40	0	24	110	33	0	865
4:30 PM	48	83	35	0	35	156	90	4	76	85	55	0	24	127	39	0	857
4:45 PM	40	107	30	0	31	194	99	4	71	104	44	0	22	120	25	0	891
5:00 PM	44	121	39	0	36	199	126	0	63	64	34	1	25	120	35	0	907
5:15 PM	46	100	28	0	35	189	89	4	86	92	42	1	37	154	40	0	943
5:30 PM	42	132	33	0	35	181	102	2	72	83	39	1	26	140	44	1	933
5:45 PM	45	115	23	2	58	173	76	2	73	77	38	0	36	100	38	0	856
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	345	846	244	3	305	1423	786	20	570	671	319	4	218	781	291	1	7027
	23.99%	58.83%	16.97%	0.21%	12.04%	56.16%	31.02%	0.79%	36.45%	42.90%	20.40%	0.26%	14.62%	65.79%	19.52%	0.07%	
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	172	460	130	0	137	763	416	10	292	343	159	3	110	534	144	1	3674
<b>PEAK HR FACTOR:</b>	0.935	0.871	0.833	0.000	0.951	0.959	0.825	0.625	0.849	0.825	0.903	0.750	0.743	0.867	0.818	0.250	0.974
	0.920				0.918				0.902				0.854				

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Rustin Ave & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-005  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Rustin Ave				Rustin Ave				3rd St				3rd St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	34	2	2	0	2	1	10	0	9	58	19	0	2	194	7	0	340
7:15 AM	43	8	15	0	7	2	14	0	9	88	25	0	3	171	10	0	395
7:30 AM	64	15	24	0	18	12	21	0	26	138	45	0	25	130	27	0	545
7:45 AM	54	38	20	0	31	17	34	0	64	133	27	0	13	108	28	0	567
8:00 AM	11	14	11	0	16	11	16	0	26	116	11	0	11	114	20	0	377
8:15 AM	9	3	3	0	4	2	14	0	8	74	12	1	12	130	15	0	287
8:30 AM	7	2	9	0	3	3	5	0	4	69	12	0	3	103	5	0	225
8:45 AM	4	0	3	0	5	3	3	0	6	74	17	0	2	99	3	0	219
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	57.22%	20.76%	22.03%	0.00%	33.86%	20.08%	46.06%	0.00%	14.19%	70.03%	15.69%	0.09%	5.75%	84.94%	9.31%	0.00%	2955
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																TOTAL
<b>PEAK HR VOL:</b>	172	75	70	0	72	42	85	0	125	475	108	0	52	523	85	0	1884
<b>PEAK HR FACTOR:</b>	0.672	0.493	0.729	0.000	0.581	0.618	0.625	0.000	0.488	0.861	0.600	0.000	0.520	0.765	0.759	0.000	0.831
			0.708				0.607				0.790				0.897		
PM	1	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	30	2	18	0	8	7	17	0	9	119	13	0	9	112	12	0	356
4:15 PM	27	4	10	0	13	3	8	0	9	117	18	0	9	120	13	0	351
4:30 PM	26	6	9	0	11	6	9	0	7	124	15	0	7	127	6	0	353
4:45 PM	18	6	2	0	16	10	11	0	8	141	17	0	8	119	12	0	368
5:00 PM	24	10	13	0	18	5	13	0	10	108	6	0	9	138	9	0	363
5:15 PM	29	5	13	0	17	4	8	0	20	105	19	0	5	167	15	0	407
5:30 PM	15	5	11	0	22	9	11	0	10	123	9	0	11	168	9	0	403
5:45 PM	25	4	6	0	15	8	10	0	11	120	20	0	7	120	13	0	359
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	61.01%	13.21%	25.79%	0.00%	46.33%	20.08%	33.59%	0.00%	7.25%	82.64%	10.10%	0.00%	5.31%	87.43%	7.27%	0.00%	2960
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																TOTAL
<b>PEAK HR VOL:</b>	86	26	39	0	73	28	43	0	48	477	51	0	33	592	45	0	1541
<b>PEAK HR FACTOR:</b>	0.741	0.650	0.750	0.000	0.830	0.700	0.827	0.000	0.600	0.846	0.671	0.000	0.750	0.881	0.750	0.000	0.947
			0.803				0.857				0.867				0.891		

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Canyon Crest Dr & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-006  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Canyon Crest Dr				Canyon Crest Dr				3rd St				3rd St				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL	
7:00 AM	18	7	9	0	0	3	9	0	6	36	19	0	12	147	0	0	266	
7:15 AM	8	4	11	0	0	15	15	0	9	69	31	0	25	152	1	0	340	
7:30 AM	16	11	22	0	2	18	11	0	15	107	46	0	42	142	2	0	434	
7:45 AM	10	14	31	0	4	34	10	0	15	139	39	0	47	117	3	0	463	
8:00 AM	12	15	24	0	2	17	11	0	5	112	25	0	28	115	7	0	373	
8:15 AM	13	10	17	0	7	9	9	0	7	61	20	0	26	136	6	0	321	
8:30 AM	15	2	12	0	3	13	14	0	2	51	20	0	35	71	4	0	242	
8:45 AM	11	14	13	0	1	17	11	0	3	56	27	0	24	79	4	0	260	
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s:</b>	103	77	139	0	19	126	90	0	62	631	227	0	239	959	27	0	2699	
	32.29%	24.14%	43.57%	0.00%	8.09%	53.62%	38.30%	0.00%	6.74%	68.59%	24.67%	0.00%	19.51%	78.29%	2.20%	0.00%		
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																	TOTAL
<b>PEAK HR VOL:</b>	46	44	88	0	8	84	47	0	44	427	141	0	142	526	13	0	1610	
<b>PEAK HR FACTOR:</b>	0.719	0.733	0.710	0.000	0.500	0.618	0.783	0.000	0.733	0.768	0.766	0.000	0.755	0.865	0.464	0.000	0.869	
	0.809				0.724				0.793				0.915					
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL	
4:00 PM	20	14	28	0	2	23	15	0	10	91	27	0	17	85	2	0	334	
4:15 PM	30	18	34	0	0	14	9	0	9	99	27	0	25	90	2	0	357	
4:30 PM	24	15	24	0	2	19	11	0	11	97	34	0	30	102	1	0	370	
4:45 PM	16	17	24	0	3	31	15	0	14	102	36	0	35	94	7	0	394	
5:00 PM	27	27	49	0	2	22	12	0	5	101	27	0	38	112	2	0	424	
5:15 PM	42	22	42	0	6	31	14	0	9	99	35	0	26	125	4	0	455	
5:30 PM	29	23	28	0	4	26	19	0	12	106	28	0	33	132	4	0	444	
5:45 PM	21	17	34	0	3	24	17	0	7	88	28	0	36	101	4	0	380	
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s:</b>	209	153	263	0	22	190	112	0	77	783	242	0	240	841	26	0	3158	
	33.44%	24.48%	42.08%	0.00%	6.79%	58.64%	34.57%	0.00%	6.99%	71.05%	21.96%	0.00%	21.68%	75.97%	2.35%	0.00%		
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																	TOTAL
<b>PEAK HR VOL:</b>	114	89	143	0	15	110	60	0	40	408	126	0	132	463	17	0	1717	
<b>PEAK HR FACTOR:</b>	0.679	0.824	0.730	0.000	0.625	0.887	0.789	0.000	0.714	0.962	0.875	0.000	0.868	0.877	0.607	0.000	0.943	
	0.816				0.907				0.944				0.905					

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Watkins Dr & 3rd St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-007  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Watkins Dr				Watkins Dr				3rd St				3rd St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	1	0.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	97	110	4	0	2	25	4	1	6	20	23	0	11	55	14	0					372
7:15 AM	106	114	2	0	2	21	12	0	1	22	32	0	5	68	22	0					407
7:30 AM	81	124	11	0	6	39	3	0	1	46	56	0	8	93	20	0					488
7:45 AM	47	125	18	0	8	35	4	0	2	88	44	0	15	114	18	0					518
8:00 AM	48	133	17	1	8	27	6	0	2	89	43	0	18	93	6	0					491
8:15 AM	51	86	3	0	5	17	4	0	3	36	24	0	18	100	11	0					358
8:30 AM	35	121	2	0	2	18	5	0	3	28	27	0	10	53	7	0					311
8:45 AM	57	109	7	0	4	25	5	0	3	14	28	0	11	52	5	0					320
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
<b>APPROACH %'s:</b>	34.59%	61.10%	4.24%	0.07%	12.85%	71.88%	14.93%	0.35%	3.28%	53.51%	43.21%	0.00%	11.61%	75.94%	12.45%	0.00%					3265
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																				TOTAL
<b>PEAK HR VOL:</b>	282	496	48	1	24	122	25	0	6	245	175	0	46	368	66	0					1904
<b>PEAK HR FACTOR:</b>	0.665	0.932	0.667	0.250	0.750	0.782	0.521	0.000	0.750	0.688	0.781	0.000	0.639	0.807	0.750	0.000					0.919
			0.931				0.891				0.795				0.816						
PM	1	0.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0					
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
4:00 PM	39	56	11	0	19	121	9	0	4	51	51	0	11	50	5	0					427
4:15 PM	48	71	12	0	25	111	8	0	3	59	60	0	9	55	8	0					469
4:30 PM	61	57	7	0	15	124	12	0	5	53	55	0	7	49	2	0					447
4:45 PM	64	58	11	0	32	110	5	0	5	63	65	0	12	53	1	0					479
5:00 PM	70	54	9	0	50	116	3	0	1	66	58	0	12	53	3	0					495
5:15 PM	61	80	17	0	33	109	14	0	3	87	54	0	5	56	7	0					526
5:30 PM	64	57	19	0	32	114	21	0	3	84	62	0	8	58	6	0					528
5:45 PM	38	52	25	0	26	120	9	0	1	59	48	0	14	72	8	0					472
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
<b>APPROACH %'s:</b>	42.75%	46.59%	10.66%	0.00%	18.74%	74.72%	6.54%	0.00%	2.50%	52.20%	45.30%	0.00%	13.83%	79.08%	7.09%	0.00%					3843
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																				TOTAL
<b>PEAK HR VOL:</b>	259	249	56	0	147	449	43	0	12	300	239	0	37	220	17	0					2028
<b>PEAK HR FACTOR:</b>	0.925	0.778	0.737	0.000	0.735	0.968	0.512	0.000	0.600	0.862	0.919	0.000	0.771	0.948	0.607	0.000					0.960
			0.892				0.945				0.924				0.951						

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Iowa Ave & W Linden St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-008  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Iowa Ave				Iowa Ave				W Linden St				W Linden St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	1.5	0.5	0	1	1	1	0	1	0.5	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	19	230	18	0	16	58	22	0	20	11	6	0	9	9	9	0	427
7:15 AM	25	157	36	0	39	82	36	0	19	14	5	0	10	10	19	0	452
7:30 AM	33	164	46	0	41	106	75	0	27	26	7	0	21	30	14	0	590
7:45 AM	53	126	45	0	21	148	110	0	31	34	9	1	27	38	14	0	657
8:00 AM	30	138	28	0	24	92	31	0	27	21	12	0	9	15	21	0	448
8:15 AM	10	127	15	0	7	86	16	0	12	7	8	0	16	9	16	0	329
8:30 AM	7	111	20	2	18	90	16	0	14	6	2	0	13	6	16	0	321
8:45 AM	8	99	19	0	16	90	12	0	11	8	5	0	12	12	14	0	306
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	11.81%	73.56%	14.50%	0.13%	14.54%	60.06%	25.40%	0.00%	46.94%	37.03%	15.74%	0.29%	31.71%	34.96%	33.33%	0.00%	3530
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																TOTAL
<b>PEAK HR VOL:</b>	141	585	155	0	125	428	252	0	104	95	33	1	67	93	68	0	2147
<b>PEAK HR FACTOR:</b>	0.665	0.892	0.842	0.000	0.762	0.723	0.573	0.000	0.839	0.699	0.688	0.250	0.620	0.612	0.810	0.000	0.817
	0.906				0.721				0.777				0.722				
PM	1	2	1	0	1	1.5	0.5	0	1	1	1	0	1	0.5	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	11	89	37	1	24	177	17	1	17	27	25	0	34	19	16	0	495
4:15 PM	15	125	33	0	16	184	30	0	30	21	16	0	19	15	25	0	529
4:30 PM	6	114	34	0	22	184	19	0	21	24	26	0	24	17	16	0	507
4:45 PM	12	155	43	2	27	220	25	1	15	25	18	0	23	14	15	0	595
5:00 PM	9	143	29	0	24	207	32	2	27	32	29	0	31	23	14	0	602
5:15 PM	11	143	35	1	21	233	28	0	21	38	27	0	34	30	21	0	643
5:30 PM	16	146	42	0	21	198	25	0	35	27	26	0	45	20	23	0	624
5:45 PM	11	133	36	0	27	201	27	0	16	22	23	0	28	12	15	0	551
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	6.35%	73.18%	20.18%	0.28%	9.13%	80.48%	10.19%	0.20%	30.95%	36.73%	32.31%	0.00%	44.65%	28.14%	27.20%	0.00%	4546
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																TOTAL
<b>PEAK HR VOL:</b>	48	587	149	3	93	858	110	3	98	122	100	0	133	87	73	0	2464
<b>PEAK HR FACTOR:</b>	0.750	0.947	0.866	0.375	0.861	0.921	0.859	0.375	0.700	0.803	0.862	0.000	0.739	0.725	0.793	0.000	0.958
	0.928				0.943				0.909				0.832				

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Canyon Crest Dr & W Linden St  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-009  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Canyon Crest Dr				Canyon Crest Dr				W Linden St				W Linden St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	4	27	20	0	8	11	8	0	1	10	9	0	7	9	10	0	124
7:15 AM	9	21	22	0	14	34	16	0	4	6	16	0	18	6	7	0	173
7:30 AM	26	43	26	0	15	60	28	0	9	14	15	0	11	6	8	0	261
7:45 AM	25	37	49	0	13	76	21	0	21	17	30	0	14	15	10	0	328
8:00 AM	20	34	46	0	13	47	8	0	13	23	22	0	15	7	9	0	257
8:15 AM	4	27	34	0	5	33	9	0	5	7	10	0	16	9	10	0	169
8:30 AM	8	28	21	0	17	40	11	0	4	11	13	0	16	13	7	0	189
8:45 AM	9	25	27	0	14	41	5	0	9	17	15	0	23	8	6	0	199
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	105	242	245	0	99	342	106	0	66	105	130	0	120	73	67	0	1700
	17.74%	40.88%	41.39%	0.00%	18.10%	62.52%	19.38%	0.00%	21.93%	34.88%	43.19%	0.00%	46.15%	28.08%	25.77%	0.00%	
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																
<b>PEAK HR VOL:</b>	80	135	143	0	55	217	73	0	47	60	83	0	58	34	34	0	1019
<b>PEAK HR FACTOR:</b>	0.769	0.785	0.730	0.000	0.917	0.714	0.652	0.000	0.560	0.652	0.692	0.000	0.806	0.567	0.850	0.000	0.777
			0.806				0.784				0.699				0.808		
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	6	32	34	0	20	53	1	0	10	21	28	0	42	22	10	0	279
4:15 PM	17	47	37	0	17	48	13	0	17	21	25	0	32	13	13	0	300
4:30 PM	8	30	27	0	13	63	9	0	5	22	28	0	40	20	25	0	290
4:45 PM	14	32	28	0	27	67	10	0	5	34	33	0	44	23	13	0	330
5:00 PM	24	69	35	0	26	85	6	0	11	15	23	0	41	19	33	0	387
5:15 PM	26	54	37	0	23	70	12	0	15	22	26	0	52	27	31	0	395
5:30 PM	18	41	20	1	15	63	15	0	19	20	31	0	38	24	17	0	322
5:45 PM	15	47	34	0	20	54	8	0	11	24	19	0	37	16	12	0	297
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	128	352	252	1	161	503	74	0	93	179	213	0	326	164	154	0	2600
	17.46%	48.02%	34.38%	0.14%	21.82%	68.16%	10.03%	0.00%	19.18%	36.91%	43.92%	0.00%	50.62%	25.47%	23.91%	0.00%	
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																
<b>PEAK HR VOL:</b>	82	196	120	1	91	285	43	0	50	91	113	0	175	93	94	0	1434
<b>PEAK HR FACTOR:</b>	0.788	0.710	0.811	0.250	0.843	0.838	0.717	0.000	0.658	0.669	0.856	0.000	0.841	0.861	0.712	0.000	0.908
			0.779				0.895				0.882				0.823		



# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Aberdeen Dr & W Linden St  
**City:** Riverside  
**Control:** 3-Way Stop(NB/EB/WB)

**Project ID:** 17-06180-010  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Aberdeen Dr				Aberdeen Dr				W Linden St				W Linden St				
<b>AM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	15	0	8	0	0	0	0	0	0	13	17	0	6	3	0	0	62
7:15 AM	10	0	6	0	0	0	0	0	0	11	20	0	4	10	0	0	61
7:30 AM	12	0	3	0	0	0	0	0	0	23	25	0	10	8	0	0	81
7:45 AM	23	0	6	0	0	0	0	0	0	27	52	0	5	12	0	0	125
8:00 AM	25	0	14	0	0	0	0	0	0	24	53	0	13	6	0	0	135
8:15 AM	27	0	3	0	0	0	0	0	0	18	23	0	7	8	0	0	86
8:30 AM	24	0	11	0	0	0	0	0	0	12	33	0	11	10	0	0	101
8:45 AM	27	0	5	0	0	0	0	0	0	18	37	0	10	8	0	0	105
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	163	0	56	0	0	0	0	0	0	146	260	0	66	65	0	0	756
<b>APPROACH %'s:</b>	74.43%	0.00%	25.57%	0.00%					0.00%	35.96%	64.04%	0.00%	50.38%	49.62%	0.00%	0.00%	
<b>PEAK HR:</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL:</b>	99	0	34	0	0	0	0	0	0	81	161	0	36	36	0	0	447
<b>PEAK HR FACTOR:</b>	0.917	0.000	0.607	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.759	0.000	0.692	0.750	0.000	0.000	0.828
			0.853								0.766				0.857		
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	40	0	8	0	0	0	0	0	0	25	47	0	4	19	0	0	143
4:15 PM	39	0	9	0	0	0	0	0	0	18	54	0	11	21	0	0	152
4:30 PM	43	0	9	0	0	0	0	0	0	16	38	0	9	19	0	0	134
4:45 PM	49	0	13	0	0	0	0	0	0	16	64	0	7	26	0	0	175
5:00 PM	85	0	9	0	0	0	0	0	0	13	66	0	9	29	0	0	211
5:15 PM	72	0	14	0	0	0	0	0	0	26	55	0	10	22	0	0	199
5:30 PM	41	0	7	0	0	0	0	0	0	21	31	0	11	28	0	0	139
5:45 PM	44	0	6	0	0	0	0	0	0	17	56	0	11	19	0	0	153
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	413	0	75	0	0	0	0	0	0	152	411	0	72	183	0	0	1306
<b>APPROACH %'s:</b>	84.63%	0.00%	15.37%	0.00%					0.00%	27.00%	73.00%	0.00%	28.24%	71.76%	0.00%	0.00%	
<b>PEAK HR:</b>	04:45 PM - 05:45 PM																TOTAL
<b>PEAK HR VOL:</b>	247	0	43	0	0	0	0	0	0	76	216	0	37	105	0	0	724
<b>PEAK HR FACTOR:</b>	0.726	0.000	0.768	0.000	0.000	0.000	0.000	0.000	0.000	0.731	0.818	0.000	0.841	0.905	0.000	0.000	0.858
			0.771								0.901				0.910		

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Iowa Ave & University Ave  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-011  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Iowa Ave				Iowa Ave				University Ave				University Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	2 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	26	178	47	0	15	38	16	0	18	55	5	1	6	86	70	7	568
7:15 AM	29	163	66	0	24	50	20	0	43	66	9	1	4	30	20	4	529
7:30 AM	19	166	43	0	38	64	33	1	56	84	7	2	6	41	22	3	585
7:45 AM	10	134	26	0	44	96	42	1	35	63	16	1	8	42	27	4	549
8:00 AM	10	129	26	0	37	55	21	1	43	76	14	0	11	54	24	11	512
8:15 AM	10	114	15	0	30	45	35	1	32	66	9	0	3	34	23	3	420
8:30 AM	12	92	21	0	32	54	25	2	35	53	5	3	6	23	13	5	381
8:45 AM	19	83	21	0	34	40	22	3	29	59	16	1	5	43	27	3	405
<b>TOTAL VOLUMES:</b>	NL 135	NT 1059	NR 265	NU 0	SL 254	ST 442	SR 214	SU 9	EL 291	ET 522	ER 81	EU 9	WL 49	WT 353	WR 226	WU 40	TOTAL 3949
<b>APPROACH %'s:</b>	9.25%	72.58%	18.16%	0.00%	27.64%	48.10%	23.29%	0.98%	32.23%	57.81%	8.97%	1.00%	7.34%	52.84%	33.83%	5.99%	
<b>PEAK HR:</b>	<b>07:00 AM - 08:00 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	84	641	182	0	121	248	111	2	152	268	37	5	24	199	139	18	2231
<b>PEAK HR FACTOR:</b>	0.724	0.900	0.689	0.000	0.688	0.646	0.661	0.500	0.679	0.798	0.578	0.625	0.750	0.578	0.496	0.643	0.953
	0.879																0.658
	0.775																0.562
PM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	2 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:00 PM	26	64	15	0	52	124	58	3	61	144	21	1	13	58	22	17	679
4:15 PM	29	71	18	0	59	103	48	2	42	162	26	1	11	61	38	7	678
4:30 PM	24	59	20	0	53	144	44	5	48	143	26	2	15	70	24	6	683
4:45 PM	18	71	26	0	48	148	38	1	90	188	24	2	10	59	37	4	764
5:00 PM	24	95	21	0	54	153	43	2	52	161	29	2	24	69	37	8	774
5:15 PM	37	77	27	0	52	146	45	4	55	175	40	3	16	76	26	16	795
5:30 PM	44	92	36	0	58	152	48	4	73	183	30	2	20	82	20	9	853
5:45 PM	27	85	27	0	57	137	43	4	56	173	32	6	17	81	30	7	782
<b>TOTAL VOLUMES:</b>	NL 229	NT 614	NR 190	NU 0	SL 433	ST 1107	SR 367	SU 25	EL 477	ET 1329	ER 228	EU 19	WL 126	WT 556	WR 234	WU 74	TOTAL 6008
<b>APPROACH %'s:</b>	22.17%	59.44%	18.39%	0.00%	22.41%	57.30%	19.00%	1.29%	23.23%	64.73%	11.11%	0.93%	12.73%	56.16%	23.64%	7.47%	
<b>PEAK HR:</b>	<b>05:00 PM - 06:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL:</b>	132	349	111	0	221	588	179	14	236	692	131	13	77	308	113	40	3204
<b>PEAK HR FACTOR:</b>	0.750	0.918	0.771	0.000	0.953	0.961	0.932	0.875	0.808	0.945	0.819	0.542	0.802	0.939	0.764	0.625	0.939
	0.860																0.956
	0.931																0.975

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** I-215 SB & University Ave  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-012  
**Date:** 11/14/2017

## Total

NS/EW Streets:	I-215 SB				I-215 SB				University Ave				University Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	0	0	0	1	0	1	0	0	1	1	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	34	0	34	0	0	76	54	0	10	145	0	0	353
7:15 AM	0	0	0	0	51	0	40	0	0	118	53	0	17	55	0	0	334
7:30 AM	0	0	0	0	96	0	59	0	0	120	66	0	14	58	0	0	413
7:45 AM	0	0	0	0	122	0	57	0	0	83	51	0	7	93	0	0	413
8:00 AM	0	0	0	0	78	2	54	0	0	81	69	0	18	76	0	0	378
8:15 AM	0	0	0	0	55	0	33	0	0	67	46	0	12	59	0	0	272
8:30 AM	0	0	0	0	57	1	43	0	0	53	67	0	6	68	0	0	295
8:45 AM	0	0	0	0	55	0	57	0	0	62	63	0	9	87	0	0	333
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	0	0	0	0	548	3	377	0	0	660	469	0	93	641	0	0	2791
					59.05%	0.32%	40.63%	0.00%	0.00%	58.46%	41.54%	0.00%	12.67%	87.33%	0.00%	0.00%	
<b>PEAK HR:</b>	<b>07:15 AM - 08:15 AM</b>																TOTAL
<b>PEAK HR VOL:</b>	0	0	0	0	347	2	210	0	0	402	239	0	56	282	0	0	1538
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.711	0.250	0.890	0.000	0.000	0.838	0.866	0.000	0.778	0.758	0.000	0.000	0.931
							0.781				0.862				0.845		
PM	0	0	0	0	1	0	1	0	0	1	1	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	18	0	27	0	0	116	138	0	36	93	0	0	428
4:15 PM	0	0	0	0	20	0	11	0	0	117	163	0	23	119	0	0	453
4:30 PM	0	0	0	0	21	0	26	0	0	100	141	0	22	104	0	0	414
4:45 PM	0	0	0	0	16	0	17	0	0	124	160	0	12	102	0	0	431
5:00 PM	0	0	0	0	13	1	17	0	0	125	161	0	44	130	0	0	491
5:15 PM	0	0	0	0	11	0	23	0	0	114	176	0	42	120	0	0	486
5:30 PM	0	0	0	0	8	1	21	0	0	121	192	0	40	118	0	0	501
5:45 PM	0	0	0	0	15	0	27	0	0	97	164	0	26	114	0	0	443
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	0	0	0	0	122	2	169	0	0	914	1295	0	245	900	0	0	3647
					41.64%	0.68%	57.68%	0.00%	0.00%	41.38%	58.62%	0.00%	21.40%	78.60%	0.00%	0.00%	
<b>PEAK HR:</b>	<b>05:00 PM - 06:00 PM</b>																TOTAL
<b>PEAK HR VOL:</b>	0	0	0	0	47	2	88	0	0	457	693	0	152	482	0	0	1921
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.783	0.500	0.815	0.000	0.000	0.914	0.902	0.000	0.864	0.927	0.000	0.000	0.959
							0.815				0.919				0.911		

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** I-215 NB & University Ave  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-013  
**Date:** 11/14/2017

## Total

NS/EW Streets:	I-215 NB				I-215 NB				University Ave				University Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	0	0	0	2	0	1	0	1	1	0	0	0	1	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	16	0	116	4	62	48	0	0	0	31	83	0	360
7:15 AM	0	0	0	0	7	0	25	0	74	83	0	0	0	46	78	0	313
7:30 AM	0	0	0	0	9	0	30	0	77	146	0	0	0	41	63	0	366
7:45 AM	0	0	0	0	15	0	52	1	30	175	0	0	0	49	48	0	370
8:00 AM	0	0	0	0	16	0	37	0	40	115	0	0	0	52	25	0	285
8:15 AM	0	0	0	0	11	0	32	0	34	88	0	0	0	40	27	0	232
8:30 AM	0	0	0	0	8	0	34	0	20	94	0	0	0	42	21	0	219
8:45 AM	0	0	0	0	11	0	50	1	29	87	0	0	0	47	27	0	252
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	0	0	0	0	93	0	376	6	366	836	0	0	0	348	372	0	2397
					19.58%	0.00%	79.16%	1.26%	30.45%	69.55%	0.00%	0.00%	0.00%	48.33%	51.67%	0.00%	
<b>PEAK HR:</b>	07:00 AM - 08:00 AM																
<b>PEAK HR VOL:</b>	0	0	0	0	47	0	223	5	243	452	0	0	0	167	272	0	1409
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.734	0.000	0.481	0.313	0.789	0.646	0.000	0.000	0.000	0.852	0.819	0.000	0.952
							0.506				0.779				0.885		
PM	0	0	0	0	2	0	1	0	1	1	0	0	0	1	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	17	0	30	0	47	87	0	0	0	94	53	0	328
4:15 PM	0	0	0	0	4	0	55	1	51	82	0	0	0	87	34	0	314
4:30 PM	0	0	0	0	12	0	58	0	42	81	0	0	0	76	62	0	331
4:45 PM	0	0	0	0	17	0	54	0	38	101	0	0	0	59	51	0	320
5:00 PM	0	0	0	0	19	0	44	0	35	96	0	0	0	125	91	0	410
5:15 PM	0	0	0	0	18	0	49	0	46	77	0	0	0	110	92	0	392
5:30 PM	0	0	0	0	17	0	54	0	50	76	0	0	0	110	55	0	362
5:45 PM	0	0	0	0	20	0	51	0	36	78	0	0	0	92	56	0	333
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	0	0	0	0	124	0	395	1	345	678	0	0	0	753	494	0	2790
					23.85%	0.00%	75.96%	0.19%	33.72%	66.28%	0.00%	0.00%	0.00%	60.38%	39.62%	0.00%	
<b>PEAK HR:</b>	05:00 PM - 06:00 PM																
<b>PEAK HR VOL:</b>	0	0	0	0	74	0	198	0	167	327	0	0	0	437	294	0	1497
<b>PEAK HR FACTOR:</b>	0.000	0.000	0.000	0.000	0.925	0.000	0.917	0.000	0.835	0.852	0.000	0.000	0.000	0.874	0.799	0.000	0.913
							0.958				0.943				0.846		

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Watkins Dr & Big Springs Rd  
**City:** Riverside  
**Control:** 4-Way Stop

**Project ID:** 17-06180-014  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Watkins Dr				Watkins Dr				Big Springs Rd				Big Springs Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	8	183	0	0	4	38	6	0	5	1	5	0	1	3	19	0	273
7:15 AM	14	154	3	0	3	39	8	0	4	2	6	0	3	8	45	0	289
7:30 AM	42	157	7	0	7	62	10	0	2	1	5	0	9	6	39	0	347
7:45 AM	34	135	12	0	3	45	35	0	5	2	11	0	1	14	45	0	342
8:00 AM	37	141	6	0	2	42	30	0	6	4	9	0	1	7	12	0	297
8:15 AM	29	135	6	0	2	38	17	0	7	1	8	0	2	3	8	0	256
8:30 AM	36	147	2	0	1	25	22	0	6	2	3	0	1	4	9	0	258
8:45 AM	34	132	10	0	8	30	23	0	1	2	5	0	3	3	12	0	263
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	234	1184	46	0	30	319	151	0	36	15	52	0	21	48	189	0	2325
<b>APPROACH %'s:</b>	15.98%	80.87%	3.14%	0.00%	6.00%	63.80%	30.20%	0.00%	34.95%	14.56%	50.49%	0.00%	8.14%	18.60%	73.26%	0.00%	
<b>PEAK HR:</b>	07:15 AM - 08:15 AM																TOTAL
<b>PEAK HR VOL:</b>	127	587	28	0	15	188	83	0	17	9	31	0	14	35	141	0	1275
<b>PEAK HR FACTOR:</b>	0.756	0.935	0.583	0.000	0.536	0.758	0.593	0.000	0.708	0.563	0.705	0.000	0.389	0.625	0.783	0.000	0.919
			0.900				0.861				0.750				0.792		
PM	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	12	89	2	0	10	143	15	0	17	6	26	0	5	4	8	0	337
4:15 PM	12	86	2	0	11	128	9	0	19	5	25	0	12	5	8	0	322
4:30 PM	17	79	2	0	27	123	10	0	23	3	40	0	17	7	10	0	358
4:45 PM	22	79	9	0	17	91	21	0	30	7	34	0	13	15	8	0	346
5:00 PM	21	72	10	0	31	87	5	0	49	7	48	0	20	12	4	0	366
5:15 PM	17	88	11	0	17	98	9	0	45	13	67	0	23	7	9	0	404
5:30 PM	14	91	8	0	25	109	5	0	29	4	25	0	21	10	7	0	348
5:45 PM	22	73	5	0	22	105	11	0	23	5	34	0	14	9	6	0	329
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	137	657	49	0	160	884	85	0	235	50	299	0	125	69	60	0	2810
<b>APPROACH %'s:</b>	16.25%	77.94%	5.81%	0.00%	14.17%	78.30%	7.53%	0.00%	40.24%	8.56%	51.20%	0.00%	49.21%	27.17%	23.62%	0.00%	
<b>PEAK HR:</b>	04:30 PM - 05:30 PM																TOTAL
<b>PEAK HR VOL:</b>	77	318	32	0	92	399	45	0	147	30	189	0	73	41	31	0	1474
<b>PEAK HR FACTOR:</b>	0.875	0.903	0.727	0.000	0.742	0.811	0.536	0.000	0.750	0.577	0.705	0.000	0.793	0.683	0.775	0.000	0.912
			0.920				0.838				0.732				0.929		

# National Data & Surveying Services **Intersection Turning Movement Count**

**Location:** Iowa Ave & Massachusetts Ave  
**City:** Riverside  
**Control:** Signalized

**Project ID:** 17-06180-015  
**Date:** 11/14/2017

## Total

NS/EW Streets:	Iowa Ave				Iowa Ave				Massachusetts Ave				Massachusetts Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	9	204	12	3	8	107	8	0	15	2	24	0	18	1	8	0	419
7:15 AM	8	198	23	1	13	146	4	0	22	8	18	0	35	3	35	0	514
7:30 AM	7	191	44	3	44	199	11	1	20	10	19	0	63	6	47	0	665
7:45 AM	16	222	51	8	52	180	10	0	24	23	26	0	73	16	67	0	768
8:00 AM	15	232	34	3	41	123	13	0	23	9	18	0	72	13	49	0	645
8:15 AM	16	210	11	2	11	129	7	0	15	7	14	0	27	5	15	0	469
8:30 AM	12	167	8	1	9	137	10	0	17	5	19	0	19	3	12	0	419
8:45 AM	8	140	5	3	7	146	7	0	16	6	17	0	11	1	5	0	372
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	91	1564	188	24	185	1167	70	1	152	70	155	0	318	48	238	0	4271
	4.87%	83.77%	10.07%	1.29%	13.00%	82.01%	4.92%	0.07%	40.32%	18.57%	41.11%	0.00%	52.65%	7.95%	39.40%	0.00%	
<b>PEAK HR:</b>	<b>07:15 AM - 08:15 AM</b>																TOTAL
<b>PEAK HR VOL:</b>	46	843	152	15	150	648	38	1	89	50	81	0	243	38	198	0	2592
<b>PEAK HR FACTOR:</b>	0.719	0.908	0.745	0.469	0.721	0.814	0.731	0.250	0.927	0.543	0.779	0.000	0.832	0.594	0.739	0.000	0.844
			0.889				0.821				0.753				0.768		
PM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	12	183	10	4	20	288	10	0	16	12	19	0	15	4	7	0	600
4:15 PM	15	162	9	6	17	246	16	0	24	9	22	0	15	5	9	0	555
4:30 PM	15	168	19	5	23	285	20	1	22	9	28	0	18	1	7	0	621
4:45 PM	18	179	14	5	17	285	9	0	26	8	26	0	18	6	14	0	625
5:00 PM	16	158	26	5	31	325	26	0	26	11	25	0	29	9	18	0	705
5:15 PM	17	169	20	6	31	297	10	0	22	7	20	0	20	6	10	0	635
5:30 PM	21	156	9	5	22	302	21	0	15	12	20	0	16	3	12	0	614
5:45 PM	24	145	14	6	26	262	13	0	20	8	30	0	13	6	4	0	571
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s:</b>	138	1320	121	42	187	2290	125	1	171	76	190	0	144	40	81	0	4926
	8.51%	81.43%	7.46%	2.59%	7.18%	87.98%	4.80%	0.04%	39.13%	17.39%	43.48%	0.00%	54.34%	15.09%	30.57%	0.00%	
<b>PEAK HR:</b>	<b>04:30 PM - 05:30 PM</b>																TOTAL
<b>PEAK HR VOL:</b>	66	674	79	21	102	1192	65	1	96	35	99	0	85	22	49	0	2586
<b>PEAK HR FACTOR:</b>	0.917	0.941	0.760	0.875	0.823	0.917	0.625	0.250	0.923	0.795	0.884	0.000	0.733	0.611	0.681	0.000	0.917
			0.972				0.890				0.927				0.696		



## **APPENDIX B: APPROVED DEVELOPMENT PROJECTS**

Map ID #	Case Number	Location	Project Description	Acres	Buildings Total Square Feet	Dwelling Units	Approval Date	Inactive/Complete	Project withIN 5-Mile Radius of Study Area? Y=Yes, N=No	Considered In Analysis Y=Yes, N=No
M13	P05-1528 P09-0087	East of Gratton St, West of Corsica Ave, North of Van Buren Blvd	Tract Map 34509; 50 Single family lots; Phase I - Develop approx 60 acres to 11 subdivision lots	254.34	-	50	CC 11/06/07; CPC 4/23/09 (Phase I)	N	Y	Y
M27	P12-0601 P12-0697 P12-0698	14601 Dauchy Ave	Tract Map 36370; GPA from VLDR to HR; RZ from R-1-1/2 acre to RC; 10 lot subdivision	9		10	4/17/2014	N	Y	Y
G24	P12-0601 P12-0697 P12-0698	14601 Dauchy Ave	Tract Map 36370; GPA from VLDR to HR; RZ from R-1-1/2 acre to RC; 10 lot subdivision	9		10		N	Y	Y
M24	P12-0799 P12-0800	west side of Palm Av between Beechwood & Highland Pl	Tract Map 36516 and Design Review; subdivide 1.26 ac vacant parcel into 7 single family residential lots ranging in size from 7,002 to 8,011 sq.ft.	1.26	-	7	CPC 4/3/14	N	Y	Y
C92	P13-0087 P13-0262	2450 Market Street	CUP, DR; establish a 67-unit senior housing facility within an existing three-story, approximately 51,321-square-foot building, on an approximately 1.7-acre site, located at 2450 Market Street situated on the easterly side of Market Street between Ogden Way and Northbend Street, across from Fairmount Park	1.7		67	CC AP 05/05/2015	N	Y	Y
D14	P13-0207 P13-0208 P13-0209 P13-0210 P13-0211	4445 Magnolia Ave	EIR, GPA, RZ, DR, SP; Riverside Community Hospital proposed expansion	10.16	251,500		CC AP 05/20/2014	N	Y	Y
G23	P13-0263 P13-0264 P14-0769	18171 Van Buren Blvd	GP, RZ; GPA from VLDR to C; RZ from R-1-1/2 Acre-SP to CR-SP; to facilitate the development of a retail commercial center on 2 contiguous parcels	7.17	10,700 (Retail), 10,000 (Day Care), 2,500 (Drive-thru restaurant), 10,000 (office), 8,000 (medical office)		CC AP 12/01/2015	N	Y	Y
	P13-0529 P13-0530	12000 Magnolia Avenue	Parcel Map and Design Review of 7 industrial buildings	14.34	282,000		DRC AP 02/22/2017	N	Y	Y
G20	P13-0553 P13-0554 P13-0583 P14-0065	5940 and 5980 Sycamore Canyon	GP, SP, RZ, DR; 275-unit multiple-family residential development, including common and private amenities and covered and uncovered surface parking, on two contiguous parcels	10.26		275	CC AP 03/17/2015	N	Y	Y
M26	P13-0665	18875 Moss Rd	Tract Map 36641; 8 lot subdivision for future development of single family residences	5.03	-	8	CPC 4/17/14	N	Y	Y
M40	P13-0956 P13-0959 P13-0960 P13-0963 P13-0964 P13-0965 P13-0966	474 Palmyrita Ave	MCUP, DR, VAR, PM to subdivide into 3 lots, GPA, SPA (Hunter Business Park Specific Plan), Vacate Columbia Avenue Loop; Construct 3 industrial buildings	72.5	1,461,449	-	CC AP 10/27/2015	N	Y	Y
D20	P14-0045 P14-0046 P14-0047 P14-0048 P14-0049	3050 Mission Inn	SPR, DR, RZ, GPA, SPA; Mission Lofts apartment complex.	4.67	-	212	CC AP 06/07/2016	N	Y	Y
M31	P14-0176	southeast corner of La Sierra and Victoria Avenues	Tract Map 36713, GPA, RZ; Final approval of tract map; 14 lot single family subdivision	8.8		14	CPC AP 12/18/2014	N	Y	Y
D19	P14-0183	3105 Market St	DR; Centerpointe Apartments	2.51		146	ZA AP 01/26/2015	N	Y	Y
C129	P14-0225 P14-0226 P14-0227 P16-0063	APNS: 223-210-019, -20, -21, -22	Proposal by Bowlus Pacific Venture Corporation to consider: 1) Conditional Use Permit to permit a 117 unit three story senior apartment complex on 3.75 vacant acres; 2) Design Review of the project plans; 3) Street Vacation to vacate Dominion Avenue between McMahon Street and Division Street; 4) Variance to allow the proposed carports to be located closer to the to the front property line than the front-most wall of the dwelling units; 5) Variance to allow fewer parking parking spaces than required by the Zoning Code; 6) Variance to allow the building to exceed the maximum building height permitted by the Zoning Code ; and 7) a Grading Exception to allow for retaining walls over six feet in height. The property is located between McMahon Street and Division Avenue and includes the Dominion Avenue right-of-way, in the R-1-8500 - Single-family Residential Zone, in Ward 3.	3.75		117		N	Y	Y



Map ID #	Case Number	Location	Project Description	Acres	Buildings Total Square Feet	Dwelling Units	Approval Date	Inactive/Complete	Project withIN 5-Mile Radius of Study Area? Y=Yes, N=No	Considered In Analysis Y=Yes, N=No
	P14-0294 P14-0295 P14-0297 P16-0497	N'ly Eucalyptus Avenue/ E'ly Valley Springs Parkway/ S'ly Campus Parkway/ W'ly Day Street	Phased development on 50.85 acres with a Healthcare Campus consisting of 1) a 280-bed, 5-story hospital with penthouse; 2) five, 2- to 4-story medical office buildings ranging in size from 40,000 to 100,000 square feet; 3) a 234-unit, 3-story senior housing facility; 4) a 290-bed, 3 story independent living/memory care, assisted living, and skilled nursing facility; and 5) two 4-level parking structures. Entitlements for this project include 1) a General Plan Amendment to amend the land use of the project site from C - Commercial to CSHCSP - Canyon Springs Healthcare Campus Specific Plan; 2) a proposed Canyon Springs Healthcare Campus Specific Plan; 3) a Specific Plan Amendment to remove the project site from the Canyon Springs Business Park Specific Plan; and 4) a Zoning Code Amendment to rezone the property from CR-SP - Commercial Retail and Specific Plan (Canyon Springs Business Park) Overlay Zones to CSHCSP - Canyon Springs Healthcare Campus Specific Plan; and 5) Environmental Impact Report related to the project.	50.85	504,000/280 beds (hospital); 370,000 (medical office)	234 (senior); 290 beds (assisted living)	CC AP 11/14/2017	N	Y	Y
M35	P14-0472 P14-0473 P15-0322 P15-0321	Northerly side of Grove Community Drive, between Trautwein Road and Worchester Lane	TM DR, VR; Tentative Tract Map (TM-39534); a related Planned Residential Development to subdivide an approximately 13.5 acre two-parcel vacant site, into 85 single family residential lots with common open space and shared amenities; the Design Review of the plot plan and building elevations for the proposed residential planned residential development; and variances related to building setback measurements in the R-1-8500-SP - Single Family Residential and Specific Plan (Orangecrest) Overlay Zones.	13.5		85	CC AP 06/23/2015	N	Y	Y
G25	P14-0841 P14-0842 P14-0843 P14-0844 P14-0845 P14-0846 P14-0847 P14-0848 P16-0472	Alessandro Blvd (APN 263-091-008, 263-100-019, 263-100-005)	GP, RZ, SP, CUP, DR, LL; GENERAL PLAN AMENDMENT (B/OP TO C), REZONE (BMP TO CR), SPECIFIC PLAN AMENDMENT TO ALLOW DRIVE-THRU BUSINESS WITH CUP, (3) CONDITIONAL USE PERMITS, DESIGN REVIEW AND LOT LINE ADJUSTMENT	10.57	73,200 industrial, 15,000 retail		CC AP 01/26/2016	N	Y	Y
D21	P14-1033 P14-1034	3667 Placentia	DR, LL; 308,000 sq. ft. warehouse	15.9	308,000			N	Y	Y
C94	P15-0247 P15-0248 P15-0250 P15-0251 P15-0252 P15-0363	3744, 3768 and 3776 Main Street	CUP, TM, VR; construction of a mixed-use project, consisting of 91 residential units, approximately 8,841 square feet of commercial space and a 115-stall parking garage, on three parcels totaling 0.62 acres, partially developed with an existing commercial building (Imperial Hardware) and a surface parking lot	1.49	8,841	91	CPC AP 05/21/2015	N	Y	Y
C103	P15-0404 P15-0405	3399 Adams St	Conditional Use Permit, Design Review, and Two Variances for the demolition and construction of a 3,040 square foot fuel station canopy with 6 MPDs (Mobil), and associated 4,159 square foot convenience store and 2,080 square foot drive-thru car wash.	0.9	4,159 (c-store), 2,080 (car wash), 6 MPDs		CPC 10/23/2015	N	Y	Y
D24	P15-0478	3439 Arlington Ave	DR; NEW COMMERCIAL BUILDING. SINGLE STORY - APPROXIMATELY 15,186 SF. DESIGNED FOR MIXED USE (RETAIL + RESTAURANT).	9.5	15,186		DRC AP 12/03/2018	N	Y	Y
C99	P15-0535	3530/3540/3558 Fairmount & 3555/3547/3545/3505 Market	CUP; A NEW HOTEL DEVELOPMENT WITH TWO PHASES. PHASE 1 = A 104 ROOM, 62,852 S.F., 75'-0" HIGH, 5-STORY HOTEL. PHASE 2 = A 135 ROOM, 74,275 S.F., 91'-4" HIGH, 6-STORY HOTEL AND A 60' HIGH 6-STORY PARKING GARAGE WITH 195 PARKING SPACES.	1.62		239 guest rooms	CPC 04/19/2016	N	Y	Y
C106	P15-0075 P15-0076 P15-0819	Prairie Way and Van Buren	To construct an approximately 11,738 square foot vehicle repair facility ("Les Schwab Tire Center") and a 2,200 square foot drive-thru restaurant ("Dunkin Donuts"), with an approximately 450 square feet outdoor dining area, on an approximately 2.11 acre vacant site	2.11	11,738 automotive, 2,200 drive-thru restaurant		CC AP 10/27/2015	N	Y	Y
C107	P15-0847 P15-0848 P15-0850	3530 Madison	To construct a commercial center in two phases as follows: Phase 1 consists of a 37,849 square foot health and fitness club (24 Hour Fitness) and a 1,950 square foot drive-thru restaurant (Starbucks); and Phase 2 consists of a 41,117 square foot retail building.	8.21	37,849 fitness, 1,950 drive-thru restaurant, 41,117 retail		CPC AP 01/12/2017	N	Y	Y
M36	P15-0862 P15-0863 P15-0864 P15-0865	4105 Jefferson	TM, RZ, GP, PPE: Tentative Tract Map No. 36994, one-lot subdivision for condominium purposes for the development of 36 single-family attached townhomes, a restroom facility and pool on a 2.96 acre net parcel.	2.96		36	CC AP 12/13/2016	N	Y	Y
C117	P15-0877 P16-0066 P16-0067	1277 University	Specific Plan Amendment, Conditional Use Permit, and Design Review to allow the construction of a seven-story, 143,983 square foot hotel consisting of 126- rooms/suites, administrative offices, gymnasium, recreation room, roof top garden, swimming pool, and a 12,000 square foot restaurant	0.82	12,000 restaurant	144 guest rooms		N	Y	Y

Map ID #	Case Number	Location	Project Description	Acres	Buildings Total Square Feet	Dwelling Units	Approval Date	Inactive/Complete	Project within 5-Mile Radius of Study Area? Y=Yes, N=No	Considered In Analysis Y=Yes, N=No
C109	P15-0907 P15-0908	2234 Main	CUP: ALLOW A GAS STATION IN CONJUNCTION WITH A 3,978 S.F. CONVENIENCE STORE WHICH REQUIRES A TYPE 20 ABC LICENSE4 AND A 968 SF INCIDENTAL CAR WASH.	1.75	3,978 retail, 968 car wash		CPC AP 10/19/2017	N	Y	Y
C110	P15-0958 P15-0959 P15-1105	6458 Van Buren	Conditional Use Permit for a drive-through vehicle wash station related to a proposed mixed automotive, retail and restaurant complex.	3.96	2,572 car wash, 14,035 retail		CPC AP 12/15/2016	N	Y	Y
C111	P15-0979 P15-0980 P15-0981	5573 Arlington	Proposal by Westmoreland Dynasty LP to consider a Zone Change, Conditional Use Permit, and Design Review to rezone 0.54 acres from Office Zone to CR - Commercial Retail Zone to facilitate the construction of a 2,200 square foot drive-thru restaurant (Cowboy Jr.), located at 5573 Arlington Avenue, situated on the north side of Arlington Avenue approximately 140 feet east of Phoenix Avenue, in Ward 3.	0.54	2,200		CC AP 01/17/2017	N	Y	Y
C113	P15-1000	10866 Arlington	Conditional Use Permit to permit the establishment of a place of worship and associated parking on 2.98 acres, developed with a residence, located at 10866 Arlington Avenue, situated on the south side of Arlington Avenue, west of Mitchell Avenue and east of La Sierra Avenue, in the RR - Rural Residential Zone, in Ward 7.	2.98	2,290			N	Y	Y
M38	P16-0016	978 Orange	TM: A Tentative Tract Map for one 0.91 acre lot being divided into five parcels.	0.91		5	CPC AP 06/26/2017	N	Y	Y
G27	P16-0168 P16-0170 P16-0388 P16-0389	3280 Vine	The following entitlements are requested to permit a 797 unit, three-story commercial storage facility: 1) Rezone the subject site to apply the CS—Commercial Storage Overlay Zone to the underlying BMP—Business and Manufacturing Park Zone; 2) Design Review of plot plan and building elevations for the commercial storage facility; 3) Variances requested to allow for a lesser front yard setback than required by Code and for a greater building height than permitted by the CS Overlay Zone.	1.7	117,478		CC AP 09/13/2016	N	Y	Y
C122	P16-0277 P16-0279	6350 Van Buren	Proposal by DRC Engineering, Inc. to consider a Conditional Use Permit to permit a 3,000 square foot drive thru fast food restaurant on 3.73 acres, developed with the Arlington Plaza, and Design Review of the plot plan and building elevations for the drive-through restaurant, located at 6350 Van Buren Boulevard, situated at the southwest Arlington Boulevard and Van Buren Boulevard, in the CR - Commercial Retail Zone, in Ward #6.	12	3,000		CPC AP 01/26/2017	N	Y	Y
D30	P16-0301	9644 Magnolia	DR; 12,000-square foot retail and commercial project with 55 parking stalls on vacant 40,000-square foot Successor Agency-owned parcel	0.88	12,000		DRC AP 10/26/2016	N	Y	Y
M42	P16-0314	147-310-036	Tentative tract map to subdivide a 12.5 acre site into 5 parcels in the Residential Conservation zone.	12.5		5	CPC AP 01/26/2017	N	Y	Y
C123	P16-0321 P16-0323 P16-0324 P16-0325	3650 Market	CUP, COA, VR, PM; Stalder Plaza - 165 residential units, 22,000sf retail and subterranean parking. 0-foot rear-yard setback along alley frontage where 15 feet is required. Commercial Airspace Condominium Map	0.53		165	CPC AP 04/20/2017	N	Y	Y
C125	P16-0396 P16-0397 P17-0440	3640 Central	CUP, DR; NEW CHI-FIL-A ON CENTRAL AVE. LOCATED WITHIN THE COMMERCIAL RETAIL ZONE IN THE MAGNOLIA AVENUE SPECIFIC PLAN OVERLAY.	0.88	4,721		CPC AP 06/29/2017	N	Y	Y
D33	P16-0413 P16-0414	7820 Lincoln	Design Review of project plans for the construction of a 100,974-square-foot light industrial building.	5.45	100,974		DRC AP 02/22/2017	N	Y	Y
D34	P16-0423 P16-0424	Southeast Nogales St	DR, VR; PROPOSING TWO COMMERCIAL BUILDINGS, ONE 7,030 SF LEGAL OFFICE AND A 4,140 SF MEDICAL OFFICE WITH A PARKING VARIANCE.	0.97	11,170		DRC AP 09/30/2016	N	Y	Y
C126	P16-0425 P16-0426	8398 Colorado	CUP, DR; New 39-unit senior housing complex on two parcels totaling 1.5 acres in the R-1-7000 zone	1.5		39	CPC AP 03/23/2017	N	Y	Y
M43	P16-0454	4663 Hedrick Ave	Project proposing 7 single-family lots in addition to the existing residence. All lots are proposed to access a privately maintained road including public connections to all utilities and adding full width public street improvements on Hedrick Avenue frontage.	1.72		8		N	Y	Y
D39	P16-0510 P16-0511 P16-0512	3345 Madison St	1) Conditional Use Permit to permit a 3,288 square foot automated carwash facility on 0.5 acres; 2) Design Review of the plot plan and building elevations and landscape plan for the construction of the automated carwash facility; and 3) Variance to allow a reduced side yard building setbacks.	0.5	3,288		CPC AP 12/15/2016	N	Y	Y
D40	P16-0532 P16-0533 P16-0534 P16-0535	4508 Olivewood Ave	Design Review to facilitate construction of a two-story, 27,000 square foot medical office building and Variances to permit fewer parking spaces than required by Code and to allow reduced landscape setbacks along Mulberry Street and Olivewood Avenue, on a vacant, eleven-parcel site	1.89	27,000		DRC AP 10/12/2016	N	Y	Y

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D42	P16-0544	4253 Fairgrounds Street	Design Review to facilitate construction of a 15,000 square foot warehouse building and related site improvements on a vacant site	0.91	15,000		DRC AP 01/06/2017	N	Y	Y
G28	P16-0556 P16-0567 P15-1035	APN: 263-091-015	To permit eight industrial buildings ranging in size from 12,015 to 35,661 square feet. The following entitlements are requested: 1) Specific Plan Amendment to amend the land use designation and establish development standards for properties located north of Alessandro Boulevard, south of Cottonwood Avenue, west of Old 215 Frontage Road, and east of Interstate 215 from the Retail Business Office and Industrial Support land use designations to the Industrial land use designation; 2) a Tentative Parcel Map for the subdivision of two parcels into six parcels, ranging in size from 27,099 square feet to 72,159 square feet; and 3) Design Review.	10.2	176,149		CC AP 11/07/2017	N	Y	Y
D43	P16-0578	1800 & 1900 Alessandro Boulevard	Design Review of a plot plan and building elevations for the construction of an 82,200-square-foot multi-tenant industrial warehouse building	5.71	82,200		DRC AP 02/10/2017	N	Y	Y
C128	P16-0612 P16-0613 P16-0614	10920 Magnolia Avenue	The construction of an 11,000 square foot multi-tenant commercial building on two contiguous parcels, totaling 1.37 acres, for the establishment of restaurants. The following entitlements are requested: 1) Rezone 1 acre of the 1.37 site from R-1-7000-SP - Single-family Residential and Specific Plan (Magnolia Avenue) Overlay Zones to CR-X-10-SP - Commercial Retail, Building Setback (10 feet - Magnolia Avenue), and Specific Plan (Magnolia Avenue) Overlay Zones; 2) Minor Conditional Use Permit for the on-sale of alcoholic beverages at the proposed restaurants, and 3) Design Review of the plot plan and building elevations for the construction of the commercial building.	1.37	11,000		CPC AP 07/27/2017	N	Y	Y
C130	P16-0620 P16-0621	1168 Stacy Court	Minor Conditional Use Permit and Design Review of a plot plan and building elevations to facilitate construction of a 3,008 square foot vehicle repair facility on a vacant, two-parcel site	0.21	3,008			N	Y	Y
M44	P16-0671 P16-0672 P16-0673	18876 Van Buren Blvd	1) Design Review of a plot plan and building elevations for the construction of a 23,290 square foot two story medical office building on a 1.62 acre site; 2) Parcel Map (PM-37218) to subdivide two contiguous parcels into 18 condominium parcels; and 3) Variance to allow a building height greater than required by the Building Stories Overlay of the Zoning Code.	1.62	23,290		CPC AP 06/29/2017	N	Y	Y
C133	P16-0716 P16-0717	3605 Market	1) a Certificate of Appropriateness to a City Structure of Merit for façade improvements; and 2) a Minor Conditional Use Permit for entertainment within the Fox Entertainment Plaza proposed to include 15,500 square feet of restaurant and storage space for 14 independent eateries and exclusive use of the 2,500 square foot outdoor patio area	0.78	15,500 in existing building		DRC AP 10/19/2017	N	Y	Y
C132	P16-0727 P16-0728 P16-0729 P16-0730	3870 Main St	Develop a 42,974-square-foot, five-story mixed-use building containing 35 dwelling units, 5,684 square feet of commercial space and 44 parking stalls on a 0.36-acre parcel developed with a public parking lot. Entitlements for consideration include: 1) a Conditional Use Permit to permit the construction of a mixed-use project with a density greater than 60 dwelling units per acre; 2) Parking Variances to allow fewer parking stalls than required by Code, reduced internal drive aisle widths, and the use of tandem parking stalls; and 3) Building Setback Variances to allow encroachment of the structure into the required 15-foot rear-yard setback, and encroachment of the residential portion of the structure into the required 15-foot interior side yard setback.	0.36	8,197	36	CPC AP 02/09/2017	N	Y	Y
M45	P16-0731 P16-0732 P16-0733	1080 Marlborough Ave	1) Parcel Map (PM-37238) to subdivide a 4.05 acre parcel into five parcels; 2) Design Review of a plot plan and building elevations for the construction of five warehouse buildings ranging in size from 10,000 to 13,850 square feet in size; and 3) Grading Exception to allow a retaining wall to exceed the maximum height required by the Grading Code.	4.05	74,210		CPC AP 03/09/2017	N	Y	Y
M46	P16-0774	South Side of Bradley Street east of Golden Star Avenue, west of Harbart Drive and north of Highridge Street	Tentative Tract Map (TM-37177) to subdivide 34.6 acres into 48 Single-family residential lots and one (1) lot for a retention basin.	34.6		48		N	Y	Y

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C134	P16-0862 P16-0863 P16-0864	4399 Main	To consider the following entitlements for the establishment of a 1,425 square foot restaurant with 3,100 square feet of outdoor dining on a 0.30-acre parcel, developed with an existing, abandoned vehicle fuel station: 1) a Minor Conditional Use Permit; to permit a restaurant larger than 1,500 square feet, with outdoor dining and on-sale of alcoholic beverages; 2) Design Review for the conversion of an existing 925-square-foot vehicle fuel station building to a restaurant, construction of a 500-square-foot addition and a 1,715 square foot attached canopy, and reconfiguration of an existing parking lot; and 3) a Variance to allow the on-sale of alcohol within 600 feet of a public park and hospital.	0.3	4,525			N	Y	Y
M49	P16-0885 P17-0090 P16-0886	Myers Street and Primrose	Planned Residential Development and Tentative Tract Map (TM 37219) to subdivide seven, vacant parcels into 64 residential lots for the construction of single family residences, and four lots for common open space	9.3		64	CPC 12/14/2017	N	Y	Y
G30	P16-0891 P16-0892 P16-0894 P17-0374	Madison Street and Railroad Avenue	To consider the construction of an 18,900 square foot commercial warehouse building. The following entitlements are requested: 1) General Plan Amendment to amend the General Plan designation from Medium Density Residential to Industrial; 2) a rezone to change the zone from R-1-7000 - Single Family Residential to I – General Industrial; and 3) Design Review of the project plans for the construction of the warehouse building and parking spaces	3.82	18,900			N	Y	Y
M50	P17-0001	North of Paschels Way and east of Clark Street	Tentative Tract Map (TM 37279) to subdivide one vacant parcel, totaling 1.6 acres into 7 residential lots,	1.6				N	Y	Y
C135	P17-0030 P17-0031	3393 Mission Inn Avenue	Conditional Use Permit to permit the construction of a mixed-use project containing: 72 affordable housing units, 5,400 square feet of office and meeting space, 3,700 square feet of museum/exhibition space, and 77 parking spaces	1.38	9,100	72	CHB AP 10/18/2017	N	Y	Y
	P17-0038	8043 Indiana	Proposed demolition of a 2,205 square foot showroom and office building, construction of a new two-story, 8,455 square foot showroom with a service drive area, and construction of a 3,975 square foot addition to an existing service building, on two contiguous parcels totaling 1.85 acres, located at 8043 and 8069 Indiana Avenue.	1.85	12,430			N	Y	Y
	P17-0097 P17-0098 P17-0099 P17-0228	6289 Palm Avenue	Proposal by David Peery, on behalf of Kingsfield Development Corporation, to consider: 1) Design Review for the construction of a self-storage facility with 5 self-storage buildings totaling 96,022 square feet, a 1,575 square foot management office, and a 1,575 square foot caretaker unit on two contiguous parcels totaling 3.02 acres; 2) Variance to allow the building lot coverage to be increased by 10 percent for a maximum 50 percent lot coverage; and 3) Variance to allow the building height and building stories to be increased to 36 feet and two stories. This property is located at 6289 Palm Avenue, situated at the northwest corner of Palm Avenue and Dewey Avenue, in the R-1-7000 – Single Family Residential Zone, in Ward 3.	3.02	99,172	1	CC AP 03/27/2018	N	Y	Y
	P17-0100 P17-0105 P17-0559	3763 Tibbetts Street	Proposal by Liviu Eftimie to consider: 1) a Design Review of project plans for a 2,500-square-foot expansion of an existing 2,770-square-foot medical office building, and a surface parking lot expansion; and 2) a Variance to allow the expansion to encroach into the required 15-foot rear yard setback and to allow fewer parking spaces than required by the Zoning Code. This property is located on two parcels totaling 0.41 acres, developed with existing office buildings, located at 3757-3763 Tibbetts Street, on the north side of Tibbetts Street, east of Magnolia Avenue and west of Brockton Avenue, in the O-SP – Office and Specific Plan (Magnolia Avenue) Overlay Zones, in Ward 3.	0.41	2,500		DRC AP 09/18/2017	N	Y	Y
	P17-0190 P17-0288	7279 Lincoln Avenue	Proposal by Charles Brown on behalf of Icon Vehicle Dynamics, to consider: 1) a Design Review of project plans for a 24,480-square-foot expansion of an existing 33,860-square-foot warehouse building, and 2) a Variance to allow 78 parking spaces where the Zoning Code requires 110 parking spaces on a 3.01-acre site, located at 7929 Lincoln Avenue, on the northwest corner of Lincoln Avenue and Jefferson Street, in the BMP – Business and Manufacturing Park Zone, in Ward 4.	3.01	24,480		DRC AP 06/07/2017	N	Y	Y

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	P17-0239 P17-0241	7979 Auto Drive	Proposal by Beth Keeler of Whitfield & Associates Architects on behalf of Kienle & Kienle Investments to consider the following entitlements for an auto dealership: 1) the Summary Vacation of approximately 10,000 square feet of excess right-of-way; and 2) Design Review of project plans for the construction of a 53,878 square foot auto dealership and service center (Walter's Sprinter and Certified Pre-Owned Mercedes-Benz), on a 2.52-acre site developed with existing vehicle sales and service buildings to be demolished, located at 7979 Auto Drive, on the entire block bounded by Auto Drive, Jefferson Street, Indiana Avenue and Detroit Drive, in the CG-SP – Commercial General and Specific Plan (Riverside Auto Center) Overlay Zones, in Ward 4.	2.52	53,878			N	Y	Y
	P17-0243	3909 Van Buren Boulevard	Proposal by Niall Saunders, on behalf of Saunders & Wiant Architects, to consider a Design Review of project plans for the construction of a 4,722 square foot, two-tenant dental office building, on two contiguous parcels totaling 0.27 acres, located at 3909 and 3915 Van Buren Boulevard, on the northeast corner of Van Buren Boulevard and Hayes Street, in the O-SP – Office and Specific Plan (Magnolia Avenue) Overlay Zones, in Ward 5.	0.27	4,722			N	Y	Y
	P17-0257 P17-0258	9241 Audrey Avenue	Proposal by Dan Hinson of HC&D Architects to consider a Conditional Use Permit and Design Review for the construction of a 2,558 square foot Taco Bell drive-thru restaurant and associated parking on a vacant 0.70 acre parcel, located at 9241 and 9265 Audrey Avenue, situated on the north side of Audrey Avenue and east of Van Buren Boulevard, in the CR-X-50-S-2-AP - Commercial Retail, Building Setback (50-feet from the easterly property line), Building Stories (two stories), and Airport Protection Overlay Zones, in Ward 6.	0.7	2,558		CPC 12/14/2017	N	Y	Y
	P17-0268	5900 Brockton Avenue	Proposal by Nelson Smith on behalf of Pacific Grove Hospital to consider revisions to a Conditional Use Permit (Planning Case C-46-589) to permit a 18,200 square foot addition to an existing hospital, modifications of the parking lot layout and circulation, and addition of three bio-retention areas. This 3.75-acre parcel is located at 5900 Brockton Avenue, situated on the southeast corner of Brockton Avenue and Maplewood Place, in the R-1-7000-SP – Single Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones, in Ward 1.	4	18,200		CPC 12/14/2017	N	Y	Y
	P17-0360 P17-0361	1001 E. Alessandro Boulevard	Proposal by Chad Hamilton of Northwest Commercial Advisors to consider a Conditional Use Permit and Design Review for the construction of a 1,857 square foot Jack In The Box drive-thru restaurant and associated parking on a vacant 0.45 acre parcel, located at 1001 E. Alessandro Boulevard, situated on the southeast corner of Alessandro Boulevard and Barton Street, in the CR – Commercial Retail Zone, in Ward 4.	0.45	1,857		CPC 11/02/2017	N	Y	Y
	P17-0419 P17-0420 P17-0421	1301 University Avenue	Proposal by Katie Rounds of the Kaidence Group, on behalf of Starbucks, to consider the following entitlements: 1) a Specific Plan Amendment, to amend the University Avenue Specific Plan to allow drive-thru restaurants within Subdistrict 3; 2) a Conditional Use Permit to permit the drive-thru restaurant; and 3) a Design Review of project plans for the construction of a 2,819 square-foot drive-thru restaurant. The subject 0.88 acre site is currently developed with a 3,020 square-foot restaurant building, located at 1301 University Avenue, on the northwest corner of University and Iowa Avenues, in the CR-SP – Commercial Retail and Specific Plan (University Avenue) Overlay Zones, in Ward 2.	0.88	2,819		CPC AP 03/08/2018	N	Y	Y

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	P17-0466 P17-0467 P17-0468 P17-0469 P17-0470 P17-0471 P17-0472	3575-3661 Merrill Avenue	Proposal by Richard Hamm of Pelican Properties to construct a 98,608 square-foot mixed-use development containing 108 dwelling units, 1,200 square foot commercial area, and 192 parking stalls on six contiguous parcels, totaling 3.14 acres, partially developed as a surface parking lot. Entitlements for consideration include: 1) amend the Magnolia Avenue Specific Plan to include MU-U – Mixed Use – Urban as a General Plan Land Use Designation in the Magnolia Center District; 2) amend the General Plan Land Use Designation from C – Commercial to MU-U – Mixed Use - Urban; 3) amend the zoning designation from CG-SP – Commercial General and Specific Plan (Magnolia Avenue) Overlay Zones to MU-U-SP – Mixed Use – Urban and Specific Plan (Magnolia Avenue) Overlay Zones; 4) Site Plan Review; 5) a Traffic Pattern Modification for the reconfiguration of Merrill Avenue; 6) a Minor Conditional Use Permit for on-site alcohol sales (Type 47 License) in conjunction with the proposed commercial area; and 7) a Variance to allow a reduced rear yard building setback. The property is located at 3575 – 3661 Merrill Avenue, situated on the north side of Merrill Avenue, between Riverside and De Anza Avenues, in the CG-SP – Commercial General and Specific Plan (Magnolia Avenue) Overlay Zones, in Ward 3.	3.14	2,400	108		N	Y	Y
	P17-0506 P17-0507	750 Marlborough Avenue	Proposal by Jim Guthrie of Guthrie Companies to consider the following entitlements for the construction of a 346,330 square foot industrial warehouse building, consisting of 6,820 square feet of office use and 339,510 square feet of warehouse area, and associated parking, on two contiguous parcels, totaling 21.32 acres: 1) Design Review of project plans; and 2) a Grading Exception for retaining walls exceeding the maximum height requirements along the east and west property lines. The property is located at 750 Marlborough Avenue and 1550 Research Park Drive, situated at the eastern terminus of Marlborough Avenue and the southwestern terminus of Research Park Drive, in the BMP-SP - Business and Manufacturing Park and Specific Plan (Hunter Business Park) Overlay Zones, in Ward 1.	21.32	346,330			N	Y	Y
	P17-0533	1606 Orange Street	Proposal by BJ Ghuman of Go-Man Constructions and Investments Inc. to consider Tentative Tract Map 37146 to subdivide a partially developed 1.96 acre parcel into seven single-family residential parcels, ranging in size from 7,975 square feet to 12,197 square feet, located at 1606 Orange Street, situated on the southwest corner of the intersection of Orange Street and Tyco Drive, in the R-1-7000 – Single Family Residential Zone, Ward 1.	1.96		7		N	Y	Y
	P17-0583 P17-0584	7918 Lindbergh Drive	Minor Conditional Use Permit and Design Review for a 114-space secured parking lot	2.38			DRC AP 12/27/2017	N	Y	Y
	P17-0585 P17-0586 P17-0755 P17-0756 P17-0757	3510-3522 Adams Street	Minor Conditional Use Permit, Design Review and Variances for a five-level, 1,456-space parking structure for California Baptist University	3.48				N	Y	Y
	P17-0627 P17-0628	7434 Diamond Street	Revised Conditional Use Permit and Design Review for expansion on an existing church	1.10	7,078 (new)			N	Y	Y
	P17-0638 P17-0639	6990 Van Buren Boulevard	Conditional Use Permit and Design Review for gas station, two drive through restaurants and a retail shops building - Riverside Gateway Plaza	3.90	3,800 (fuel station), 16 fueling positions, 1,152 (car wash), 6,250 (drive thru restaurants), 3,000 (retail)			N	Y	Y
	P17-0667	3775 Fairmount Boulevard	City-initiated closure and vacation of entire segment of Fairmount Boulevard between Mission Inn and University Avenues, in conjunction with new Main Library	0.46	42,000 (library)			N	Y	Y
	P17-0686 P17-0687	16151 Alta Cresta Avenue	Conditional Use Permit and Design Review for a new drive-through fast food restaurant on site developed with existing SFR to be demolished	0.73	2,558	-1		N	Y	Y
	P17-0688 P17-0689	18806 Van Buren Boulevard	Conditional Use Permit and Design Review for a new 5,440-square-foot automated car wash	2.20	5,440			N	Y	Y
	P17-0690 P17-0691 P17-0692 P17-0693 P17-0694	10525 Hole Avenue	General Plan Amendment from MDR to C; Rezone from R-1-7000 to CG; Conditional Use Permit for drive-thru business; Parcel Map to subdivide 1.46 acres into two lots; and Design Review for new automated car wash	1.46	5,380			N	Y	Y

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	P17-0761 P17-0762 P17-0763 P17-0764	4019 Mission Inn Avenue	Proposal by Russ Haley of CityMark Communities, LLC to consider the following entitlements: 1) a Specific Plan Amendment to amend the Neighborhood Commercial District of the Downtown Specific Plan to allow residential uses subject to a Conditional Use Permit; 2) a Conditional Use Permit to permit the construction of 13 attached single family dwellings; and 3) a Condominium Map to subdivide a 0.66-acre parcel into 13 condominium lots. This property is located at 4019 Mission Inn Avenue, situated on the northwest corner of Mission Inn Avenue and Chestnut Street, in the DSP-CR - Downtown Specific Plan-Neighborhood Commercial District, in Ward 1	0.66		13		N	Y	Y
	P17-0813 P17-0814 P17-0846	NWC Van Buren Boulevard and Jurupa Avenue	CONDITIONAL USE PERMIT (P17-0813) AND DESIGN REVIEW (P17-0814) TO ALLOW FOR THE CONSTRUCTION OF A 5,400 SF AUTOMATED CARWASH FACILITY ON 2.33 ACRES, SITUATED ON THE NORTHWEST CORNER OF JURUPA AV. AND VAN BUREN BLVD., IN WARD 7. Rezone from RE - REsidential Estate to CG - Commercial General.	2.33	5,400			N	Y	Y
	P17-0853 P17-0854	1705-1761 Seventh Street	General Plan Amendment from MDR to HDR and Rezone from R-1-7000 to R-3-1500 for consistency with Chicago-Linden Strategic Plan, in conjunction with Housing Authority redevelopment project	2.04		63		N	Y	Y
	P17-0872	11754 Warm Springs Road	Revised Conditional Use Permit to expand an existing Assemblies of People - Non-Entertainment with new 5,560sf sanctuary in an existing industrial building	4.95	5,560 (existing building)			N	Y	Y
	P17-0873	9531-9597 Rudicill Street	Design Review of plot plans and building elevations for two spec light industrial buildings	3.71	66,300			N	Y	Y
	P17-0883 P17-0884 P17-0885	3490 Madison Street	Design review (P17-0883) of project plans for Phase II of Madison Plaza, which includes the construction of a 17,889 square foot grocery store with the off-sale of alcoholic beverages and an 8,065 square foot in line tenant spaces	7.04	25,954			N	Y	Y
	P17-0922	1737 Atlanta Avenue	Minor condition use permit for storefront church in an existing multi-tenant industrial building	2.75	3,905			N	Y	Y
	P17-0929 P17-0930 P17-0931 P17-0932	Talcey Terrace SW'ly Overlook Parkway	TENTATIVE TRACT MAP 37392 PROPOSING A SUBDIVISION OF A 16.8 ACRE LOT INTO EIGHT (8) SINGLE-FAMILY RESIDENCES; variances for lot size, width, corridor access	16.79		8		N	Y	Y
	P17-0946	9315 Magnolia Avenue	DESIGN REVIEW FOR NEW 2 STORY OFFICE/MEDICAL BUILDING - 4415 SF - IN THE COMMERCIAL RETAIL ZONE (MAGNOLIA AVENUE SPECIFIC PLAN)	0.23	4,415			N	Y	Y
	P17-0960 P17-0961	2002 Iowa Avenue	CONDITIONAL USE PERMIT FOR A 9,701 SQUARE FOOT ASSEMBLY OF PEOPLE USE WITH A 2,700 SQUARE FOOT SANCTUARY WITHIN AN EXISTING OFFICE COMPLEX IN THE BMP-SP (HUNTER BUSINESS PARK) AND A PARKING VARIANCE.	9.25	9,700			N	Y	Y
	P18-0018 P18-0019	10000 Magnolia Avenue	Design Review and Variance to convert existing 22,000-square-foot furniture store to office space and to construct a single-level parking deck with 35 spaces	1.22	21,120			N	Y	Y
	P18-0020 P18-0021 P18-0022 P18-0023	3444 Center Street	Rezoning, Tentative Map, Conditional Use Permit and Design Review to establish a 104-lot mobile home park with onsite amenities	12.88		104		N	Y	Y
	P18-0028 P18-0029 P18-0030 P18-0031 P18-0032 P18-0033 P18-0034	NEC Central Avenue and Sycamore Canyon Boulevard	REZONE, VACATION, SUMMARY VACATION, 2 CONDITIONAL USE PERMITS, DESIGN REVIEW, AND PARCEL MAP FOR A PROPOSED VEHICLE FUEL STATION WITH A 3,200 SQ.FT CONVENIENCE STORE WITH TYPE 20 BEER AND WINE LICENSE AND A 3,800 SQ.FT RESTAURANT.	2.19	3,200 C-store, 3,800 fast food, 6 MPDs			N	Y	Y
	P18-0035 P18-0037 P18-0053	6610 Doolittle Avenue	Proposal by Richard Finkel of Bundy-Finkel Architects to consider the following entitlements for the construction of seven industrial buildings, ranging in size from 11,193 to 20,250 square feet, and 199 parking stalls: 1) a Parcel Map to subdivide four vacant, parcels totaling 4.98 acres into seven parcels ranging in size from 0.60 to 0.80 acres; 2) a Design Review of project plans; and 3) a Variance to allow Building 7 to encroach into the rear yard setback.	4.98	107,939			N	Y	Y
	P18-0052	3330 Durahart Street	Proposal by Matthew Thronson of New Beginnings Christian Ministry, Inc. for a Minor Conditional Use Permit to permit a 5,165 square foot storefront church and children's ministry within an existing multi-tenant industrial complex, on a 6.04 acre parcel, located at 3330 and 3332 Durahart Street, situated on the southeast corner of Durahart Street and Third Street, in the BMP - Business and Manufacturing Park Zone, in Ward 2.	6.04	5,165			N	Y	Y

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	P18-0083 P18-0084 P18-0085	3300 Central Avenue	PROPOSED CONDITIONAL USE PERMIT FOR CONSTRUCTION OF A 2-STORY 2,916 SF MAUSOLEUM WITH 512 CRYPTS, 396 GRAVE SITES, AND 3,060 SF OF COVERED AREA, WITH NEW ACCESS ROAD AT OLIVEWOOD MEMORIAL PARK	52.74	2,916 (908 gravesites)			N	Y	Y
	P18-0091 P18-0092 P18-0093 P18-0094 P18-0095 P18-0096 P18-0097 P18-0098 P18-0099 P18-0100 P18-0101	NWC Orange Street and SR-60	Northgate Center - Master-planned mixed use development with 482 multi-family residential units, 44,500 square feet of retail and restaurant space, fuel station with 4,000-sf convenience store and 8 MPDs/16 pumps, two hotels totaling 229 rooms and 27 RV camping spaces. General Plan Amendment, Rezone, Site Plan Review, Conditional Use Permits (5), Tentative Parcel Map, Minor CUP and Design Review.	35.40	48,500 retail/restaurant, 8 MPDs	482 (residential), 229 (hotel), 27 (RV)		N	Y	Y
	P18-0104 P18-0105 P18-0106	8230 Magnolia Avenue	CUP, DR and Variance to convert an existing 32-unit apartment complex to a 116 bed student housing development on 1.66 acres.	1.66		32 units/116 beds		N	Y	Y
	P18-0122 P18-0123	3723 Strong Street	CUP and DR to consider the construction of a 60-unit senior housing complex consisting of a 57,799 square foot two-story building on 2.01 acres	2.01		60		N	Y	Y
	P18-0151	3536 Adams Street	DESIGN REVIEW FOR THE CONSTRUCTION OF 12,500 SF NEW ATHLETIC PERFORMANCE CENTER THE RENOVATION OF 6,350 SF AND ADDITION OF 11,200 SF TO THE EXISTING RECREATION CENTER, AND ASSOCIATED 19,300 SF OF ENHANCED PEDESTRIAN PROMENADES TO SOUTH/WEST AT CBU.	12.72	23,697			N	Y	Y
	P18-0172	9501 Lincoln Avenue	DESIGN REVIEW OF PLOT PLAN AND ELEVATIONS FOR 180-UNIT MULTI-TENANT APARTMENT COMPLEX WITH COMBINED LEASING AND RECREATIONAL BUILDING.	5.34		180		N	Y	Y
	P18-0189 P18-0190 P18-0191 P18-0192 P18-0193	10434 Arlington Avenue	To consider the following entitlements for a multi-tenant commercial center: 1) a Conditional Use Permit for a 3,000-square-foot drive-thru restaurant and associated queuing lane; 2) a Conditional Use Permit for a 3,000-square-foot automated vehicle wash facility and associated queuing lane and vacuum bay canopy; 3) Design Review of the plot plan and building elevations for the drive-thru restaurant, vehicle wash facility and a 15,768-square-foot, two-story multi-tenant retail and office building; 4) a Variance request to allow fewer parking spaces than required by Code; and 5) a Variance request to allow a portion of the proposed on-site parking spaces to have compact dimensions.	1.48	3,000 drive-thru, 3,000 express car wash, 15,768 retail/office			N	Y	Y
	P18-0199 P18-0200	2375 Third Street	DESIGN REVIEW OF PLOT PLANS AND ELEVATIONS FOR THE CONSTRUCTION OF A 26,076 SQ. FT. SINGLE TENANT CONCRETE BLOCK TYPE III -B INDUSTRIAL BUILDING AND ASSOCIATES 8,147 SQ FT OF LANDSCAPING & ASSOCIATED PARKING VARIANCE TO SHARE PARKING WITH ADJACENT SITE OWNED BY SAME OWNER	3.62	26,076			N	Y	Y
	P18-0255	17815 Van Buren Boulevard	Design Review of project plans for the construction of a 4,400 square foot, multiple tenant, commercial building and drive-thru restaurant previously reviewed under P14-0973, P15-0303, P15-0304, and P15-0305. The site is located on the southwest corner of Van Buren Boulevard and Fred Street, in the CR- Commercial Retail Zone, in Ward 4.	1.94	4,400			N	Y	Y
	P18-0279 P18-0280 P18-0281 P18-0282	4800 Palm Avenue	Proposal to construct a 51,998 square foot two-story senior housing complex consisting of 59 dwelling units: 1) a Zoning Code Amendment to rezone a portion of the site from O-Office Zone to R-1-7000 Single Family Residential Zone, 2) A Conditional Use Permit to permit the construction of a senior housing complex, 3) Design Review of project plans, and 4) a Grading Exception for retaining walls up to 21 feet high.	1.96		59		N	Y	Y
	P18-0295 P18-0331 P18-0330	3753 Myers Street	Proposal by City of Riverside Housing Authority to consider the following entitlements for the construction of a four unit condominium project on 0.57 acres: 1) a Zoning Code Amendment to rezone the project site from CR-NC-SP - Commercial Retail, Neighborhood Commercial, and Specific Plan (Magnolia Avenue) Overlay Zones to MU-V-SP - MU-V - Mixed Use-Village and Specific Plan (Magnolia Avenue) Overlay Zones; 2) a Parcel Map to subdivide the site into one parcel for condominium purposes; and 3) a Design Review of project plans and building elevations.	0.57		4		N	Y	Y

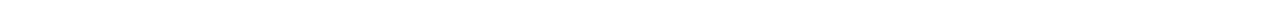


Map ID #	Case Number	Location	Project Description	Acres	Buildings Total Square Feet	Dwelling Units	Approval Date	Inactive/Complete	Project withIN 5-Mile Radius of Study Area? Y=Yes, N=No	Considered In Analysis Y=Yes, N=No
	P18-0296 P18-0297 P18-0298 P18-0299 P18-0300 P18-0301 P18-0302 P18-0303	9608 Indiana Avenue	To consider the following entitlements for a commercial development consisting of a vehicle fuel station with eight MPDs; a 5,000-square-foot multi-tenant convenience store building; a 4,495-square-foot drive-thru vehicle wash facility; a 2,533-square-foot drive-thru restaurant; a 5,555-square-foot restaurant; and a 4-story, 84-room hotel building and related site improvements: 1) a General Plan Amendment to amend the General Plan 2025 Land Use Designation from B/OP – Business and Manufacturing Park to C – Commercial; 2) a Rezoning request to change the zoning designation from BMP – Business and Manufacturing Park to CG – Commercial General; 3) a Conditional Use Permit to permit the establishment of a vehicle fuel station with the concurrent off-sale of beer and wine (Type 20 license); 4) a Conditional Use Permit to permit the off-sale of alcohol (Type 21 license); a Conditional Use Permit to permit the establishment of an automated drive-thru vehicle wash facility; 5) a Conditional Use Permit to permit the establishment of a hotel; 6) a Conditional Use Permit to permit the establishment of a drive thru restaurant; and 7) Design Review of project plans.	6.03	5,000 C-Store, 8 MPDs, 2,533 drive-thru restaurant, 5,555 sit-down restaurant	84 (hotel)		N	Y	Y
	P18-0364	3434 Arlinton	Design Review of project plans for the construction of a 1,100-square-foot retail building, expansion of an existing parking lot and reconfiguration of an existing drive-thru restaurant vehicle queueing lane.	1.24	1,100			N	Y	Y
	P18-0367 P18-0368	7351 Lincoln Avenue	Entitlements for the construction of a 210 unit condominium project: 1) a Tentative Tract Map (TM-37541) for condominium purposes; and 2) a Design Review of project plans and building elevations.	9.48		210		N	Y	Y
	P18-0396 P18-0370	3907 Polk Street	Entitlements for the construction of a 92-unit multiple-family residential development on 2.92 vacant acres: 1) Zoning Code Amendment to change the zone of the project site from R-1-7000-SP – Single Family Residential Zone and Specific Plan (Magnolia Avenue) Overlay Zones to MU-V-SP – Mixed Use – Village and Specific Plan (Magnolia Avenue) Overlay Zones; and 2) Site Plan Review of project plans.	2.92		92		N	Y	Y
	P18-0403	7137 Margeurita Street	Tentative Parcel Map to subdivide one parcel into three lots for single-family residential development	0.50		3		N	Y	Y
	P18-0432 P18-0433 P18-0434 P18-0435 P18-0436 P18-0437	3505 Van Buren Boulevard	DEVELOPMENT OF VACANT PROPERTY AND PARCEL MAP TO PROVIDE 3 SEPARATE PARCELS. PARCEL 1: NEW 3800SF GAS STATION (INCLUDING TYPE 20 BEER/WINE LICENSE) WITH ATTACHED 1300SF QUICK SERVICE RESTAURANT, AUTOMATIC CAR WASH. PARCEL 2: PAD FOR FUTURE (2) 6000SF MULTI USE BUILDING. PARCEL 3: IN N OUT FAST FOOD RESTAURANT WITH DRIVETHROUGH	3.90	3,800 C-Store, 8 MPDs, 1,300 Restaurant, 3,700 Drive-thru restaurant, 6,000 retail			N	Y	Y



## **APPENDIX C: TECHNICAL CALCULATIONS SHEETS**

## Existing (2017) Conditions



HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	50	81	243	38	198	61	843	152	151	648	38
Future Volume (veh/h)	89	50	81	243	38	198	61	843	152	151	648	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	60	52	289	45	97	73	1004	171	180	771	41
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	151	131	405	83	180	102	1307	222	154	1582	84
Arrive On Green	0.07	0.16	0.14	0.09	0.16	0.14	0.06	0.43	0.40	0.09	0.46	0.43
Sat Flow, veh/h	1781	916	794	1781	520	1122	1781	3025	514	1781	3427	182
Grp Volume(v), veh/h	106	0	112	289	0	142	73	589	586	180	400	412
Grp Sat Flow(s),veh/h/ln	1781	0	1709	1781	0	1642	1781	1777	1763	1781	1777	1832
Q Serve(g_s), s	3.2	0.0	3.7	5.5	0.0	5.1	2.6	17.9	18.0	5.5	9.9	10.0
Cycle Q Clear(g_c), s	3.2	0.0	3.7	5.5	0.0	5.1	2.6	17.9	18.0	5.5	9.9	10.0
Prop In Lane	1.00		0.46	1.00		0.68	1.00		0.29	1.00		0.10
Lane Grp Cap(c), veh/h	306	0	281	405	0	263	102	768	762	154	820	846
V/C Ratio(X)	0.35	0.00	0.40	0.71	0.00	0.54	0.72	0.77	0.77	1.17	0.49	0.49
Avail Cap(c_a), veh/h	324	0	880	405	0	820	140	890	883	154	904	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	24.0	23.2	0.0	25.0	29.4	15.3	15.6	29.0	11.9	11.9
Incr Delay (d2), s/veh	0.2	0.0	0.9	5.9	0.0	1.7	5.1	3.5	3.6	124.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.5	1.9	0.0	2.0	1.2	7.0	7.1	7.4	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	0.0	24.9	29.1	0.0	26.7	34.5	18.8	19.2	153.1	12.3	12.4
LnGrp LOS	C	A	C	C	A	C	C	B	B	F	B	B
Approach Vol, veh/h		218			431			1248				992
Approach Delay, s/veh		23.4			28.3			19.9				37.9
Approach LOS		C			C			B				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	14.6	7.6	33.3	8.4	14.2	9.5	31.4				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 31	5.0	30.5	5.0	30.2	5.0	30.0				
Max Q Clear Time (g_c+I1), s	7.5	5.7	4.6	12.0	5.2	7.1	7.5	20.0				
Green Ext Time (p_c), s	0.0	0.6	0.0	4.4	0.0	0.8	0.0	5.4				

Intersection Summary

HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & Third St/Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	356	64	150	357	251	184	638	240	190	234	59
Future Volume (veh/h)	98	356	64	150	357	251	184	638	240	190	234	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	434	65	183	435	197	224	778	263	232	285	55
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	656	98	205	574	257	259	883	298	266	1022	194
Arrive On Green	0.08	0.21	0.20	0.11	0.24	0.23	0.15	0.34	0.32	0.15	0.34	0.33
Sat Flow, veh/h	1781	3094	460	1781	2372	1063	1781	2596	877	1781	2971	565
Grp Volume(v), veh/h	120	248	251	183	325	307	224	532	509	232	169	171
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	1781	1777	1658	1781	1777	1696	1781	1777	1758
Q Serve(g_s), s	5.8	11.1	11.3	8.8	14.8	15.1	10.7	24.6	24.7	11.1	6.0	6.2
Cycle Q Clear(g_c), s	5.8	11.1	11.3	8.8	14.8	15.1	10.7	24.6	24.7	11.1	6.0	6.2
Prop In Lane	1.00		0.26	1.00		0.64	1.00		0.52	1.00		0.32
Lane Grp Cap(c), veh/h	151	377	377	205	430	402	259	604	577	266	611	605
V/C Ratio(X)	0.80	0.66	0.67	0.89	0.75	0.77	0.86	0.88	0.88	0.87	0.28	0.28
Avail Cap(c_a), veh/h	205	706	706	205	706	659	266	641	612	266	641	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	31.4	31.7	38.0	30.6	31.1	36.4	27.1	27.4	36.2	20.7	20.9
Incr Delay (d2), s/veh	10.0	2.0	2.0	34.8	2.7	3.1	22.9	13.0	13.6	24.8	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.9	5.0	5.7	6.3	6.1	6.1	11.8	11.5	6.6	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	33.4	33.7	72.8	33.3	34.2	59.3	40.1	41.0	61.0	20.9	21.2
LnGrp LOS	D	C	C	E	C	C	E	D	D	E	C	C
Approach Vol, veh/h		619		815		1265		572				
Approach Delay, s/veh		36.6		42.5		43.9		37.3				
Approach LOS		D		D		D		D				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	22.5	16.7	34.0	11.4	25.1	17.0	33.6				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	10.0	33.2	13.0	30.0	10.0	33.2	13.0	30.0				
Max Q Clear Time (g_c+I), s	10.0	13.3	12.7	8.2	7.8	17.1	13.1	26.7				
Green Ext Time (p_c), s	0.0	2.0	0.0	1.3	0.0	2.3	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay		41.0										
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary  
 3: Blaine St & I-215 SB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑						↑	↑
Traffic Volume (veh/h)	0	653	162	190	470	0	0	0	0	491	3	439
Future Volume (veh/h)	0	653	162	190	470	0	0	0	0	491	3	439
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	777	147	226	560	0				585	4	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1492	282	2552	4478	0				566	4	
Arrive On Green	0.00	0.50	0.49	0.24	0.42	0.00				0.32	0.32	0.00
Sat Flow, veh/h	0	3067	563	3456	3647	0				1770	12	1585
Grp Volume(v), veh/h	0	464	460	226	560	0				589	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1760	1728	1777	0				1782	0	1585
Q Serve(g_s), s	0.0	17.6	17.7	5.1	0.0	0.0				32.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.6	17.7	5.1	0.0	0.0				32.0	0.0	0.0
Prop In Lane	0.00		0.32	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	891	883	2552	4478	0				570	0	
V/C Ratio(X)	0.00	0.52	0.52	0.09	0.13	0.00				1.03	0.00	
Avail Cap(c_a), veh/h	0	891	883	2552	4478	0				570	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.64	0.64	0.63	0.63	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.9	11.8	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.0	0.0				46.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.7	6.7	1.6	0.0	0.0				20.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.1	17.2	11.8	0.0	0.0				80.4	0.0	0.0
LnGrp LOS		A	B	B	A	A				F	A	
Approach Vol, veh/h		924			786						589	A
Approach Delay, s/veh		17.2			3.4						80.4	
Approach LOS		B			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	79.8	54.2		36.0		134.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	21.0	24.0		30.7		* 61						
Max Q Clear Time (g_c+1), s	17.0	19.7		34.0		2.0						
Green Ext Time (p_c), s	0.7	1.9		0.0		0.6						

Intersection Summary

HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑			↑	↔			
Traffic Volume (veh/h)	280	850	0	0	497	794	162	4	282	0	0	0
Future Volume (veh/h)	280	850	0	0	497	794	162	4	282	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	322	977	0	0	571	430	186	5	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	406	2772	0	0	1195	900	243	7				
Arrive On Green	0.12	0.78	0.00	0.00	0.62	0.61	0.14	0.14	0.00			
Sat Flow, veh/h	3456	3647	0	0	2012	1445	1737	47	1585			
Grp Volume(v), veh/h	322	977	0	0	529	472	191	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1587	1784	0	1585			
Q Serve(g_s), s	9.1	8.3	0.0	0.0	16.0	16.3	10.3	0.0	0.0			
Cycle Q Clear(g_c), s	9.1	8.3	0.0	0.0	16.0	16.3	10.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.91	0.97		1.00			
Lane Grp Cap(c), veh/h	406	2772	0	0	1106	988	250	0				
V/C Ratio(X)	0.79	0.35	0.00	0.00	0.48	0.48	0.76	0.00				
Avail Cap(c_a), veh/h	484	2772	0	0	1106	988	428	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.62	0.62	1.00	0.00	0.00			
Uniform Delay (d), s/veh	43.0	3.3	0.0	0.0	10.1	10.4	41.4	0.0	0.0			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.9	1.0	1.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.8	1.9	0.0	0.0	5.7	5.3	4.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	3.4	0.0	0.0	11.1	11.5	43.3	0.0	0.0			
LnGrp LOS	D	A	A	A	B	B	D	A				
Approach Vol, veh/h		1299			1001			191	A			
Approach Delay, s/veh		13.3			11.3			43.3				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		82.0			15.7	66.3		18.0				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		67.0			13.5	49.0		22.7				
Max Q Clear Time (g_c+I1), s		10.3			11.1	18.3		12.3				
Green Ext Time (p_c), s		4.9			0.2	4.5		0.4				

Intersection Summary

HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.  
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑		↔	↑↑	↔
Traffic Volume (veh/h)	432	468	156	144	612	109	162	586	110	116	487	352
Future Volume (veh/h)	432	468	156	144	612	109	162	586	110	116	487	352
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	491	532	63	164	695	30	184	666	114	132	553	123
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	554	1042	458	231	938	412	198	847	145	176	952	418
Arrive On Green	0.16	0.29	0.29	0.13	0.26	0.26	0.11	0.28	0.26	0.10	0.27	0.27
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	3027	517	1781	3554	1560
Grp Volume(v), veh/h	491	532	63	164	695	30	184	391	389	132	553	123
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1767	1781	1777	1560
Q Serve(g_s), s	11.3	10.1	2.4	7.2	14.5	1.2	8.3	16.5	16.5	5.9	10.9	5.1
Cycle Q Clear(g_c), s	11.3	10.1	2.4	7.2	14.5	1.2	8.3	16.5	16.5	5.9	10.9	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	554	1042	458	231	938	412	198	498	495	176	952	418
V/C Ratio(X)	0.89	0.51	0.14	0.71	0.74	0.07	0.93	0.79	0.79	0.75	0.58	0.29
Avail Cap(c_a), veh/h	554	1524	669	294	1542	677	198	646	643	248	1393	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	23.8	21.1	33.9	27.3	22.4	35.8	27.0	27.2	35.6	25.8	23.6
Incr Delay (d2), s/veh	15.5	0.4	0.1	3.5	1.2	0.1	44.3	4.8	4.9	4.1	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	4.0	0.8	3.2	5.9	0.4	5.8	7.0	7.1	2.6	4.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	24.2	21.2	37.3	28.5	22.5	80.1	31.7	32.1	39.7	26.3	24.0
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		1086			889			964			808	
Approach Delay, s/veh		35.2			29.9			41.1			28.2	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	27.9	13.0	25.7	17.0	25.4	12.0	26.7				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	33	* 33	9.0	30.0	13.0	33.7	10.8	27.7				
Max Q Clear Time (g_c+1/2), s	12.1	10.3	12.9	13.3	16.5	7.9	18.5					
Green Ext Time (p_c), s	0.1	2.6	0.0	2.7	0.0	3.1	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	475	108	52	523	85	172	75	70	72	42	85
Future Volume (veh/h)	125	475	108	52	523	85	172	75	70	72	42	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	572	111	63	630	88	207	90	51	87	51	77
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	938	181	206	1016	142	518	265	150	240	110	118
Arrive On Green	0.11	0.32	0.28	0.12	0.33	0.29	0.24	0.24	0.22	0.24	0.24	0.22
Sat Flow, veh/h	1781	2955	571	1781	3120	435	1261	1113	631	426	463	496
Grp Volume(v), veh/h	151	343	340	63	358	360	207	0	141	215	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1778	1261	0	1744	1384	0	0
Q Serve(g_s), s	3.0	6.0	6.1	1.2	6.2	6.3	0.0	0.0	2.5	2.9	0.0	0.0
Cycle Q Clear(g_c), s	3.0	6.0	6.1	1.2	6.2	6.3	4.8	0.0	2.5	5.4	0.0	0.0
Prop In Lane	1.00		0.33	1.00		0.24	1.00		0.36	0.40		0.36
Lane Grp Cap(c), veh/h	192	564	555	206	578	579	518	0	415	468	0	0
V/C Ratio(X)	0.79	0.61	0.61	0.31	0.62	0.62	0.40	0.00	0.34	0.46	0.00	0.00
Avail Cap(c_a), veh/h	244	895	882	244	895	896	1068	0	1175	1107	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.9	10.5	10.8	14.8	10.4	10.6	12.4	0.0	11.6	12.7	0.0	0.0
Incr Delay (d2), s/veh	9.4	1.1	1.1	0.3	1.1	1.1	0.5	0.0	0.5	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.9	1.9	0.4	2.0	2.0	1.3	0.0	0.8	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	11.6	11.9	15.1	11.5	11.7	12.9	0.0	12.1	13.4	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		834			781			348			215	
Approach Delay, s/veh		14.2			11.9			12.6			13.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	15.6		12.7	7.9	15.9		12.7				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	17.0		24.0	5.0	17.0		24.0				
Max Q Clear Time (g_c+1), s	1.0	8.1		7.4	5.0	8.3		6.8				
Green Ext Time (p_c), s	0.0	2.1		0.8	0.0	2.1		1.4				

Intersection Summary

HCM 6th Ctrl Delay		13.0										
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	427	141	142	526	13	46	44	88	8	84	47
Future Volume (veh/h)	44	427	141	142	526	13	46	44	88	8	84	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	51	491	124	163	605	13	53	51	50	9	97	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	842	211	201	1290	28	340	312	390	398	220	77
Arrive On Green	0.06	0.33	0.29	0.13	0.40	0.36	0.19	0.19	0.15	0.19	0.19	0.15
Sat Flow, veh/h	1603	2518	631	1603	3199	69	1131	1683	1382	1159	1184	415
Grp Volume(v), veh/h	51	311	304	163	302	316	53	51	50	9	0	131
Grp Sat Flow(s),veh/h/ln	1603	1599	1550	1603	1599	1669	1131	1683	1382	1159	0	1599
Q Serve(g_s), s	1.0	5.4	5.6	3.3	4.7	4.7	1.5	0.9	0.9	0.2	0.0	2.5
Cycle Q Clear(g_c), s	1.0	5.4	5.6	3.3	4.7	4.7	3.9	0.9	0.9	1.1	0.0	2.5
Prop In Lane	1.00		0.41	1.00		0.04	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	90	535	518	201	645	673	340	312	390	398	0	297
V/C Ratio(X)	0.57	0.58	0.59	0.81	0.47	0.47	0.16	0.16	0.13	0.02	0.00	0.44
Avail Cap(c_a), veh/h	285	1178	1142	332	1225	1279	1003	1300	1201	1079	0	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	9.3	9.6	14.4	7.4	7.4	14.0	11.6	9.1	12.0	0.0	12.3
Incr Delay (d2), s/veh	2.1	1.0	1.1	3.0	0.5	0.5	0.2	0.2	0.1	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.3	1.3	1.0	0.9	1.0	0.3	0.3	0.2	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	10.3	10.6	17.4	8.0	8.0	14.2	11.8	9.3	12.0	0.0	13.4
LnGrp LOS	B	B	B	B	A	A	B	B	A	B	A	B
Approach Vol, veh/h		666			781			154			140	
Approach Delay, s/veh		11.0			9.9			11.8			13.3	
Approach LOS		B			A			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	15.3		10.3	5.9	17.6		10.3				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	6.0	24.5		25.0				
Max Q Clear Time (g_c+1/3), s		7.6		4.5	3.0	6.7		5.9				
Green Ext Time (p_c), s	0.0	2.2		0.4	0.0	2.2		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					10.8							
HCM 6th LOS					B							

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	245	175	46	368	66	283	496	48	24	122	25
Future Volume (veh/h)	6	245	175	46	368	66	283	496	48	24	122	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	7	266	58	50	400	68	308	539	0	26	133	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	426	351	157	477	81	360	640		46	310	
Arrive On Green	0.01	0.25	0.25	0.10	0.34	0.32	0.22	0.38	0.00	0.03	0.18	0.00
Sat Flow, veh/h	1603	1683	1388	1603	1396	237	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	7	266	58	50	0	468	308	539	0	26	133	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1388	1603	0	1633	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.3	9.3	2.2	1.9	0.0	17.6	12.3	19.5	0.0	1.1	4.7	0.0
Cycle Q Clear(g_c), s	0.3	9.3	2.2	1.9	0.0	17.6	12.3	19.5	0.0	1.1	4.7	0.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	426	351	157	0	558	360	640		46	310	
V/C Ratio(X)	0.48	0.62	0.17	0.32	0.00	0.84	0.86	0.84		0.57	0.43	
Avail Cap(c_a), veh/h	120	750	619	253	0	863	433	1107		120	778	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	22.1	19.4	28.0	0.0	20.3	24.8	18.8	0.0	31.9	24.1	0.0
Incr Delay (d2), s/veh	8.7	1.5	0.2	1.1	0.0	4.4	11.8	3.1	0.0	4.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.5	0.6	0.7	0.0	6.5	5.3	6.8	0.0	0.4	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	23.6	19.6	29.1	0.0	24.8	36.6	21.9	0.0	36.0	25.0	0.0
LnGrp LOS	D	C	B	C	A	C	D	C		D	C	
Approach Vol, veh/h		331			518			847	A		159	A
Approach Delay, s/veh		23.3			25.2			27.3			26.8	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	20.8	19.0	16.3	4.6	26.8	5.9	29.3				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	28.3	17.5	29.0	5.0	33.8	5.0	42.0				
Max Q Clear Time (g_c+1), s	13.0	11.3	14.3	6.7	2.3	19.6	3.1	21.5				
Green Ext Time (p_c), s	0.0	1.1	0.2	0.4	0.0	1.6	0.0	2.1				

Intersection Summary

HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St

UCR North District Transportation Study  
 Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	95	33	67	93	68	141	585	155	125	428	252
Future Volume (veh/h)	105	95	33	67	93	68	141	585	155	125	428	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	116	40	82	113	83	172	713	189	152	522	307
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	373	327	113	171	125	215	1248	546	195	733	430
Arrive On Green	0.09	0.20	0.21	0.06	0.17	0.15	0.12	0.35	0.34	0.11	0.34	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1002	736	1781	3554	1585	1781	2155	1265
Grp Volume(v), veh/h	128	116	40	82	0	196	172	713	189	152	430	399
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1738	1781	1777	1585	1781	1777	1643
Q Serve(g_s), s	4.1	3.1	1.2	2.6	0.0	6.1	5.4	9.4	5.1	4.8	12.2	12.4
Cycle Q Clear(g_c), s	4.1	3.1	1.2	2.6	0.0	6.1	5.4	9.4	5.1	4.8	12.2	12.4
Prop In Lane	1.00		1.00	1.00		0.42	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	165	373	327	113	0	296	215	1248	546	195	604	559
V/C Ratio(X)	0.78	0.31	0.12	0.73	0.00	0.66	0.80	0.57	0.35	0.78	0.71	0.71
Avail Cap(c_a), veh/h	247	1145	982	154	0	974	216	1943	856	370	1125	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	19.8	18.7	26.6	0.0	22.7	24.7	15.2	14.1	25.1	16.6	17.3
Incr Delay (d2), s/veh	8.7	0.5	0.2	5.7	0.0	2.5	17.7	0.4	0.4	2.6	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9	1.2	0.4	1.2	0.0	2.4	3.1	3.2	1.6	2.0	4.4	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	20.2	18.8	32.2	0.0	25.3	42.5	15.6	14.5	27.6	18.2	19.0
LnGrp LOS	C	C	B	C	A	C	D	B	B	C	B	B
Approach Vol, veh/h		284			278			1074			981	
Approach Delay, s/veh		26.4			27.3			19.7			20.0	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	24.3	7.7	15.5	11.0	23.7	9.3	13.8				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	12.0	29.8	5.0	34.0	7.0	34.8	8.0	31.0				
Max Q Clear Time (g_c+1), s	10.8	11.4	4.6	5.1	7.4	14.4	6.1	8.1				
Green Ext Time (p_c), s	0.1	4.0	0.0	0.5	0.0	3.5	0.1	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				21.3								
HCM 6th LOS				C								

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	60	83	58	34	34	80	135	143	55	217	73
Future Volume (vph)	47	60	83	58	34	34	80	135	143	55	217	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1701		1770	1723		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1701		1770	1723		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	60	77	106	74	44	44	103	173	183	71	278	94
RTOR Reduction (vph)	0	38	0	0	27	0	0	0	129	0	0	68
Lane Group Flow (vph)	60	145	0	74	61	0	103	173	54	71	278	26
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	4.1	12.6		5.8	14.3		6.8	16.1	16.1	5.8	15.9	15.9
Effective Green, g (s)	4.1	13.7		5.8	15.4		6.8	17.5	17.5	5.8	16.5	16.5
Actuated g/C Ratio	0.07	0.23		0.10	0.26		0.12	0.30	0.30	0.10	0.28	0.28
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	123	396		174	451		204	554	471	174	522	444
v/s Ratio Prot	0.03	c0.09		c0.04	0.04		c0.06	0.09		0.04	c0.15	
v/s Ratio Perm									0.03			0.02
v/c Ratio	0.49	0.37		0.43	0.14		0.50	0.31	0.12	0.41	0.53	0.06
Uniform Delay, d1	26.3	18.9		24.9	16.6		24.4	16.0	15.0	24.9	17.9	15.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.6		0.6	0.1		0.7	0.3	0.1	0.6	1.0	0.1
Delay (s)	27.4	19.5		25.5	16.7		25.1	16.3	15.1	25.5	18.9	15.5
Level of Service	C	B		C	B		C	B	B	C	B	B
Approach Delay (s)		21.4			20.8			17.8			19.3	
Approach LOS		C			C			B			B	

Intersection Summary

HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	58.8	Sum of lost time (s)	20.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	81	161	36	36	99	34
Future Vol, veh/h	81	161	36	36	99	34
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	194	43	43	119	41
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9	8.4	9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	74%	0%	50%
Vol Thru, %	0%	33%	50%
Vol Right, %	26%	67%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	133	242	72
LT Vol	99	0	36
Through Vol	0	81	36
RT Vol	34	161	0
Lane Flow Rate	160	292	87
Geometry Grp	1	1	1
Degree of Util (X)	0.211	0.327	0.114
Departure Headway (Hd)	4.734	4.036	4.726
Convergence, Y/N	Yes	Yes	Yes
Cap	758	892	759
Service Time	2.766	2.054	2.753
HCM Lane V/C Ratio	0.211	0.327	0.115
HCM Control Delay	9	9	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	1.4	0.4

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Existing (2017) Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔
Traffic Volume (veh/h)	157	268	37	42	199	139	84	641	182	123	248	111
Future Volume (veh/h)	157	268	37	42	199	139	84	641	182	123	248	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	282	18	44	209	33	88	675	106	129	261	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	752	623	82	513	224	370	1120	487	166	531	167
Arrive On Green	0.11	0.21	0.19	0.05	0.14	0.14	0.21	0.32	0.32	0.09	0.20	0.16
Sat Flow, veh/h	3456	3554	1557	1781	3554	1555	1781	3554	1545	1781	2648	831
Grp Volume(v), veh/h	165	282	18	44	209	33	88	675	106	129	173	172
Grp Sat Flow(s),veh/h/ln	1728	1777	1557	1781	1777	1555	1781	1777	1545	1781	1777	1702
Q Serve(g_s), s	2.1	3.3	0.1	1.2	2.6	0.6	2.0	7.7	1.4	3.4	4.1	4.4
Cycle Q Clear(g_c), s	2.1	3.3	0.1	1.2	2.6	0.6	2.0	7.7	1.4	3.4	4.1	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	392	752	623	82	513	224	370	1120	487	166	357	342
V/C Ratio(X)	0.42	0.37	0.03	0.53	0.41	0.15	0.24	0.60	0.22	0.78	0.48	0.50
Avail Cap(c_a), veh/h	432	2090	1209	223	2090	914	370	2357	1024	297	1215	1164
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	16.2	2.4	22.4	18.7	7.4	15.8	13.9	4.0	21.3	17.0	17.5
Incr Delay (d2), s/veh	0.3	0.3	0.0	2.0	0.5	0.3	0.1	0.5	0.2	2.9	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.2	0.0	0.5	1.0	0.3	0.7	2.4	0.6	1.3	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	16.5	2.4	24.4	19.2	7.7	16.0	14.4	4.3	24.2	18.0	18.6
LnGrp LOS	C	B	A	C	B	A	B	B	A	C	B	B
Approach Vol, veh/h		465			286			869			474	
Approach Delay, s/veh		17.2			18.6			13.3			19.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	14.2	14.0	13.6	9.4	10.9	8.5	19.1				
Change Period (Y+Rc), s	4.0	5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	27.1	7.0	31.0	5.0	27.1	8.0	30.0				
Max Q Clear Time (g_c+1), s	13.2	5.3	4.0	6.4	4.1	4.6	5.4	9.7				
Green Ext Time (p_c), s	0.0	1.2	0.0	1.2	0.0	1.0	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Existing (2017) Conditions - AM



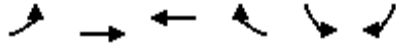
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑					↖	↗	
Traffic Volume (veh/h)	0	402	239	56	282	0	0	0	0	347	2	210
Future Volume (veh/h)	0	402	239	56	282	0	0	0	0	347	2	210
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	432	99	60	303	0				373	2	54
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	947	784	198	1238	0				444	14	377
Arrive On Green	0.00	0.51	0.51	0.11	0.66	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	1870	1548	1781	1870	0				1781	56	1513
Grp Volume(v), veh/h	0	432	99	60	303	0				373	0	56
Grp Sat Flow(s),veh/h/ln	0	1870	1548	1781	1870	0				1781	0	1569
Q Serve(g_s), s	0.0	13.3	3.0	2.8	5.9	0.0				17.9	0.0	2.5
Cycle Q Clear(g_c), s	0.0	13.3	3.0	2.8	5.9	0.0				17.9	0.0	2.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.96
Lane Grp Cap(c), veh/h	0	947	784	198	1238	0				444	0	391
V/C Ratio(X)	0.00	0.46	0.13	0.30	0.24	0.00				0.84	0.00	0.14
Avail Cap(c_a), veh/h	0	947	784	198	1238	0				693	0	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.94	0.90	0.90	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.3	11.7	36.8	6.1	0.0				32.1	0.0	26.3
Incr Delay (d2), s/veh	0.0	1.5	0.3	3.5	0.4	0.0				3.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.6	1.0	1.4	2.1	0.0				7.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.8	12.0	40.3	6.6	0.0				35.2	0.0	26.4
LnGrp LOS		A	B	D	A	A				D	A	C
Approach Vol, veh/h		531			363					429		
Approach Delay, s/veh		15.1			12.1					34.0		
Approach LOS		B			B					C		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	4.0	49.6		26.4		63.6						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	5.0	31.3		33.5		45.3						
Max Q Clear Time (g_c+I), s	14.8	15.3		19.9		7.9						
Green Ext Time (p_c), s	0.0	1.1		0.9		0.6						

Intersection Summary

HCM 6th Ctrl Delay		20.4										
HCM 6th LOS			C									



HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	243	452	167	272	52	223
Future Volume (veh/h)	243	452	167	272	52	223
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	476	176	193	55	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	292	1585	1174	936	96	44
Arrive On Green	0.16	0.85	0.63	0.60	0.03	0.03
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	256	476	176	193	55	14
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	10.1	3.8	2.8	4.1	1.1	0.6
Cycle Q Clear(g_c), s	10.1	3.8	2.8	4.1	1.1	0.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	292	1585	1174	936	96	44
V/C Ratio(X)	0.88	0.30	0.15	0.21	0.57	0.32
Avail Cap(c_a), veh/h	292	1585	1174	936	720	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	1.1	5.5	6.4	34.6	34.3
Incr Delay (d2), s/veh	19.8	0.4	0.3	0.5	5.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.2	0.9	1.2	0.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.2	1.5	5.8	6.9	39.9	38.4
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		732	369		69	
Approach Delay, s/veh		18.2	6.4		39.6	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		7.0	15.8	49.2
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		46.3		16.0	11.3	30.5
Max Q Clear Time (g_c+I1), s		5.8		3.1	12.1	6.1
Green Ext Time (p_c), s		1.0		0.1	0.0	0.8
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			15.7			
HCM 6th LOS			B			

**Intersection**

Intersection Delay, s/veh 57.2

Intersection LOS F

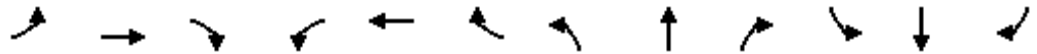
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	17	9	31	14	35	141	127	587	28	15	188	83
Future Vol, veh/h	17	9	31	14	35	141	127	587	28	15	188	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	10	34	15	38	153	138	638	30	16	204	90
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	11.6	12.9	88.7	14
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	65%	0%	29%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	35%	0%	71%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	587	28	26	31	49	141	15	188	83
LT Vol	127	0	0	17	0	14	0	15	0	0
Through Vol	0	587	0	9	0	35	0	0	188	0
RT Vol	0	0	28	0	31	0	141	0	0	83
Lane Flow Rate	138	638	30	28	34	53	153	16	204	90
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.268	1.147	0.049	0.067	0.071	0.117	0.302	0.035	0.414	0.165
Departure Headway (Hd)	6.977	6.471	5.762	8.885	7.845	8.21	7.361	8.119	7.61	6.897
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	514	561	620	406	459	439	492	444	476	523
Service Time	4.731	4.224	3.515	6.585	5.545	5.91	5.061	5.819	5.31	4.597
HCM Lane V/C Ratio	0.268	1.137	0.048	0.069	0.074	0.121	0.311	0.036	0.429	0.172
HCM Control Delay	12.3	109.1	8.8	12.2	11.1	12	13.2	11.1	15.6	11
HCM Lane LOS	B	F	A	B	B	B	B	B	C	B
HCM 95th-tile Q	1.1	21.3	0.2	0.2	0.2	0.4	1.3	0.1	2	0.6

HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (veh/h)	96	35	99	85	22	49	87	702	79	103	1214	65
Future Volume (veh/h)	96	35	99	85	22	49	87	702	79	103	1214	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	38	15	92	24	7	95	763	78	112	1320	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	161	63	332	167	49	122	1488	152	157	1637	89
Arrive On Green	0.07	0.13	0.10	0.06	0.12	0.10	0.07	0.46	0.43	0.09	0.48	0.45
Sat Flow, veh/h	1781	1267	500	1781	1383	403	1781	3246	332	1781	3422	186
Grp Volume(v), veh/h	104	0	53	92	0	31	95	418	423	112	684	708
Grp Sat Flow(s),veh/h/ln	1781	0	1767	1781	0	1787	1781	1777	1801	1781	1777	1831
Q Serve(g_s), s	3.1	0.0	1.7	2.8	0.0	1.0	3.2	10.1	10.2	3.7	19.9	20.0
Cycle Q Clear(g_c), s	3.1	0.0	1.7	2.8	0.0	1.0	3.2	10.1	10.2	3.7	19.9	20.0
Prop In Lane	1.00		0.28	1.00		0.23	1.00		0.18	1.00		0.10
Lane Grp Cap(c), veh/h	353	0	224	332	0	216	122	815	826	157	850	876
V/C Ratio(X)	0.29	0.00	0.24	0.28	0.00	0.14	0.78	0.51	0.51	0.71	0.80	0.81
Avail Cap(c_a), veh/h	375	0	949	339	0	930	146	928	941	161	943	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	24.1	22.8	0.0	24.1	27.9	11.7	11.8	27.0	13.5	13.6
Incr Delay (d2), s/veh	0.2	0.0	0.5	0.4	0.0	0.3	16.2	0.5	0.5	11.6	4.7	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.7	1.1	0.0	0.4	1.8	3.5	3.6	1.9	7.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	0.0	24.6	23.2	0.0	24.4	44.1	12.2	12.3	38.6	18.2	18.3
LnGrp LOS	C	A	C	C	A	C	D	B	B	D	B	B
Approach Vol, veh/h		157			123			936			1504	
Approach Delay, s/veh		23.3			23.5			15.5			19.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	11.8	8.2	33.1	8.3	11.3	9.4	31.9				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 31	5.0	30.5	5.0	30.2	5.0	30.0				
Max Q Clear Time (g_c+I1), s	4.8	3.7	5.2	22.0	5.1	3.0	5.7	12.2				
Green Ext Time (p_c), s	0.0	0.2	0.0	5.2	0.0	0.1	0.0	5.2				

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & Third St/Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	101	669	149	162	249	107	119	377	175	266	761	99
Future Volume (veh/h)	101	669	149	162	249	107	119	377	175	266	761	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	719	142	174	268	73	128	405	137	286	818	96
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	890	176	208	941	251	160	577	193	323	1001	118
Arrive On Green	0.08	0.30	0.29	0.12	0.34	0.32	0.09	0.22	0.21	0.18	0.31	0.30
Sat Flow, veh/h	1781	2949	582	1781	2764	737	1781	2603	870	1781	3197	375
Grp Volume(v), veh/h	109	433	428	174	170	171	128	275	267	286	455	459
Grp Sat Flow(s),veh/h/ln	1781	1777	1755	1781	1777	1724	1781	1777	1696	1781	1777	1796
Q Serve(g_s), s	5.4	20.1	20.2	8.6	6.3	6.5	6.3	12.7	13.1	14.0	21.1	21.2
Cycle Q Clear(g_c), s	5.4	20.1	20.2	8.6	6.3	6.5	6.3	12.7	13.1	14.0	21.1	21.2
Prop In Lane	1.00		0.33	1.00		0.43	1.00		0.51	1.00		0.21
Lane Grp Cap(c), veh/h	139	536	530	208	605	587	160	394	376	323	557	562
V/C Ratio(X)	0.79	0.81	0.81	0.84	0.28	0.29	0.80	0.70	0.71	0.89	0.82	0.82
Avail Cap(c_a), veh/h	259	707	698	219	667	647	219	564	538	378	723	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	28.8	29.1	38.7	21.5	21.8	40.0	32.1	32.5	35.7	28.4	28.5
Incr Delay (d2), s/veh	3.7	5.2	5.3	21.5	0.3	0.3	9.7	2.2	2.5	17.7	5.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	9.2	9.1	4.8	2.5	2.6	3.1	5.5	5.4	7.6	9.7	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	34.0	34.4	60.2	21.8	22.1	49.7	34.3	35.0	53.5	34.0	34.1
LnGrp LOS	D	C	C	E	C	C	D	C	D	D	C	C
Approach Vol, veh/h		970		515		670		1200				
Approach Delay, s/veh		35.3		34.9		37.5		38.7				
Approach LOS		D		C		D		D				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	31.0	12.0	32.0	11.0	34.5	20.2	23.8				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	34.2	11.0	35.0	13.0	32.2	19.0	27.0					
Max Q Clear Time (g_c+M), s	22.2	8.3	23.2	7.4	8.5	16.0	15.1					
Green Ext Time (p_c), s	0.0	3.2	0.1	3.4	0.1	1.2	0.2	1.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				36.9								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary  
 3: Blaine St & I-215 SB

UCR North District Transportation Study  
 Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑						↑	↑
Traffic Volume (veh/h)	0	583	600	319	455	0	0	0	0	349	19	132
Future Volume (veh/h)	0	583	600	319	455	0	0	0	0	349	19	132
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	601	309	329	469	0				360	20	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1166	599	4033	6100	0				423	23	
Arrive On Green	0.00	0.52	0.50	0.39	0.57	0.00				0.25	0.25	0.00
Sat Flow, veh/h	0	2352	1161	3456	3647	0				1692	94	1585
Grp Volume(v), veh/h	0	473	437	329	469	0				380	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1642	1728	1777	0				1786	0	1585
Q Serve(g_s), s	0.0	10.5	10.7	0.0	0.0	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.5	10.7	0.0	0.0	0.0				12.2	0.0	0.0
Prop In Lane	0.00		0.71	1.00		0.00				0.95		1.00
Lane Grp Cap(c), veh/h	0	917	848	4033	6100	0				446	0	
V/C Ratio(X)	0.00	0.52	0.52	0.08	0.08	0.00				0.85	0.00	
Avail Cap(c_a), veh/h	0	917	848	4033	6100	0				446	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.44	0.44	0.67	0.67	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.6	9.8	0.0	0.0	0.0				21.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	1.0	0.0	0.0	0.0				18.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	3.2	0.0	0.0	0.0				6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.5	10.8	0.0	0.0	0.0				39.6	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				D	A	
Approach Vol, veh/h		910			798						380	A
Approach Delay, s/veh		10.6			0.0						39.6	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	35.0		19.0		111.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	30.0	24.0		13.7		* 38						
Max Q Clear Time (g_c+1), s	12.0	12.7		14.2		2.0						
Green Ext Time (p_c), s	0.6	3.6		0.0		0.5						

Intersection Summary

HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑			↑↓			↑	↖↗			
Traffic Volume (veh/h)	209	707	0	0	622	661	149	1	303	0	0	0
Future Volume (veh/h)	209	707	0	0	622	661	149	1	303	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	215	729	0	0	641	383	154	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	352	2565	0	0	1177	703	257	2				
Arrive On Green	0.10	0.72	0.00	0.00	0.55	0.54	0.14	0.14	0.00			
Sat Flow, veh/h	3456	3647	0	0	2220	1270	1770	11	1585			
Grp Volume(v), veh/h	215	729	0	0	535	489	155	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1621	1782	0	1585			
Q Serve(g_s), s	3.6	4.3	0.0	0.0	11.6	11.8	4.9	0.0	0.0			
Cycle Q Clear(g_c), s	3.6	4.3	0.0	0.0	11.6	11.8	4.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.78	0.99		1.00			
Lane Grp Cap(c), veh/h	352	2565	0	0	983	896	258	0				
V/C Ratio(X)	0.61	0.28	0.00	0.00	0.54	0.54	0.60	0.00				
Avail Cap(c_a), veh/h	403	2565	0	0	983	896	386	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.70	0.70	1.00	0.00	0.00			
Uniform Delay (d), s/veh	25.8	2.9	0.0	0.0	8.6	8.9	24.0	0.0	0.0			
Incr Delay (d2), s/veh	0.7	0.2	0.0	0.0	1.5	1.7	0.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4	0.7	0.0	0.0	3.6	3.4	2.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	3.1	0.0	0.0	10.1	10.5	24.9	0.0	0.0			
LnGrp LOS	C	A	A	A	B	B	C	A				
Approach Vol, veh/h		944			1024			155	A			
Approach Delay, s/veh		8.4			10.3			24.9				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.3			10.1	37.2		12.7				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		38.0			6.5	27.0		11.7				
Max Q Clear Time (g_c+I1), s		6.3			5.6	13.8		6.9				
Green Ext Time (p_c), s		3.3			0.0	3.7		0.2				

Intersection Summary

HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑		↖	↑↑	↖
Traffic Volume (veh/h)	295	394	159	123	588	165	172	467	139	164	769	416
Future Volume (veh/h)	295	394	159	123	588	165	172	467	139	164	769	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	406	42	127	606	43	177	481	118	169	793	206
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	399	886	389	195	869	381	218	857	209	219	1082	475
Arrive On Green	0.12	0.25	0.25	0.11	0.24	0.24	0.12	0.30	0.28	0.12	0.30	0.30
Sat Flow, veh/h	3456	3554	1559	1781	3554	1559	1781	2823	688	1781	3554	1561
Grp Volume(v), veh/h	304	406	42	127	606	43	177	302	297	169	793	206
Grp Sat Flow(s),veh/h/ln	1728	1777	1559	1781	1777	1559	1781	1777	1734	1781	1777	1561
Q Serve(g_s), s	6.4	7.3	1.6	5.1	11.7	1.6	7.3	10.7	10.9	6.9	15.0	7.9
Cycle Q Clear(g_c), s	6.4	7.3	1.6	5.1	11.7	1.6	7.3	10.7	10.9	6.9	15.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	399	886	389	195	869	381	218	539	526	219	1082	475
V/C Ratio(X)	0.76	0.46	0.11	0.65	0.70	0.11	0.81	0.56	0.57	0.77	0.73	0.43
Avail Cap(c_a), veh/h	553	1629	715	323	1705	748	332	779	760	311	1516	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	23.9	21.7	32.0	25.8	22.0	32.1	21.9	22.3	31.9	23.4	20.9
Incr Delay (d2), s/veh	2.4	0.4	0.1	1.4	1.0	0.1	4.8	0.9	1.0	4.2	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	0.5	2.2	4.6	0.6	3.2	4.1	4.1	3.0	5.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	24.2	21.8	33.4	26.8	22.1	36.9	22.8	23.2	36.1	24.5	21.5
LnGrp LOS	C	C	C	C	C	C	D	C	C	D	C	C
Approach Vol, veh/h		752			776			776			1168	
Approach Delay, s/veh		28.3			27.7			26.2			25.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	22.8	13.2	26.8	12.7	22.3	13.2	26.8				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	12.1	* 33	14.0	30.2	12.0	34.5	12.6	31.1				
Max Q Clear Time (g_c+1T), s	9.3	9.3	17.0	8.4	13.7	8.9	12.9					
Green Ext Time (p_c), s	0.1	1.9	0.1	3.9	0.3	2.8	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	554	51	33	679	45	86	26	39	73	28	43
Future Volume (veh/h)	48	554	51	33	679	45	86	26	39	73	28	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	583	48	35	715	42	91	27	9	77	29	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	1153	95	181	1333	78	487	202	67	302	45	43
Arrive On Green	0.06	0.35	0.30	0.10	0.39	0.34	0.15	0.15	0.13	0.15	0.15	0.13
Sat Flow, veh/h	1781	3317	273	1781	3405	200	1342	1335	445	752	299	287
Grp Volume(v), veh/h	51	312	319	35	373	384	91	0	36	135	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1828	1342	0	1781	1338	0	0
Q Serve(g_s), s	0.8	4.2	4.2	0.5	4.9	4.9	0.0	0.0	0.5	2.5	0.0	0.0
Cycle Q Clear(g_c), s	0.8	4.2	4.2	0.5	4.9	4.9	1.4	0.0	0.5	3.1	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.11	1.00		0.25	0.57		0.21
Lane Grp Cap(c), veh/h	103	618	630	181	696	716	487	0	269	390	0	0
V/C Ratio(X)	0.50	0.50	0.51	0.19	0.54	0.54	0.19	0.00	0.13	0.35	0.00	0.00
Avail Cap(c_a), veh/h	831	3078	3141	593	2842	2924	1894	0	2136	1955	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.7	7.7	7.8	12.4	7.0	7.1	11.4	0.0	11.1	12.4	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.6	0.6	0.2	0.6	0.6	0.2	0.0	0.2	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.1	1.1	0.2	1.1	1.2	0.4	0.0	0.2	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	8.4	8.5	12.5	7.7	7.7	11.6	0.0	11.3	12.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		682			792			127			135	
Approach Delay, s/veh		8.9			7.9			11.5			12.9	
Approach LOS		A			A			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	14.4		8.5	5.7	15.8		8.5				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	10.0	50.6		35.4	14.0	46.6		35.4				
Max Q Clear Time (g_c+1/2), s	12.5	6.2		5.1	2.8	6.9		3.4				
Green Ext Time (p_c), s	0.0	2.8		0.5	0.0	3.4		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					9.0							
HCM 6th LOS					A							



HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	468	143	148	534	17	130	89	152	15	110	60
Future Volume (veh/h)	40	468	143	148	534	17	130	89	152	15	110	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	43	498	126	157	568	16	138	95	71	16	117	45
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	781	196	200	1234	35	397	493	550	437	337	130
Arrive On Green	0.05	0.31	0.28	0.12	0.39	0.36	0.29	0.29	0.27	0.29	0.29	0.27
Sat Flow, veh/h	1603	2516	632	1603	3174	89	1100	1683	1389	1095	1152	443
Grp Volume(v), veh/h	43	315	309	157	286	298	138	95	71	16	0	162
Grp Sat Flow(s),veh/h/ln	1603	1599	1549	1603	1599	1665	1100	1683	1389	1095	0	1595
Q Serve(g_s), s	1.2	7.5	7.6	4.2	5.9	5.9	5.0	1.9	1.4	0.5	0.0	3.6
Cycle Q Clear(g_c), s	1.2	7.5	7.6	4.2	5.9	5.9	8.5	1.9	1.4	2.4	0.0	3.6
Prop In Lane	1.00		0.41	1.00		0.05	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	74	497	481	200	622	647	397	493	550	437	0	467
V/C Ratio(X)	0.58	0.64	0.64	0.78	0.46	0.46	0.35	0.19	0.13	0.04	0.00	0.35
Avail Cap(c_a), veh/h	327	1450	1405	836	1957	2037	947	1335	1245	985	0	1265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	13.1	13.4	18.7	10.0	10.1	15.7	11.7	8.6	12.6	0.0	12.4
Incr Delay (d2), s/veh	2.6	1.4	1.4	2.6	0.5	0.5	0.5	0.2	0.1	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	2.2	1.4	1.5	1.6	1.2	0.6	0.4	0.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	14.4	14.8	21.3	10.6	10.6	16.2	11.9	8.7	12.6	0.0	12.9
LnGrp LOS	C	B	B	C	B	B	B	B	A	B	A	B
Approach Vol, veh/h		667			741			304			178	
Approach Delay, s/veh		15.2			12.8			13.1			12.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	17.7		16.9	6.0	21.2		16.9				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.0	38.6		33.9	9.0	52.6		33.9				
Max Q Clear Time (g_c+10), s	10.2	9.6		5.6	3.2	7.9		10.5				
Green Ext Time (p_c), s	0.3	2.5		0.7	0.0	2.3		1.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												13.7
HCM 6th LOS												B

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	300	244	37	220	17	263	249	56	147	449	43
Future Volume (veh/h)	12	300	244	37	220	17	263	249	56	147	449	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	12	312	63	39	229	15	274	259	0	153	468	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	386	326	121	453	30	314	671		185	535	
Arrive On Green	0.01	0.23	0.23	0.08	0.29	0.27	0.20	0.40	0.00	0.12	0.32	0.00
Sat Flow, veh/h	1603	1683	1420	1603	1560	102	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	12	312	63	39	0	244	274	259	0	153	468	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1420	1603	0	1662	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.7	15.4	3.2	2.0	0.0	10.8	14.6	9.6	0.0	8.2	23.1	0.0
Cycle Q Clear(g_c), s	0.7	15.4	3.2	2.0	0.0	10.8	14.6	9.6	0.0	8.2	23.1	0.0
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	23	386	326	121	0	482	314	671		185	535	
V/C Ratio(X)	0.52	0.81	0.19	0.32	0.00	0.51	0.87	0.39		0.83	0.87	
Avail Cap(c_a), veh/h	91	583	492	191	0	679	364	671		346	631	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	32.1	27.4	38.6	0.0	26.0	34.4	18.8	0.0	38.1	28.4	0.0
Incr Delay (d2), s/veh	6.5	5.1	0.3	1.5	0.0	0.8	16.6	0.4	0.0	3.6	11.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.5	1.0	0.8	0.0	4.1	6.8	3.5	0.0	3.2	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	37.2	27.7	40.1	0.0	26.9	51.0	19.2	0.0	41.7	40.0	0.0
LnGrp LOS	D	D	C	D	A	C	D	B		D	D	
Approach Vol, veh/h		387			283			533	A		621	A
Approach Delay, s/veh		36.0			28.7			35.5			40.4	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	24.2	21.3	32.0	5.3	29.6	14.1	39.1				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	29.1	19.5	31.2	5.0	34.6	19.0	32.2				
Max Q Clear Time (g_c+1), s	10.0	17.4	16.6	25.1	2.7	12.8	10.2	11.6				
Green Ext Time (p_c), s	0.0	1.1	0.2	1.0	0.0	0.8	0.2	0.8				

Intersection Summary

HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St

UCR North District Transportation Study  
 Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	129	100	147	96	80	51	596	160	102	870	110
Future Volume (veh/h)	98	129	100	147	96	80	51	596	160	102	870	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	134	21	153	100	49	53	621	57	106	906	107
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	244	207	198	200	98	92	1320	589	137	1270	150
Arrive On Green	0.07	0.13	0.13	0.11	0.17	0.14	0.05	0.37	0.37	0.08	0.40	0.36
Sat Flow, veh/h	1781	1870	1585	1781	1185	581	1781	3554	1585	1781	3201	378
Grp Volume(v), veh/h	102	134	21	153	0	149	53	621	57	106	503	510
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1766	1781	1777	1585	1781	1777	1802
Q Serve(g_s), s	2.9	3.5	0.6	4.3	0.0	4.0	1.5	6.9	1.2	3.0	12.3	12.4
Cycle Q Clear(g_c), s	2.9	3.5	0.6	4.3	0.0	4.0	1.5	6.9	1.2	3.0	12.3	12.4
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	130	244	207	198	0	298	92	1320	589	137	705	715
V/C Ratio(X)	0.78	0.55	0.10	0.77	0.00	0.50	0.58	0.47	0.10	0.78	0.71	0.71
Avail Cap(c_a), veh/h	138	1355	1148	483	0	1074	172	2312	1031	310	1294	1312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	21.0	19.8	22.3	0.0	19.7	23.9	12.4	10.6	23.4	13.1	13.3
Incr Delay (d2), s/veh	23.8	1.9	0.2	2.4	0.0	1.3	2.1	0.3	0.1	3.5	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.4	0.2	1.7	0.0	1.5	0.6	2.2	0.3	1.2	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	22.9	20.0	24.7	0.0	21.0	26.1	12.6	10.7	26.9	14.5	14.6
LnGrp LOS	D	C	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		257			302			731			1119	
Approach Delay, s/veh		32.4			22.9			13.4			15.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	23.2	9.8	10.7	6.7	24.5	7.8	12.7				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	31.8	14.0	36.0	5.0	35.8	4.0	30.0					
Max Q Clear Time (g_c+1), s	8.9	6.3	5.5	3.5	14.4	4.9	6.0					
Green Ext Time (p_c), s	0.1	3.0	0.2	0.5	0.0	4.3	0.0	0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											17.7	
HCM 6th LOS											B	

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	91	113	175	93	94	83	196	120	91	285	43
Future Volume (vph)	50	91	113	175	93	94	83	196	120	91	285	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.9		4.0	2.9		4.0	2.6	2.6	4.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1708		1770	1722		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1708		1770	1722		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	55	100	124	192	102	103	91	215	132	100	313	47
RTOR Reduction (vph)	0	49	0	0	36	0	0	0	93	0	0	35
Lane Group Flow (vph)	55	175	0	192	169	0	91	215	39	100	313	12
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	3.0	9.9		8.0	14.9		5.0	13.1	13.1	4.8	13.7	13.7
Effective Green, g (s)	3.0	12.1		8.0	17.1		5.0	15.9	15.9	4.8	13.7	13.7
Actuated g/C Ratio	0.06	0.22		0.15	0.31		0.09	0.29	0.29	0.09	0.25	0.25
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	97	380		260	542		162	545	463	156	470	399
v/s Ratio Prot	0.03	c0.10		c0.11	0.10		0.05	0.12		c0.06	c0.17	
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.57	0.46		0.74	0.31		0.56	0.39	0.08	0.64	0.67	0.03
Uniform Delay, d1	25.0	18.3		22.1	14.1		23.6	15.4	13.9	23.9	18.2	15.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	0.9		9.1	0.3		2.6	0.5	0.1	6.6	3.6	0.0
Delay (s)	29.5	19.2		31.2	14.5		26.2	15.8	14.0	30.5	21.8	15.3
Level of Service	C	B		C	B		C	B	B	C	C	B
Approach Delay (s)		21.2			22.6			17.4			23.0	
Approach LOS		C			C			B			C	

Intersection Summary

HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	54.3	Sum of lost time (s)	17.5
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh 13.9  
 Intersection LOS B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	139	216	37	163	247	43
Future Vol, veh/h	139	216	37	163	247	43
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	162	251	43	190	287	50
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.3	11.7	14.9
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	85%	0%	18%
Vol Thru, %	0%	39%	81%
Vol Right, %	15%	61%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	290	355	200
LT Vol	247	0	37
Through Vol	0	139	163
RT Vol	43	216	0
Lane Flow Rate	337	413	233
Geometry Grp	1	1	1
Degree of Util (X)	0.529	0.568	0.36
Departure Headway (Hd)	5.652	4.952	5.573
Convergence, Y/N	Yes	Yes	Yes
Cap	637	727	644
Service Time	3.69	2.989	3.617
HCM Lane V/C Ratio	0.529	0.568	0.362
HCM Control Delay	14.9	14.3	11.7
HCM Lane LOS	B	B	B
HCM 95th-tile Q	3.1	3.6	1.6

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔
Traffic Volume (veh/h)	255	709	131	117	329	113	132	364	111	235	607	186
Future Volume (veh/h)	255	709	131	117	329	113	132	364	111	235	607	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	754	69	124	350	32	140	387	25	250	646	171
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	997	573	158	948	416	177	631	273	405	847	224
Arrive On Green	0.12	0.28	0.27	0.09	0.27	0.27	0.10	0.18	0.18	0.23	0.31	0.28
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	3554	1538	1781	2770	732
Grp Volume(v), veh/h	271	754	69	124	350	32	140	387	25	250	414	403
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1538	1781	1777	1725
Q Serve(g_s), s	5.7	14.7	0.0	5.2	6.1	0.6	5.8	7.6	1.0	9.6	16.0	16.1
Cycle Q Clear(g_c), s	5.7	14.7	0.0	5.2	6.1	0.6	5.8	7.6	1.0	9.6	16.0	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	403	997	573	158	948	416	177	631	273	405	543	527
V/C Ratio(X)	0.67	0.76	0.12	0.79	0.37	0.08	0.79	0.61	0.09	0.62	0.76	0.76
Avail Cap(c_a), veh/h	502	1464	778	259	1464	643	353	1492	646	470	863	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	24.9	15.9	33.8	22.6	5.3	33.3	28.7	26.0	26.3	23.8	24.2
Incr Delay (d2), s/veh	1.4	1.3	0.1	3.3	0.2	0.1	3.0	1.0	0.1	1.0	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.9	0.7	2.3	2.4	0.4	2.5	3.1	0.4	3.8	6.3	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	26.2	16.0	37.1	22.8	5.4	36.3	29.7	26.2	27.3	26.1	26.5
LnGrp LOS	C	C	B	D	C	A	D	C	C	C	C	C
Approach Vol, veh/h		1094			506			552			1067	
Approach Delay, s/veh		27.4			25.2			31.2			26.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	25.3	11.5	27.2	12.8	24.2	21.2	17.4				
Change Period (Y+Rc), s	5.1	* 5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30	* 30	15.0	35.0	10.0	30.1	20.0	30.0				
Max Q Clear Time (g_c+1T), s	16.7	7.8	18.1	7.7	8.1	11.6	9.6					
Green Ext Time (p_c), s	0.1	3.3	0.1	3.1	0.2	1.6	0.3	1.6				

Intersection Summary

HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

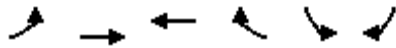
HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Existing (2017) Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑					↖		↗
Traffic Volume (veh/h)	0	474	693	171	503	0	0	0	0	47	2	88
Future Volume (veh/h)	0	474	693	171	503	0	0	0	0	47	2	88
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	494	375	178	524	0				49	2	18
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1217	1008	294	1601	0				114	0	99
Arrive On Green	0.00	0.65	0.65	0.17	0.86	0.00				0.06	0.05	0.06
Sat Flow, veh/h	0	1870	1549	1781	1870	0				1781	0	1541
Grp Volume(v), veh/h	0	494	375	178	524	0				49	0	18
Grp Sat Flow(s),veh/h/ln	0	1870	1549	1781	1870	0				1781	0	1541
Q Serve(g_s), s	0.0	12.5	11.2	9.3	5.6	0.0				2.6	0.0	1.1
Cycle Q Clear(g_c), s	0.0	12.5	11.2	9.3	5.6	0.0				2.6	0.0	1.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1217	1008	294	1601	0				114	0	99
V/C Ratio(X)	0.00	0.41	0.37	0.61	0.33	0.00				0.43	0.00	0.18
Avail Cap(c_a), veh/h	0	1217	1008	294	1601	0				527	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.67	0.67	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.3	8.0	38.7	1.4	0.0				45.0	0.0	44.3
Incr Delay (d2), s/veh	0.0	0.7	0.7	7.4	0.4	0.0				0.9	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	3.5	4.6	0.9	0.0				1.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.0	8.8	46.1	1.9	0.0				46.0	0.0	44.6
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		869			702						67	
Approach Delay, s/veh		8.9			13.1						45.6	
Approach LOS		A			B						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.5	69.1		10.4		89.6						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	40.0	40.2		28.1		60.7						
Max Q Clear Time (g_c+M), s	14.5	14.5		4.6		7.6						
Green Ext Time (p_c), s	0.1	2.2		0.1		1.2						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				12.2								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	167	344	477	303	89	198
Future Volume (veh/h)	167	344	477	303	89	198
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	378	524	179	98	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	242	1512	1134	939	201	92
Arrive On Green	0.14	0.81	0.61	0.61	0.06	0.06
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	184	378	524	179	98	25
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	6.0	2.9	9.2	3.1	1.6	0.9
Cycle Q Clear(g_c), s	6.0	2.9	9.2	3.1	1.6	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	242	1512	1134	939	201	92
V/C Ratio(X)	0.76	0.25	0.46	0.19	0.49	0.27
Avail Cap(c_a), veh/h	273	1512	1134	939	403	185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	1.4	6.5	5.3	27.4	27.0
Incr Delay (d2), s/veh	9.4	0.3	1.4	0.5	1.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.2	2.9	0.8	0.7	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.3	1.7	7.8	5.7	29.2	28.6
LnGrp LOS	C	A	A	A	C	C
Approach Vol, veh/h		562	703		123	
Approach Delay, s/veh		12.4	7.3		29.1	
Approach LOS		B	A		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		52.5		7.5	12.1	40.4
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		43.3		7.0	8.7	30.1
Max Q Clear Time (g_c+I1), s		4.9		3.6	8.0	11.2
Green Ext Time (p_c), s		0.8		0.1	0.0	1.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			11.3			
HCM 6th LOS			B			



**Intersection**

Intersection Delay, s/veh52.2

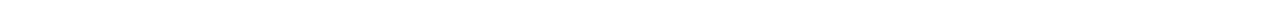
Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	147	30	189	73	41	31	77	333	32	92	418	45
Future Vol, veh/h	147	30	189	73	41	31	77	333	32	92	418	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	162	33	208	80	45	34	85	366	35	101	459	49
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	21	17.9	44.8	87.6
HCM LOS	C	C	E	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	83%	0%	64%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	17%	0%	36%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	333	32	177	189	114	31	92	418	45
LT Vol	77	0	0	147	0	73	0	92	0	0
Through Vol	0	333	0	30	0	41	0	0	418	0
RT Vol	0	0	32	0	189	0	31	0	0	45
Lane Flow Rate	85	366	35	195	208	125	34	101	459	49
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.22	0.901	0.08	0.515	0.487	0.357	0.088	0.262	1.123	0.111
Departure Headway (Hd)	9.766	9.246	8.519	9.881	8.742	10.692	9.641	9.316	8.798	8.073
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	370	395	423	368	415	338	374	385	413	443
Service Time	7.466	6.946	6.219	7.581	6.442	8.392	7.341	7.088	6.57	5.844
HCM Lane V/C Ratio	0.23	0.927	0.083	0.53	0.501	0.37	0.091	0.262	1.111	0.111
HCM Control Delay	15.2	54.8	12	22.6	19.5	19.2	13.3	15.4	111.7	11.9
HCM Lane LOS	C	F	B	C	C	C	B	C	F	B
HCM 95th-tile Q	0.8	9.3	0.3	2.8	2.6	1.6	0.3	1	16.6	0.4

## Existing Plus Project Conditions



HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (veh/h)	89	50	81	243	38	198	61	854	152	151	657	38
Future Volume (veh/h)	89	50	81	243	38	198	61	854	152	151	657	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	60	52	289	45	97	73	1017	171	180	782	41
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	151	131	331	83	179	101	1315	221	154	1589	83
Arrive On Green	0.07	0.16	0.14	0.06	0.16	0.14	0.06	0.43	0.41	0.09	0.46	0.44
Sat Flow, veh/h	1781	916	794	1781	520	1122	1781	3032	509	1781	3430	180
Grp Volume(v), veh/h	106	0	112	289	0	142	73	595	593	180	405	418
Grp Sat Flow(s),veh/h/ln	1781	0	1709	1781	0	1642	1781	1777	1764	1781	1777	1833
Q Serve(g_s), s	3.2	0.0	3.8	4.0	0.0	5.1	2.6	18.2	18.4	5.5	10.1	10.1
Cycle Q Clear(g_c), s	3.2	0.0	3.8	4.0	0.0	5.1	2.6	18.2	18.4	5.5	10.1	10.1
Prop In Lane	1.00		0.46	1.00		0.68	1.00		0.29	1.00		0.10
Lane Grp Cap(c), veh/h	306	0	281	331	0	262	101	771	765	154	823	849
V/C Ratio(X)	0.35	0.00	0.40	0.87	0.00	0.54	0.72	0.77	0.77	1.17	0.49	0.49
Avail Cap(c_a), veh/h	322	0	876	331	0	816	140	886	880	154	900	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	24.1	26.8	0.0	25.1	29.6	15.4	15.6	29.1	11.9	12.0
Incr Delay (d2), s/veh	0.3	0.0	0.9	21.5	0.0	1.7	5.3	3.7	3.8	126.2	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.5	4.3	0.0	2.0	1.2	7.2	7.3	7.5	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	25.0	48.3	0.0	26.9	34.9	19.1	19.4	155.3	12.4	12.4
LnGrp LOS	C	A	C	D	A	C	C	B	B	F	B	B
Approach Vol, veh/h		218			431			1261			1003	
Approach Delay, s/veh		23.5			41.2			20.2			38.0	
Approach LOS		C			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	14.6	7.6	33.5	8.4	14.2	9.5	31.7				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 31	5.0	30.5	5.0	30.2	5.0	30.0				
Max Q Clear Time (g_c+I1), s	6.0	5.8	4.6	12.1	5.2	7.1	7.5	20.4				
Green Ext Time (p_c), s	0.0	0.6	0.0	4.5	0.0	0.8	0.0	5.4				

Intersection Summary

HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & Third St/Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	368	64	154	372	251	184	638	243	190	234	59
Future Volume (veh/h)	98	368	64	154	372	251	184	638	243	190	234	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	449	65	188	454	197	224	778	266	232	285	55
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	677	97	202	593	255	259	878	300	263	1016	193
Arrive On Green	0.08	0.22	0.20	0.11	0.25	0.23	0.15	0.34	0.32	0.15	0.34	0.33
Sat Flow, veh/h	1781	3110	447	1781	2406	1035	1781	2588	884	1781	2971	565
Grp Volume(v), veh/h	120	255	259	188	334	317	224	534	510	232	169	171
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1664	1781	1777	1695	1781	1777	1758
Q Serve(g_s), s	5.8	11.6	11.7	9.2	15.4	15.7	10.8	25.0	25.1	11.2	6.1	6.3
Cycle Q Clear(g_c), s	5.8	11.6	11.7	9.2	15.4	15.7	10.8	25.0	25.1	11.2	6.1	6.3
Prop In Lane	1.00		0.25	1.00		0.62	1.00		0.52	1.00		0.32
Lane Grp Cap(c), veh/h	151	387	388	202	438	410	259	603	575	263	607	601
V/C Ratio(X)	0.80	0.66	0.67	0.93	0.76	0.77	0.87	0.89	0.89	0.88	0.28	0.28
Avail Cap(c_a), veh/h	202	698	700	202	698	654	263	634	605	263	634	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	31.5	31.7	38.7	30.8	31.3	36.8	27.5	27.8	36.8	21.1	21.3
Incr Delay (d2), s/veh	10.5	1.9	2.0	43.1	2.8	3.1	23.6	13.8	14.4	26.7	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	5.1	5.2	6.3	6.5	6.3	6.2	12.1	11.7	6.8	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	33.4	33.7	81.8	33.6	34.4	60.4	41.2	42.2	63.4	21.3	21.6
LnGrp LOS	D	C	C	F	C	C	E	D	D	E	C	C
Approach Vol, veh/h		634			839			1268			572	
Approach Delay, s/veh		36.7			44.7			45.0			38.5	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	23.2	16.8	34.1	11.4	25.7	17.0	33.9				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	10.0	33.2	13.0	30.0	10.0	33.2	13.0	30.0				
Max Q Clear Time (g_c+I), s	10.0	13.7	12.8	8.3	7.8	17.7	13.2	27.1				
Green Ext Time (p_c), s	0.0	2.1	0.0	1.3	0.0	2.4	0.0	1.4				

Intersection Summary

HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 3: Blaine St & I-215 SB

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑						↑	↑
Traffic Volume (veh/h)	0	668	162	190	489	0	0	0	0	497	3	439
Future Volume (veh/h)	0	668	162	190	489	0	0	0	0	497	3	439
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	795	147	226	582	0				592	4	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1498	277	2552	4478	0				566	4	
Arrive On Green	0.00	0.50	0.49	0.24	0.42	0.00				0.32	0.32	0.00
Sat Flow, veh/h	0	3080	552	3456	3647	0				1770	12	1585
Grp Volume(v), veh/h	0	473	469	226	582	0				596	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1762	1728	1777	0				1782	0	1585
Q Serve(g_s), s	0.0	18.1	18.2	5.1	0.0	0.0				32.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.1	18.2	5.1	0.0	0.0				32.0	0.0	0.0
Prop In Lane	0.00		0.31	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	891	884	2552	4478	0				570	0	
V/C Ratio(X)	0.00	0.53	0.53	0.09	0.13	0.00				1.05	0.00	
Avail Cap(c_a), veh/h	0	891	884	2552	4478	0				570	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.64	0.64	0.61	0.61	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.9	17.1	11.8	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.0	0.0				50.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	6.9	1.6	0.0	0.0				21.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.2	17.4	11.8	0.0	0.0				84.0	0.0	0.0
LnGrp LOS		A	B	B	A	A				F	A	
Approach Vol, veh/h		942			808						596	A
Approach Delay, s/veh		17.3			3.3						84.0	
Approach LOS		B			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	79.8	54.2		36.0		134.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	21.0	24.0		30.7		* 61						
Max Q Clear Time (g_c+1), s	11.5	20.2		34.0		2.0						
Green Ext Time (p_c), s	0.7	1.7		0.0		0.7						

Intersection Summary

HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑			↑↓			↑	↗			
Traffic Volume (veh/h)	280	871	0	0	516	798	162	0	282	0	0	0
Future Volume (veh/h)	280	871	0	0	516	798	162	0	282	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	322	1001	0	0	593	434	186	0	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	406	2782	0	0	1216	890	245	0				
Arrive On Green	0.12	0.78	0.00	0.00	0.63	0.62	0.14	0.00	0.00			
Sat Flow, veh/h	3456	3647	0	0	2038	1423	1781	0	1585			
Grp Volume(v), veh/h	322	1001	0	0	542	485	186	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1591	1781	0	1585			
Q Serve(g_s), s	9.1	8.5	0.0	0.0	16.4	16.7	10.1	0.0	0.0			
Cycle Q Clear(g_c), s	9.1	8.5	0.0	0.0	16.4	16.7	10.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.89	1.00		1.00			
Lane Grp Cap(c), veh/h	406	2782	0	0	1111	995	245	0				
V/C Ratio(X)	0.79	0.36	0.00	0.00	0.49	0.49	0.76	0.00				
Avail Cap(c_a), veh/h	484	2782	0	0	1111	995	428	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.61	0.61	1.00	0.00	0.00			
Uniform Delay (d), s/veh	43.0	3.3	0.0	0.0	10.1	10.4	41.6	0.0	0.0			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.9	1.0	1.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.8	1.9	0.0	0.0	5.8	5.4	4.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	3.3	0.0	0.0	11.0	11.4	43.4	0.0	0.0			
LnGrp LOS	D	A	A	A	B	B	D	A				
Approach Vol, veh/h		1323			1027			186	A			
Approach Delay, s/veh		13.1			11.2			43.4				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		82.3			15.7	66.5		17.7				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		67.0			13.5	49.0		22.7				
Max Q Clear Time (g_c+I1), s		10.5			11.1	18.7		12.1				
Green Ext Time (p_c), s		5.0			0.2	4.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.  
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑		↖	↑↑	↖
Traffic Volume (veh/h)	432	489	156	149	635	117	162	589	114	123	489	352
Future Volume (veh/h)	432	489	156	149	635	117	162	589	114	123	489	352
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	491	556	63	169	722	39	184	669	119	140	556	123
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	538	1040	457	234	959	421	192	841	149	184	978	429
Arrive On Green	0.16	0.29	0.29	0.13	0.27	0.27	0.11	0.28	0.26	0.10	0.28	0.28
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	3007	534	1781	3554	1560
Grp Volume(v), veh/h	491	556	63	169	722	39	184	395	393	140	556	123
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1764	1781	1777	1560
Q Serve(g_s), s	11.7	11.0	2.5	7.6	15.5	1.6	8.6	17.2	17.3	6.4	11.2	5.2
Cycle Q Clear(g_c), s	11.7	11.0	2.5	7.6	15.5	1.6	8.6	17.2	17.3	6.4	11.2	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	538	1040	457	234	959	421	192	497	494	184	978	429
V/C Ratio(X)	0.91	0.53	0.14	0.72	0.75	0.09	0.96	0.79	0.80	0.76	0.57	0.29
Avail Cap(c_a), veh/h	538	1481	650	286	1498	658	192	628	623	241	1353	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	24.8	21.8	34.8	27.9	22.8	37.1	27.8	28.1	36.4	26.0	23.8
Incr Delay (d2), s/veh	19.6	0.4	0.1	4.8	1.2	0.1	52.5	5.5	5.6	6.8	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	4.4	0.9	3.4	6.3	0.5	6.3	7.4	7.5	3.0	4.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	25.2	21.9	39.6	29.2	22.9	89.5	33.4	33.8	43.2	26.5	24.2
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		1110			930			972			819	
Approach Delay, s/veh		37.9			30.8			44.2			29.0	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	28.5	13.0	27.0	17.0	26.5	12.6	27.4				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	33	* 33	9.0	30.0	13.0	33.7	10.8	27.7				
Max Q Clear Time (g_c+19), s	19.6	13.0	10.6	13.2	13.7	17.5	8.4	19.3				
Green Ext Time (p_c), s	0.1	2.7	0.0	2.7	0.0	3.2	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	35.9
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	507	108	52	559	85	172	75	70	72	42	85
Future Volume (veh/h)	125	507	108	52	559	85	172	75	70	72	42	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	611	111	63	673	88	207	90	51	87	51	77
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	971	176	208	1051	137	510	265	150	236	110	118
Arrive On Green	0.11	0.32	0.29	0.12	0.33	0.30	0.24	0.24	0.22	0.24	0.24	0.22
Sat Flow, veh/h	1781	2991	542	1781	3149	411	1261	1113	631	426	464	496
Grp Volume(v), veh/h	151	362	360	63	379	382	207	0	141	215	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1756	1781	1777	1783	1261	0	1744	1386	0	0
Q Serve(g_s), s	3.1	6.5	6.6	1.2	6.8	6.8	0.0	0.0	2.5	3.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	6.5	6.6	1.2	6.8	6.8	5.0	0.0	2.5	5.5	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.23	1.00		0.36	0.40		0.36
Lane Grp Cap(c), veh/h	192	577	570	208	593	595	510	0	415	465	0	0
V/C Ratio(X)	0.79	0.63	0.63	0.30	0.64	0.64	0.41	0.00	0.34	0.46	0.00	0.00
Avail Cap(c_a), veh/h	238	873	863	238	873	877	1039	0	1146	1080	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	10.7	10.9	15.1	10.6	10.7	12.8	0.0	11.9	13.0	0.0	0.0
Incr Delay (d2), s/veh	10.2	1.1	1.2	0.3	1.2	1.2	0.5	0.0	0.5	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.1	2.1	0.4	2.1	2.2	1.3	0.0	0.8	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	11.9	12.1	15.4	11.7	11.9	13.3	0.0	12.4	13.8	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		873			824			348			215	
Approach Delay, s/veh		14.5			12.1			12.9			13.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	16.1		12.9	8.0	16.5		12.9				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	17.0		24.0	5.0	17.0		24.0				
Max Q Clear Time (g_c+1), s	13.2	8.6		7.5	5.1	8.8		7.0				
Green Ext Time (p_c), s	0.0	2.1		0.8	0.0	2.2		1.4				

Intersection Summary

HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B



HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	452	148	149	555	13	53	44	92	8	84	47
Future Volume (veh/h)	44	452	148	149	555	13	53	44	92	8	84	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	51	520	132	171	638	13	61	51	55	9	97	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	853	215	211	1330	27	339	327	414	396	230	81
Arrive On Green	0.06	0.34	0.30	0.13	0.42	0.38	0.19	0.19	0.16	0.19	0.19	0.16
Sat Flow, veh/h	1603	2514	635	1603	3204	65	1131	1683	1383	1154	1184	415
Grp Volume(v), veh/h	51	330	322	171	318	333	61	51	55	9	0	131
Grp Sat Flow(s),veh/h/ln	1603	1599	1549	1603	1599	1670	1131	1683	1383	1154	0	1599
Q Serve(g_s), s	1.1	6.2	6.3	3.7	5.2	5.2	1.8	0.9	1.0	0.2	0.0	2.6
Cycle Q Clear(g_c), s	1.1	6.2	6.3	3.7	5.2	5.2	4.4	0.9	1.0	1.1	0.0	2.6
Prop In Lane	1.00		0.41	1.00		0.04	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	89	542	525	211	664	693	339	327	414	396	0	311
V/C Ratio(X)	0.57	0.61	0.61	0.81	0.48	0.48	0.18	0.16	0.13	0.02	0.00	0.42
Avail Cap(c_a), veh/h	268	1111	1077	313	1156	1207	943	1226	1152	1013	0	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	9.9	10.1	15.1	7.7	7.7	14.6	12.0	9.3	12.5	0.0	12.8
Incr Delay (d2), s/veh	2.1	1.1	1.2	5.7	0.5	0.5	0.3	0.2	0.1	0.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.5	1.5	1.3	1.1	1.1	0.4	0.3	0.3	0.0	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	11.0	11.3	20.8	8.2	8.2	14.8	12.2	9.4	12.5	0.0	13.7
LnGrp LOS	B	B	B	C	A	A	B	B	A	B	A	B
Approach Vol, veh/h		703			822			167			140	
Approach Delay, s/veh		11.7			10.8			12.2			13.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	16.2		11.0	6.0	18.9		11.0				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	6.0	24.5		25.0				
Max Q Clear Time (g_c+1/3), s	8.3			4.6	3.1	7.2		6.4				
Green Ext Time (p_c), s	0.0	2.3		0.4	0.0	2.3		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											11.5	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	245	177	46	368	66	285	496	48	24	122	25
Future Volume (veh/h)	6	245	177	46	368	66	285	496	48	24	122	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	7	266	60	50	400	68	310	539	0	26	133	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	426	351	157	477	81	362	640		46	308	
Arrive On Green	0.01	0.25	0.25	0.10	0.34	0.32	0.23	0.38	0.00	0.03	0.18	0.00
Sat Flow, veh/h	1603	1683	1388	1603	1396	237	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	7	266	60	50	0	468	310	539	0	26	133	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1388	1603	0	1633	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.3	9.3	2.2	1.9	0.0	17.6	12.4	19.5	0.0	1.1	4.7	0.0
Cycle Q Clear(g_c), s	0.3	9.3	2.2	1.9	0.0	17.6	12.4	19.5	0.0	1.1	4.7	0.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	426	351	157	0	558	362	640		46	308	
V/C Ratio(X)	0.48	0.62	0.17	0.32	0.00	0.84	0.86	0.84		0.57	0.43	
Avail Cap(c_a), veh/h	120	750	619	253	0	863	433	1107		120	778	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	22.1	19.4	28.0	0.0	20.3	24.8	18.8	0.0	31.9	24.1	0.0
Incr Delay (d2), s/veh	8.7	1.5	0.2	1.1	0.0	4.4	12.0	3.1	0.0	4.0	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.5	0.7	0.7	0.0	6.5	5.3	6.8	0.0	0.4	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	23.6	19.7	29.1	0.0	24.8	36.7	21.9	0.0	36.0	25.1	0.0
LnGrp LOS	D	C	B	C	A	C	D	C		D	C	
Approach Vol, veh/h		333			518			849	A		159	A
Approach Delay, s/veh		23.3			25.2			27.3			26.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	20.8	19.0	16.2	4.6	26.8	5.9	29.3				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	28.3	17.5	29.0	5.0	33.8	5.0	42.0				
Max Q Clear Time (g_c+1), s	13.0	11.3	14.4	6.7	2.3	19.6	3.1	21.5				
Green Ext Time (p_c), s	0.0	1.1	0.2	0.4	0.0	1.6	0.0	2.1				

Intersection Summary

HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St























UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	98	33	72	97	71	141	589	160	127	433	252
Future Volume (veh/h)	105	98	33	72	97	71	141	589	160	127	433	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	120	40	88	118	87	172	718	195	155	528	307
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	380	322	116	176	129	212	1238	552	198	737	427
Arrive On Green	0.09	0.20	0.20	0.06	0.18	0.15	0.12	0.35	0.35	0.11	0.34	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1000	737	1781	3554	1585	1781	2165	1256
Grp Volume(v), veh/h	128	120	40	88	0	205	172	718	195	155	433	402
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1738	1781	1777	1585	1781	1777	1644
Q Serve(g_s), s	4.1	3.2	1.2	2.9	0.0	6.5	5.5	9.7	5.4	5.0	12.5	12.7
Cycle Q Clear(g_c), s	4.1	3.2	1.2	2.9	0.0	6.5	5.5	9.7	5.4	5.0	12.5	12.7
Prop In Lane	1.00		1.00	1.00		0.42	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	165	380	322	116	0	305	212	1238	552	198	605	559
V/C Ratio(X)	0.78	0.32	0.12	0.76	0.00	0.67	0.81	0.58	0.35	0.78	0.72	0.72
Avail Cap(c_a), veh/h	243	1128	956	152	0	959	212	1913	853	364	1108	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	19.9	19.1	27.0	0.0	22.9	25.2	15.6	14.2	25.4	16.9	17.6
Incr Delay (d2), s/veh	9.1	0.5	0.2	10.3	0.0	2.6	19.1	0.4	0.4	2.6	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.3	0.4	1.4	0.0	2.6	3.2	3.4	1.7	2.0	4.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	20.4	19.3	37.3	0.0	25.5	44.3	16.0	14.6	28.0	18.5	19.3
LnGrp LOS	D	C	B	D	A	C	D	B	B	C	B	B
Approach Vol, veh/h		288			293			1085			990	
Approach Delay, s/veh		26.8			29.0			20.3			20.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	24.4	7.8	15.9	11.0	24.0	9.4	14.3				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	12.0	29.8	5.0	34.0	7.0	34.8	8.0	31.0				
Max Q Clear Time (g_c+1), s	11.7	11.7	4.9	5.2	7.5	14.7	6.1	8.5				
Green Ext Time (p_c), s	0.1	4.0	0.0	0.6	0.0	3.5	0.1	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											22.0	
HCM 6th LOS											C	

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - AM

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	48	69	83	72	45	41	80	138	153	62	223	74	
Future Volume (vph)	48	69	83	72	45	41	80	138	153	62	223	74	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.92		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1710		1770	1729		1770	1863	1583	1770	1863	1583	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1770	1710		1770	1729		1770	1863	1583	1770	1863	1583	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
Adj. Flow (vph)	62	88	106	92	58	53	103	177	196	79	286	95	
RTOR Reduction (vph)	0	33	0	0	25	0	0	0	136	0	0	68	
Lane Group Flow (vph)	62	161	0	92	86	0	103	177	60	79	286	27	
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	5	2		1	6		3	8		7		4	
Permitted Phases									8			4	
Actuated Green, G (s)	5.5	12.7		6.3	13.5		6.9	17.0	17.0	6.0	16.9	16.9	
Effective Green, g (s)	5.5	13.8		6.3	14.6		6.9	18.4	18.4	6.0	17.5	17.5	
Actuated g/C Ratio	0.09	0.23		0.10	0.24		0.11	0.30	0.30	0.10	0.29	0.29	
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	
Lane Grp Cap (vph)	160	390		184	417		201	566	481	175	538	457	
v/s Ratio Prot	0.04	c0.09		c0.05	0.05		c0.06	0.10		0.04	c0.15		
v/s Ratio Perm									0.04			0.02	
v/c Ratio	0.39	0.41		0.50	0.21		0.51	0.31	0.12	0.45	0.53	0.06	
Uniform Delay, d1	25.9	19.9		25.6	18.3		25.2	16.2	15.2	25.7	18.1	15.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.7		0.8	0.2		0.9	0.3	0.1	0.7	1.0	0.1	
Delay (s)	26.5	20.6		26.4	18.6		26.1	16.5	15.3	26.4	19.1	15.6	
Level of Service	C	C		C	B		C	B	B	C	B	B	
Approach Delay (s)		22.0			22.1			18.1			19.6		
Approach LOS		C			C			B			B		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			19.9									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.53										
Actuated Cycle Length (s)			60.5									Sum of lost time (s)	20.0
Intersection Capacity Utilization			42.4%									ICU Level of Service	A
Analysis Period (min)			15										

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	107	161	36	60	99	34
Future Vol, veh/h	107	161	36	60	99	34
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	194	43	72	119	41
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.5	8.6	9.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	74%	0%	38%
Vol Thru, %	0%	40%	62%
Vol Right, %	26%	60%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	133	268	96
LT Vol	99	0	36
Through Vol	0	107	60
RT Vol	34	161	0
Lane Flow Rate	160	323	116
Geometry Grp	1	1	1
Degree of Util (X)	0.217	0.369	0.152
Departure Headway (Hd)	4.871	4.117	4.746
Convergence, Y/N	Yes	Yes	Yes
Cap	736	875	755
Service Time	2.909	2.14	2.779
HCM Lane V/C Ratio	0.217	0.369	0.154
HCM Control Delay	9.3	9.5	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	1.7	0.5

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖↗
Traffic Volume (veh/h)	159	275	37	42	207	139	84	647	182	123	255	114
Future Volume (veh/h)	159	275	37	42	207	139	84	647	182	123	255	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	289	18	44	218	33	88	681	106	129	268	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	760	624	82	522	228	367	1123	493	166	537	170
Arrive On Green	0.11	0.21	0.19	0.05	0.15	0.15	0.21	0.32	0.32	0.09	0.20	0.17
Sat Flow, veh/h	3456	3554	1557	1781	3554	1555	1781	3554	1561	1781	2642	837
Grp Volume(v), veh/h	167	289	18	44	218	33	88	681	106	129	178	177
Grp Sat Flow(s),veh/h/ln	1728	1777	1557	1781	1777	1555	1781	1777	1561	1781	1777	1701
Q Serve(g_s), s	2.2	3.4	0.1	1.2	2.7	0.6	2.0	7.8	1.4	3.4	4.3	4.5
Cycle Q Clear(g_c), s	2.2	3.4	0.1	1.2	2.7	0.6	2.0	7.8	1.4	3.4	4.3	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	391	760	624	82	522	228	367	1123	493	166	361	346
V/C Ratio(X)	0.43	0.38	0.03	0.54	0.42	0.14	0.24	0.61	0.21	0.78	0.49	0.51
Avail Cap(c_a), veh/h	429	2073	1199	221	2073	907	367	2337	1027	295	1205	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	16.3	2.4	22.6	18.7	7.4	16.0	14.0	4.1	21.4	17.0	17.5
Incr Delay (d2), s/veh	0.3	0.3	0.0	2.0	0.5	0.3	0.1	0.5	0.2	3.0	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.2	0.0	0.5	1.0	0.3	0.7	2.4	0.6	1.3	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	16.6	2.4	24.6	19.3	7.7	16.2	14.5	4.3	24.4	18.1	18.7
LnGrp LOS	C	B	A	C	B	A	B	B	A	C	B	B
Approach Vol, veh/h		474			295			875			484	
Approach Delay, s/veh		17.3			18.8			13.5			20.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	14.3	14.0	13.8	9.5	11.1	8.5	19.3				
Change Period (Y+Rc), s	4.0	5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	27.1	7.0	31.0	5.0	27.1	8.0	30.0				
Max Q Clear Time (g_c+1), s	13.2	5.4	4.0	6.5	4.2	4.7	5.4	9.8				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.3	0.0	1.0	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

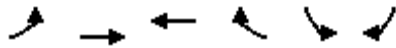
HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↗	↑				↘		↗
Traffic Volume (veh/h)	0	409	239	63	290	0	0	0	0	347	2	210
Future Volume (veh/h)	0	409	239	63	290	0	0	0	0	347	2	210
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	440	99	68	312	0				373	2	54
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	947	784	198	1238	0				444	0	389
Arrive On Green	0.00	0.51	0.51	0.11	0.66	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	1870	1548	1781	1870	0				1781	0	1559
Grp Volume(v), veh/h	0	440	99	68	312	0				373	0	54
Grp Sat Flow(s),veh/h/ln	0	1870	1548	1781	1870	0				1781	0	1559
Q Serve(g_s), s	0.0	13.7	3.0	3.2	6.1	0.0				17.9	0.0	2.4
Cycle Q Clear(g_c), s	0.0	13.7	3.0	3.2	6.1	0.0				17.9	0.0	2.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	947	784	198	1238	0				444	0	389
V/C Ratio(X)	0.00	0.46	0.13	0.34	0.25	0.00				0.84	0.00	0.14
Avail Cap(c_a), veh/h	0	947	784	198	1238	0				693	0	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.94	0.91	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.3	11.7	37.0	6.2	0.0				32.1	0.0	26.3
Incr Delay (d2), s/veh	0.0	1.5	0.3	4.3	0.4	0.0				3.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	1.0	1.6	2.2	0.0				7.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.9	12.0	41.2	6.6	0.0				35.2	0.0	26.3
LnGrp LOS		A	B	B	D	A				D	A	C
Approach Vol, veh/h		539			380					427		
Approach Delay, s/veh		15.2			12.8					34.0		
Approach LOS		B			B					C		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	4.0	49.6		26.4		63.6						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	5.0	31.3		33.5		45.3						
Max Q Clear Time (g_c+1), s	5.0	15.7		19.9		8.1						
Green Ext Time (p_c), s	0.0	1.1		0.9		0.6						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay		20.5										
HCM 6th LOS		C										

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗	↘	↙	↘
Traffic Volume (veh/h)	243	459	182	276	58	223
Future Volume (veh/h)	243	459	182	276	58	223
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	483	192	198	61	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	292	1582	1171	970	149	68
Arrive On Green	0.16	0.85	0.63	0.63	0.04	0.04
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	256	483	192	198	61	14
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	10.1	3.9	3.1	3.9	1.2	0.6
Cycle Q Clear(g_c), s	10.1	3.9	3.1	3.9	1.2	0.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	292	1582	1171	970	149	68
V/C Ratio(X)	0.88	0.31	0.16	0.20	0.41	0.20
Avail Cap(c_a), veh/h	292	1582	1171	970	768	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	1.2	5.6	5.8	33.6	33.3
Incr Delay (d2), s/veh	20.0	0.4	0.3	0.5	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.2	1.0	1.1	0.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.4	1.5	5.9	6.2	35.3	34.7
LnGrp LOS	D	A	A	A	D	C
Approach Vol, veh/h		739	390		75	
Approach Delay, s/veh		18.1	6.1		35.2	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		64.9		7.1	15.8	49.1
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		46.3		16.0	11.3	30.5
Max Q Clear Time (g_c+I1), s		5.9		3.2	12.1	5.9
Green Ext Time (p_c), s		1.1		0.2	0.0	0.9
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			15.3			
HCM 6th LOS			B			



Intersection

Intersection Delay, s/veh60.2

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	17	9	31	14	35	141	127	593	28	15	195	83
Future Vol, veh/h	17	9	31	14	35	141	127	593	28	15	195	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	10	34	15	38	153	138	645	30	16	212	90
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	11.7	13	93.9	14.3
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	65%	0%	29%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	35%	0%	71%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	593	28	26	31	49	141	15	195	83
LT Vol	127	0	0	17	0	14	0	15	0	0
Through Vol	0	593	0	9	0	35	0	0	195	0
RT Vol	0	0	28	0	31	0	141	0	0	83
Lane Flow Rate	138	645	30	28	34	53	153	16	212	90
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.269	1.164	0.049	0.067	0.071	0.118	0.303	0.035	0.43	0.166
Departure Headway (Hd)	7.005	6.499	5.79	8.94	7.9	8.258	7.409	8.145	7.636	6.924
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	561	617	403	456	437	489	442	475	521
Service Time	4.758	4.251	3.542	6.64	5.6	5.958	5.109	5.845	5.336	4.624
HCM Lane V/C Ratio	0.27	1.15	0.049	0.069	0.075	0.121	0.313	0.036	0.446	0.173
HCM Control Delay	12.3	115.4	8.8	12.3	11.2	12.1	13.3	11.1	16	11
HCM Lane LOS	B	F	A	B	B	B	B	B	C	B
HCM 95th-tile Q	1.1	22.1	0.2	0.2	0.2	0.4	1.3	0.1	2.1	0.6

HCM 6th Signalized Intersection Summary  
 1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	35	99	85	22	49	87	702	79	103	1214	65
Future Volume (veh/h)	96	35	99	85	22	49	87	702	79	103	1214	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	38	47	92	24	17	95	763	79	112	1320	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	95	118	303	122	86	122	1487	154	157	1636	90
Arrive On Green	0.07	0.13	0.10	0.06	0.12	0.10	0.07	0.46	0.43	0.09	0.48	0.45
Sat Flow, veh/h	1781	751	928	1781	1008	714	1781	3242	336	1781	3419	189
Grp Volume(v), veh/h	104	0	85	92	0	41	95	418	424	112	685	708
Grp Sat Flow(s),veh/h/ln	1781	0	1679	1781	0	1722	1781	1777	1800	1781	1777	1831
Q Serve(g_s), s	3.1	0.0	2.9	2.8	0.0	1.3	3.2	10.1	10.2	3.7	19.9	20.1
Cycle Q Clear(g_c), s	3.1	0.0	2.9	2.8	0.0	1.3	3.2	10.1	10.2	3.7	19.9	20.1
Prop In Lane	1.00		0.55	1.00		0.41	1.00		0.19	1.00		0.10
Lane Grp Cap(c), veh/h	344	0	213	303	0	208	122	815	826	157	850	876
V/C Ratio(X)	0.30	0.00	0.40	0.30	0.00	0.20	0.78	0.51	0.51	0.71	0.81	0.81
Avail Cap(c_a), veh/h	365	0	901	310	0	896	146	928	940	161	942	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	24.8	22.8	0.0	24.4	27.9	11.7	11.8	27.0	13.5	13.6
Incr Delay (d2), s/veh	0.2	0.0	1.2	0.6	0.0	0.5	16.2	0.5	0.5	11.6	4.7	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	1.1	0.0	0.5	1.8	3.5	3.6	1.9	7.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	0.0	26.0	23.4	0.0	24.9	44.1	12.2	12.3	38.6	18.2	18.3
LnGrp LOS	C	A	C	C	A	C	D	B	B	D	B	B
Approach Vol, veh/h		189			133			937			1505	
Approach Delay, s/veh		24.2			23.8			15.5			19.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	11.8	8.2	33.1	8.3	11.3	9.4	31.9				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 31	5.0	30.5	5.0	30.2	5.0	30.0				
Max Q Clear Time (g_c+I1), s	4.8	4.9	5.2	22.1	5.1	3.3	5.7	12.2				
Green Ext Time (p_c), s	0.0	0.4	0.0	5.2	0.0	0.2	0.0	5.2				

Intersection Summary

HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & Third St/Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	101	669	149	162	249	107	119	377	175	266	761	99
Future Volume (veh/h)	101	669	149	162	249	107	119	377	175	266	761	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	719	144	174	268	67	128	405	144	286	818	98
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	889	178	208	961	236	159	569	200	323	1000	120
Arrive On Green	0.08	0.30	0.29	0.12	0.34	0.33	0.09	0.22	0.21	0.18	0.31	0.30
Sat Flow, veh/h	1781	2941	589	1781	2819	691	1781	2566	901	1781	3189	382
Grp Volume(v), veh/h	109	434	429	174	167	168	128	279	270	286	456	460
Grp Sat Flow(s),veh/h/ln	1781	1777	1753	1781	1777	1733	1781	1777	1690	1781	1777	1795
Q Serve(g_s), s	5.4	20.3	20.3	8.6	6.1	6.4	6.3	13.0	13.3	14.1	21.3	21.3
Cycle Q Clear(g_c), s	5.4	20.3	20.3	8.6	6.1	6.4	6.3	13.0	13.3	14.1	21.3	21.3
Prop In Lane	1.00		0.34	1.00		0.40	1.00		0.53	1.00		0.21
Lane Grp Cap(c), veh/h	139	537	530	208	606	591	159	394	375	323	557	563
V/C Ratio(X)	0.79	0.81	0.81	0.84	0.28	0.28	0.80	0.71	0.72	0.89	0.82	0.82
Avail Cap(c_a), veh/h	258	705	695	218	665	649	218	562	535	377	720	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	28.9	29.2	38.8	21.5	21.8	40.1	32.2	32.7	35.9	28.5	28.6
Incr Delay (d2), s/veh	3.7	5.3	5.4	21.7	0.2	0.3	9.9	2.3	2.7	17.9	5.8	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	9.3	9.2	4.9	2.5	2.5	3.1	5.6	5.5	7.7	9.8	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	34.2	34.6	60.5	21.8	22.1	50.0	34.6	35.4	53.8	34.2	34.3
LnGrp LOS	D	C	C	E	C	C	D	C	D	D	C	C
Approach Vol, veh/h		972		509		677		1202				
Approach Delay, s/veh		35.5		35.1		37.8		38.9				
Approach LOS		D		D		D		D				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	31.1	12.0	32.1	11.0	34.6	20.3	23.9				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	34.2	11.0	35.0	13.0	32.2	19.0	27.0					
Max Q Clear Time (g_c+I), s	22.3	8.3	23.3	7.4	8.4	16.1	15.3					
Green Ext Time (p_c), s	0.0	3.2	0.1	3.4	0.1	1.2	0.2	1.7				

Intersection Summary

HCM 6th Ctrl Delay	37.1
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 3: Blaine St & I-215 SB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑						↑	↑
Traffic Volume (veh/h)	0	583	600	319	455	0	0	0	0	349	19	132
Future Volume (veh/h)	0	583	600	319	455	0	0	0	0	349	19	132
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	601	362	329	469	0				360	20	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1094	659	4033	6100	0				423	23	
Arrive On Green	0.00	0.52	0.50	0.39	0.57	0.00				0.25	0.25	0.00
Sat Flow, veh/h	0	2213	1277	3456	3647	0				1692	94	1585
Grp Volume(v), veh/h	0	504	459	329	469	0				380	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1619	1728	1777	0				1786	0	1585
Q Serve(g_s), s	0.0	11.5	11.7	0.0	0.0	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.5	11.7	0.0	0.0	0.0				12.2	0.0	0.0
Prop In Lane	0.00		0.79	1.00		0.00				0.95		1.00
Lane Grp Cap(c), veh/h	0	917	836	4033	6100	0				446	0	
V/C Ratio(X)	0.00	0.55	0.55	0.08	0.08	0.00				0.85	0.00	
Avail Cap(c_a), veh/h	0	917	836	4033	6100	0				446	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.44	0.44	0.67	0.67	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.8	10.1	0.0	0.0	0.0				21.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	1.1	0.0	0.0	0.0				18.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	3.4	0.0	0.0	0.0				6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.8	11.3	0.0	0.0	0.0				39.6	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				D	A	
Approach Vol, veh/h		963			798						380	A
Approach Delay, s/veh		11.0			0.0						39.6	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	35.0		19.0		111.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	30.0	24.0		13.7		* 38						
Max Q Clear Time (g_c+I), s	12.0	13.7		14.2		2.0						
Green Ext Time (p_c), s	0.6	3.7		0.0		0.5						

Intersection Summary

HCM 6th Ctrl Delay		12.0										
HCM 6th LOS			B									

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 4: I-215 NB & Blaine St

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑↑			↑↓			↑	↗			
Traffic Volume (veh/h)	209	707	0	0	622	661	149	0	303	0	0	0
Future Volume (veh/h)	209	707	0	0	622	661	149	0	303	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	215	729	0	0	641	463	154	0	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	352	2565	0	0	1084	781	258	0				
Arrive On Green	0.10	0.72	0.00	0.00	0.55	0.54	0.14	0.00	0.00			
Sat Flow, veh/h	3456	3647	0	0	2052	1411	1781	0	1585			
Grp Volume(v), veh/h	215	729	0	0	581	523	154	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1593	1781	0	1585			
Q Serve(g_s), s	3.6	4.3	0.0	0.0	13.0	13.3	4.9	0.0	0.0			
Cycle Q Clear(g_c), s	3.6	4.3	0.0	0.0	13.0	13.3	4.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.89	1.00		1.00			
Lane Grp Cap(c), veh/h	352	2565	0	0	983	881	258	0				
V/C Ratio(X)	0.61	0.28	0.00	0.00	0.59	0.59	0.60	0.00				
Avail Cap(c_a), veh/h	403	2565	0	0	983	881	386	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.70	0.70	1.00	0.00	0.00			
Uniform Delay (d), s/veh	25.8	2.9	0.0	0.0	8.9	9.3	24.0	0.0	0.0			
Incr Delay (d2), s/veh	0.7	0.2	0.0	0.0	1.8	2.1	0.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4	0.7	0.0	0.0	4.0	3.8	1.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	3.1	0.0	0.0	10.7	11.3	24.8	0.0	0.0			
LnGrp LOS	C	A	A	A	B	B	C	A				
Approach Vol, veh/h		944			1104			154	A			
Approach Delay, s/veh		8.4			11.0			24.8				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.3			10.1	37.2		12.7				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		38.0			6.5	27.0		11.7				
Max Q Clear Time (g_c+I1), s		6.3			5.6	15.3		6.9				
Green Ext Time (p_c), s		3.3			0.0	3.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑		↖	↑↑	↖
Traffic Volume (veh/h)	295	394	159	123	588	165	172	467	139	164	769	416
Future Volume (veh/h)	295	394	159	123	588	165	172	467	139	164	769	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	406	38	127	606	54	177	481	125	169	793	194
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	399	888	390	195	871	382	218	844	218	219	1080	474
Arrive On Green	0.12	0.25	0.25	0.11	0.25	0.25	0.12	0.30	0.28	0.12	0.30	0.30
Sat Flow, veh/h	3456	3554	1559	1781	3554	1559	1781	2785	719	1781	3554	1561
Grp Volume(v), veh/h	304	406	38	127	606	54	177	306	300	169	793	194
Grp Sat Flow(s),veh/h/ln	1728	1777	1559	1781	1777	1559	1781	1777	1727	1781	1777	1561
Q Serve(g_s), s	6.4	7.3	1.4	5.1	11.6	2.0	7.3	10.9	11.1	6.9	15.0	7.4
Cycle Q Clear(g_c), s	6.4	7.3	1.4	5.1	11.6	2.0	7.3	10.9	11.1	6.9	15.0	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	399	888	390	195	871	382	218	538	523	219	1080	474
V/C Ratio(X)	0.76	0.46	0.10	0.65	0.70	0.14	0.81	0.57	0.57	0.77	0.73	0.41
Avail Cap(c_a), veh/h	553	1629	715	323	1705	748	332	779	757	311	1516	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	23.8	21.6	32.0	25.8	22.1	32.1	22.0	22.4	31.9	23.4	20.8
Incr Delay (d2), s/veh	2.4	0.4	0.1	1.4	1.0	0.2	4.8	0.9	1.0	4.2	1.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	0.5	2.2	4.6	0.7	3.2	4.2	4.2	3.0	5.8	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	24.2	21.7	33.4	26.8	22.3	36.9	23.0	23.4	36.1	24.5	21.3
LnGrp LOS	C	C	C	C	C	C	D	C	C	D	C	C
Approach Vol, veh/h		748			787			783			1156	
Approach Delay, s/veh		28.3			27.6			26.3			25.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	22.9	13.2	26.8	12.7	22.4	13.2	26.7				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	12.1	* 33	14.0	30.2	12.0	34.5	12.6	31.1				
Max Q Clear Time (g_c+1T), s	9.3	9.3	9.3	17.0	8.4	13.6	8.9	13.1				
Green Ext Time (p_c), s	0.1	1.9	0.1	3.8	0.3	2.9	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	554	51	33	679	45	86	26	39	73	28	43
Future Volume (veh/h)	48	554	51	33	679	45	86	26	39	73	28	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	583	47	35	715	42	91	27	8	77	29	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	1155	93	182	1334	78	486	207	61	303	45	42
Arrive On Green	0.06	0.35	0.30	0.10	0.39	0.35	0.15	0.15	0.13	0.15	0.15	0.13
Sat Flow, veh/h	1781	3323	267	1781	3405	200	1343	1379	409	760	297	279
Grp Volume(v), veh/h	51	311	319	35	373	384	91	0	35	134	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1814	1781	1777	1828	1343	0	1788	1336	0	0
Q Serve(g_s), s	0.8	4.2	4.2	0.5	4.8	4.9	0.0	0.0	0.5	2.5	0.0	0.0
Cycle Q Clear(g_c), s	0.8	4.2	4.2	0.5	4.8	4.9	1.4	0.0	0.5	3.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.11	1.00		0.23	0.57		0.21
Lane Grp Cap(c), veh/h	103	617	630	182	696	716	486	0	268	390	0	0
V/C Ratio(X)	0.50	0.50	0.51	0.19	0.54	0.54	0.19	0.00	0.13	0.34	0.00	0.00
Avail Cap(c_a), veh/h	832	3083	3148	594	2846	2929	1898	0	2148	1959	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.7	7.7	7.8	12.3	7.0	7.1	11.4	0.0	11.1	12.4	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.6	0.6	0.2	0.6	0.6	0.2	0.0	0.2	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.1	1.1	0.2	1.1	1.2	0.4	0.0	0.2	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	8.4	8.5	12.5	7.7	7.7	11.6	0.0	11.3	12.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		681			792			126			134	
Approach Delay, s/veh		8.9			7.9			11.5			12.9	
Approach LOS		A			A			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	14.4		8.5	5.7	15.7		8.5				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	10.0	50.6		35.4	14.0	46.6		35.4				
Max Q Clear Time (g_c+1/2), s	12.5	6.2		5.0	2.8	6.9		3.4				
Green Ext Time (p_c), s	0.0	2.7		0.5	0.0	3.4		0.5				

Intersection Summary

HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	468	143	148	534	17	130	89	152	15	110	60
Future Volume (veh/h)	40	468	143	148	534	17	130	89	152	15	110	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	43	498	116	157	568	15	138	95	88	16	117	44
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	787	182	200	1225	32	401	496	553	437	342	129
Arrive On Green	0.05	0.31	0.27	0.12	0.39	0.35	0.29	0.29	0.27	0.29	0.29	0.27
Sat Flow, veh/h	1603	2563	593	1603	3181	84	1101	1683	1389	1078	1160	436
Grp Volume(v), veh/h	43	309	305	157	285	298	138	95	88	16	0	161
Grp Sat Flow(s),veh/h/ln	1603	1599	1558	1603	1599	1666	1101	1683	1389	1078	0	1597
Q Serve(g_s), s	1.2	7.3	7.5	4.2	5.9	5.9	4.9	1.9	1.8	0.5	0.0	3.5
Cycle Q Clear(g_c), s	1.2	7.3	7.5	4.2	5.9	5.9	8.4	1.9	1.8	2.3	0.0	3.5
Prop In Lane	1.00		0.38	1.00		0.05	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	75	491	478	200	616	642	401	496	553	437	0	471
V/C Ratio(X)	0.58	0.63	0.64	0.78	0.46	0.46	0.34	0.19	0.16	0.04	0.00	0.34
Avail Cap(c_a), veh/h	329	1458	1420	840	1968	2049	954	1342	1251	978	0	1273
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	13.1	13.4	18.6	10.1	10.1	15.4	11.6	8.6	12.4	0.0	12.3
Incr Delay (d2), s/veh	2.6	1.3	1.4	2.6	0.5	0.5	0.5	0.2	0.1	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	2.2	1.4	1.5	1.6	1.1	0.6	0.5	0.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	14.4	14.8	21.2	10.6	10.7	16.0	11.7	8.7	12.5	0.0	12.7
LnGrp LOS	C	B	B	C	B	B	B	B	A	B	A	B
Approach Vol, veh/h		657			740			321			177	
Approach Delay, s/veh		15.1			12.9			12.7			12.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	17.5		16.9	6.0	20.9		16.9				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.0	38.6		33.9	9.0	52.6		33.9				
Max Q Clear Time (g_c+10), s	10.2	9.5		5.5	3.2	7.9		10.4				
Green Ext Time (p_c), s	0.3	2.5		0.7	0.0	2.3		1.5				

Intersection Summary

HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B



HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	300	244	37	220	17	263	249	56	147	449	43
Future Volume (veh/h)	12	300	244	37	220	17	263	249	56	147	449	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	12	312	80	39	229	16	274	259	0	153	468	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	387	319	121	451	32	314	671		185	535	
Arrive On Green	0.01	0.23	0.23	0.08	0.29	0.27	0.20	0.40	0.00	0.12	0.32	0.00
Sat Flow, veh/h	1603	1683	1387	1603	1552	108	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	12	312	80	39	0	245	274	259	0	153	468	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1387	1603	0	1660	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.7	15.5	4.2	2.0	0.0	10.8	14.6	9.7	0.0	8.2	23.2	0.0
Cycle Q Clear(g_c), s	0.7	15.5	4.2	2.0	0.0	10.8	14.6	9.7	0.0	8.2	23.2	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	23	387	319	121	0	483	314	671		185	535	
V/C Ratio(X)	0.52	0.81	0.25	0.32	0.00	0.51	0.87	0.39		0.83	0.87	
Avail Cap(c_a), veh/h	91	582	479	191	0	677	363	671		345	629	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	32.1	27.8	38.7	0.0	26.1	34.4	18.9	0.0	38.2	28.4	0.0
Incr Delay (d2), s/veh	6.5	5.0	0.4	1.5	0.0	0.8	16.7	0.4	0.0	3.6	11.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.5	1.3	0.8	0.0	4.1	6.8	3.5	0.0	3.2	10.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	37.2	28.2	40.2	0.0	26.9	51.1	19.2	0.0	41.8	40.1	0.0
LnGrp LOS	D	D	C	D	A	C	D	B		D	D	
Approach Vol, veh/h		404			284			533	A		621	A
Approach Delay, s/veh		35.8			28.7			35.6			40.5	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	24.3	21.3	32.0	5.3	29.7	14.2	39.2				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	29.1	19.5	31.2	5.0	34.6	19.0	32.2				
Max Q Clear Time (g_c+1), s	10.0	17.5	16.6	25.2	2.7	12.8	10.2	11.7				
Green Ext Time (p_c), s	0.0	1.2	0.2	1.0	0.0	0.8	0.2	0.8				

Intersection Summary

HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM



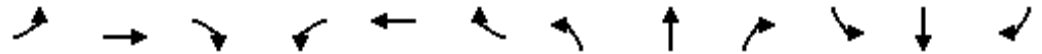
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	129	100	147	96	80	51	596	160	102	870	110
Future Volume (veh/h)	98	129	100	147	96	80	51	596	160	102	870	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	134	104	153	100	83	53	621	167	106	906	115
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	268	227	198	171	142	91	1313	586	137	1254	159
Arrive On Green	0.07	0.14	0.14	0.11	0.18	0.15	0.05	0.37	0.37	0.08	0.40	0.36
Sat Flow, veh/h	1781	1870	1585	1781	945	784	1781	3554	1585	1781	3172	403
Grp Volume(v), veh/h	102	134	104	153	0	183	53	621	167	106	507	514
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1729	1781	1777	1585	1781	1777	1798
Q Serve(g_s), s	3.0	3.5	3.2	4.5	0.0	5.2	1.6	7.1	4.0	3.1	12.9	13.0
Cycle Q Clear(g_c), s	3.0	3.5	3.2	4.5	0.0	5.2	1.6	7.1	4.0	3.1	12.9	13.0
Prop In Lane	1.00		1.00	1.00		0.45	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	130	268	227	198	0	313	91	1313	586	137	702	711
V/C Ratio(X)	0.78	0.50	0.46	0.77	0.00	0.58	0.58	0.47	0.29	0.78	0.72	0.72
Avail Cap(c_a), veh/h	133	1310	1110	467	0	1017	167	2236	997	300	1251	1266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	21.1	21.0	23.1	0.0	20.3	24.8	12.9	11.9	24.2	13.7	13.9
Incr Delay (d2), s/veh	25.1	1.4	1.4	2.4	0.0	1.7	2.2	0.3	0.3	3.5	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.5	1.1	1.8	0.0	2.0	0.6	2.3	1.2	1.3	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	22.6	22.4	25.5	0.0	22.1	27.0	13.1	12.1	27.7	15.1	15.3
LnGrp LOS	D	C	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		340			336			841			1127	
Approach Delay, s/veh		30.6			23.6			13.8			16.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	23.7	9.9	11.6	6.7	25.1	7.9	13.7				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	31.8	14.0	36.0	5.0	35.8	4.0	30.0					
Max Q Clear Time (g_c+1), s	9.1	6.5	5.5	3.6	15.0	5.0	7.2					
Green Ext Time (p_c), s	0.1	3.6	0.2	0.9	0.0	4.3	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	113	113	210	121	110	83	204	144	108	299	45
Future Volume (vph)	52	113	113	210	121	110	83	204	144	108	299	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.93		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1723		1770	1730		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1723		1770	1730		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	57	124	124	231	133	121	91	224	158	119	329	49
RTOR Reduction (vph)	0	40	0	0	33	0	0	0	121	0	0	37
Lane Group Flow (vph)	57	208	0	231	221	0	91	224	37	119	329	12
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	3.0	10.0		8.0	15.0		5.0	11.1	11.1	6.0	12.9	12.9
Effective Green, g (s)	3.0	11.1		8.0	16.1		5.0	12.5	12.5	6.0	13.5	13.5
Actuated g/C Ratio	0.06	0.21		0.15	0.30		0.09	0.23	0.23	0.11	0.25	0.25
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	99	356		264	519		165	434	369	198	469	398
v/s Ratio Prot	0.03	c0.12		c0.13	0.13		0.05	0.12		c0.07	c0.18	
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.58	0.59		0.88	0.43		0.55	0.52	0.10	0.60	0.70	0.03
Uniform Delay, d1	24.7	19.2		22.3	15.0		23.2	17.9	16.1	22.7	18.2	15.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	2.5		25.2	0.6		2.3	1.0	0.1	3.5	4.7	0.0
Delay (s)	29.6	21.6		47.5	15.6		25.5	19.0	16.3	26.2	22.9	15.2
Level of Service	C	C		D	B		C	B	B	C	C	B
Approach Delay (s)		23.1			30.8			19.3			22.9	
Approach LOS		C			C			B			C	

Intersection Summary

HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	139	216	37	163	247	43
Future Vol, veh/h	139	216	37	163	247	43
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	162	251	43	190	287	50
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.3	11.7	14.9
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	85%	0%	18%
Vol Thru, %	0%	39%	81%
Vol Right, %	15%	61%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	290	355	200
LT Vol	247	0	37
Through Vol	0	139	163
RT Vol	43	216	0
Lane Flow Rate	337	413	233
Geometry Grp	1	1	1
Degree of Util (X)	0.529	0.568	0.36
Departure Headway (Hd)	5.652	4.952	5.573
Convergence, Y/N	Yes	Yes	Yes
Cap	637	727	644
Service Time	3.69	2.989	3.617
HCM Lane V/C Ratio	0.529	0.568	0.362
HCM Control Delay	14.9	14.3	11.7
HCM Lane LOS	B	B	B
HCM 95th-tile Q	3.1	3.6	1.6

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔	↔	↑↑	↔
Traffic Volume (veh/h)	255	709	131	117	329	113	132	364	111	235	607	186
Future Volume (veh/h)	255	709	131	117	329	113	132	364	111	235	607	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	754	60	124	350	31	140	387	22	250	646	181
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	994	571	158	945	415	177	629	272	411	842	236
Arrive On Green	0.12	0.28	0.27	0.09	0.27	0.27	0.10	0.18	0.18	0.23	0.31	0.28
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	3554	1538	1781	2731	764
Grp Volume(v), veh/h	271	754	60	124	350	31	140	387	22	250	420	407
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1538	1781	1777	1718
Q Serve(g_s), s	5.7	14.8	0.0	5.2	6.1	0.6	5.9	7.7	0.9	9.6	16.3	16.4
Cycle Q Clear(g_c), s	5.7	14.8	0.0	5.2	6.1	0.6	5.9	7.7	0.9	9.6	16.3	16.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	402	994	571	158	945	415	177	629	272	411	548	530
V/C Ratio(X)	0.67	0.76	0.11	0.79	0.37	0.07	0.79	0.62	0.08	0.61	0.77	0.77
Avail Cap(c_a), veh/h	498	1454	773	257	1454	638	350	1482	641	467	857	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	25.1	16.0	34.1	22.8	5.3	33.6	29.0	26.2	26.2	23.9	24.3
Incr Delay (d2), s/veh	1.5	1.4	0.1	3.3	0.2	0.1	3.0	1.0	0.1	1.0	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.0	0.6	2.3	2.4	0.4	2.5	3.1	0.3	3.8	6.4	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	26.5	16.1	37.3	23.0	5.4	36.6	30.0	26.3	27.2	26.2	26.7
LnGrp LOS	C	C	B	D	C	A	D	C	C	C	C	C
Approach Vol, veh/h		1085			505			549			1077	
Approach Delay, s/veh		27.7			25.5			31.5			26.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	25.3	11.6	27.5	12.9	24.3	21.6	17.5				
Change Period (Y+Rc), s	5.1	* 5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30	* 30	15.0	35.0	10.0	30.1	20.0	30.0				
Max Q Clear Time (g_c+1T), s	16.8	7.9	18.4	7.7	8.1	11.6	9.7					
Green Ext Time (p_c), s	0.1	3.3	0.1	3.1	0.2	1.6	0.3	1.6				

Intersection Summary

HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Existing Plus Phase 1 Conditions - PM

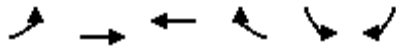


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑					↖		↗
Traffic Volume (veh/h)	0	474	693	171	503	0	0	0	0	47	0	88
Future Volume (veh/h)	0	474	693	171	503	0	0	0	0	47	0	88
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	494	310	178	524	0				49	0	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1232	1020	294	1615	0				101	0	90
Arrive On Green	0.00	0.66	0.66	0.17	0.86	0.00				0.06	0.00	0.06
Sat Flow, veh/h	0	1870	1549	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	494	310	178	524	0				49	0	15
Grp Sat Flow(s),veh/h/ln	0	1870	1549	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	12.3	8.5	9.3	5.3	0.0				2.7	0.0	0.9
Cycle Q Clear(g_c), s	0.0	12.3	8.5	9.3	5.3	0.0				2.7	0.0	0.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1232	1020	294	1615	0				101	0	90
V/C Ratio(X)	0.00	0.40	0.30	0.61	0.32	0.00				0.49	0.00	0.17
Avail Cap(c_a), veh/h	0	1232	1020	294	1615	0				527	0	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.67	0.67	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.9	7.3	38.7	1.3	0.0				45.8	0.0	44.9
Incr Delay (d2), s/veh	0.0	0.7	0.5	7.4	0.4	0.0				1.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	2.6	4.6	0.7	0.0				1.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.6	7.8	46.1	1.7	0.0				47.1	0.0	45.3
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		804			702						64	
Approach Delay, s/veh		8.3			13.0						46.7	
Approach LOS		A			B						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.5	69.8		9.7		90.3						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	40.0	40.2		28.1		60.7						
Max Q Clear Time (g_c+I), s	14.3	14.3		4.7		7.3						
Green Ext Time (p_c), s	0.1	2.0		0.1		1.2						

Intersection Summary

HCM 6th Ctrl Delay		12.0										
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗	↘	↙	↘
Traffic Volume (veh/h)	167	344	477	303	89	198
Future Volume (veh/h)	167	344	477	303	89	198
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	378	524	257	98	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	242	1516	1137	942	194	89
Arrive On Green	0.14	0.81	0.61	0.61	0.06	0.06
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	184	378	524	257	98	13
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	6.0	2.9	9.2	4.7	1.7	0.5
Cycle Q Clear(g_c), s	6.0	2.9	9.2	4.7	1.7	0.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	242	1516	1137	942	194	89
V/C Ratio(X)	0.76	0.25	0.46	0.27	0.50	0.15
Avail Cap(c_a), veh/h	273	1516	1137	942	403	185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	1.4	6.4	5.5	27.5	26.9
Incr Delay (d2), s/veh	9.8	0.4	1.3	0.7	2.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.2	2.9	1.2	0.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.7	1.7	7.7	6.2	29.5	27.7
LnGrp LOS	C	A	A	A	C	C
Approach Vol, veh/h		562	781		111	
Approach Delay, s/veh		12.5	7.3		29.3	
Approach LOS		B	A		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		52.6		7.4	12.1	40.5
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		43.3		7.0	8.7	30.1
Max Q Clear Time (g_c+I1), s		4.9		3.7	8.0	11.2
Green Ext Time (p_c), s		0.8		0.1	0.0	1.8
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			11.0			
HCM 6th LOS			B			

**Intersection**

Intersection Delay, s/veh52.2

Intersection LOS F

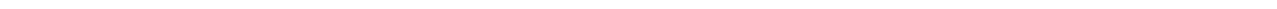
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	147	30	189	73	41	31	77	333	32	92	418	45
Future Vol, veh/h	147	30	189	73	41	31	77	333	32	92	418	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	162	33	208	80	45	34	85	366	35	101	459	49
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	21	17.9	44.8	87.6
HCM LOS	C	C	E	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	83%	0%	64%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	17%	0%	36%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	333	32	177	189	114	31	92	418	45
LT Vol	77	0	0	147	0	73	0	92	0	0
Through Vol	0	333	0	30	0	41	0	0	418	0
RT Vol	0	0	32	0	189	0	31	0	0	45
Lane Flow Rate	85	366	35	195	208	125	34	101	459	49
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.22	0.901	0.08	0.515	0.487	0.357	0.088	0.262	1.123	0.111
Departure Headway (Hd)	9.766	9.246	8.519	9.881	8.742	10.692	9.641	9.316	8.798	8.073
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	370	395	423	368	415	338	374	385	413	443
Service Time	7.466	6.946	6.219	7.581	6.442	8.392	7.341	7.088	6.57	5.844
HCM Lane V/C Ratio	0.23	0.927	0.083	0.53	0.501	0.37	0.091	0.262	1.111	0.111
HCM Control Delay	15.2	54.8	12	22.6	19.5	19.2	13.3	15.4	111.7	11.9
HCM Lane LOS	C	F	B	C	C	C	B	C	F	B
HCM 95th-tile Q	0.8	9.3	0.3	2.8	2.6	1.6	0.3	1	16.6	0.4



## Future Year (2025) Conditions



HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	130	50	120	250	40	250	120	970	160	160	820	80
Future Volume (veh/h)	130	50	120	250	40	250	120	970	160	160	820	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	60	51	298	48	85	143	1155	180	190	976	90
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	128	109	280	84	148	178	1422	221	239	1631	150
Arrive On Green	0.06	0.14	0.12	0.06	0.14	0.12	0.10	0.46	0.44	0.13	0.50	0.47
Sat Flow, veh/h	1781	924	785	1781	597	1057	1781	3071	477	1781	3282	303
Grp Volume(v), veh/h	155	0	111	298	0	133	143	666	669	190	528	538
Grp Sat Flow(s),veh/h/ln	1781	0	1710	1781	0	1654	1781	1777	1771	1781	1777	1807
Q Serve(g_s), s	5.0	0.0	4.8	5.0	0.0	6.0	6.3	25.7	26.1	8.3	17.0	17.1
Cycle Q Clear(g_c), s	5.0	0.0	4.8	5.0	0.0	6.0	6.3	25.7	26.1	8.3	17.0	17.1
Prop In Lane	1.00		0.46	1.00		0.64	1.00		0.27	1.00		0.17
Lane Grp Cap(c), veh/h	259	0	238	280	0	232	178	823	820	239	883	898
V/C Ratio(X)	0.60	0.00	0.47	1.06	0.00	0.57	0.80	0.81	0.82	0.80	0.60	0.60
Avail Cap(c_a), veh/h	259	0	693	280	0	671	268	934	931	326	992	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	32.0	34.4	0.0	32.6	35.2	18.4	18.7	33.5	14.4	14.5
Incr Delay (d2), s/veh	2.7	0.0	1.4	71.8	0.0	2.2	5.6	4.8	5.1	6.5	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.0	8.5	0.0	2.5	2.9	10.7	11.0	3.8	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	0.0	33.4	106.2	0.0	34.8	40.7	23.3	23.9	40.0	15.2	15.3
LnGrp LOS	C	A	C	F	A	C	D	C	C	D	B	B
Approach Vol, veh/h		266			431			1478			1256	
Approach Delay, s/veh		33.3			84.2			25.2			19.0	
Approach LOS		C			F			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	15.2	12.0	43.7	9.0	15.2	14.7	41.0				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	5.0	* 31	12.0	42.8	5.0	30.9	14.1	40.2				
Max Q Clear Time (g_c+I1), s	7.0	6.8	8.3	19.1	7.0	8.0	10.3	28.1				
Green Ext Time (p_c), s	0.0	0.6	0.1	6.8	0.0	0.7	0.1	7.1				

Intersection Summary

HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street

UCR North District Transportation Study  
Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	360	70	170	380	290	190	820	250	200	410	70
Future Volume (veh/h)	100	360	70	170	380	290	190	820	250	200	410	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	439	76	207	463	303	232	1000	285	244	500	76
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	658	113	225	536	349	260	1054	299	254	1183	179
Arrive On Green	0.08	0.22	0.21	0.13	0.26	0.25	0.15	0.39	0.38	0.14	0.38	0.37
Sat Flow, veh/h	1781	3023	520	1781	2048	1333	1781	2723	772	1781	3088	467
Grp Volume(v), veh/h	122	257	258	207	401	365	232	651	634	244	287	289
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1605	1781	1777	1718	1781	1777	1778
Q Serve(g_s), s	8.5	16.7	17.0	14.5	27.2	27.5	16.2	44.8	45.4	17.2	15.0	15.2
Cycle Q Clear(g_c), s	8.5	16.7	17.0	14.5	27.2	27.5	16.2	44.8	45.4	17.2	15.0	15.2
Prop In Lane	1.00		0.29	1.00		0.83	1.00		0.45	1.00		0.26
Lane Grp Cap(c), veh/h	147	387	384	225	465	420	260	688	665	254	681	681
V/C Ratio(X)	0.83	0.66	0.67	0.92	0.86	0.87	0.89	0.95	0.95	0.96	0.42	0.42
Avail Cap(c_a), veh/h	183	506	503	225	548	495	394	688	666	254	681	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	45.2	45.5	54.6	44.5	45.2	53.0	37.5	38.0	53.9	28.7	28.9
Incr Delay (d2), s/veh	18.6	2.1	2.2	37.7	11.9	13.6	11.1	22.0	24.1	45.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.7	7.8	8.8	13.2	12.3	7.9	22.9	22.8	11.0	6.6	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	47.3	47.8	92.3	56.4	58.7	64.1	59.5	62.1	99.6	29.1	29.3
LnGrp LOS	E	D	D	F	E	E	E	E	E	F	C	C
Approach Vol, veh/h		637		973		1517		820				
Approach Delay, s/veh		52.9		64.9		61.3		50.2				
Approach LOS		D		E		E		D				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	31.5	22.5	52.4	14.4	37.1	22.0	52.9				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	10.0	34.6	28.0	37.6	13.0	37.6	18.0	47.6				
Max Q Clear Time (g_c+10), s	10.5	19.0	18.2	17.2	10.5	29.5	19.2	47.4				
Green Ext Time (p_c), s	0.0	2.0	0.3	2.4	0.1	2.2	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	58.5
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary  
3: 3rd Street & I-215 SB

UCR North District Transportation Study  
Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖↗	↑↑						↑	↗
Traffic Volume (veh/h)	0	690	170	240	550	0	0	0	0	570	0	450
Future Volume (veh/h)	0	690	170	240	550	0	0	0	0	570	0	450
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	821	171	286	655	0				679	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1577	328	2419	4478	0				570	0	
Arrive On Green	0.00	0.54	0.53	1.00	1.00	0.00				0.32	0.00	0.00
Sat Flow, veh/h	0	3013	608	3456	3647	0				1781	0	1585
Grp Volume(v), veh/h	0	500	492	286	655	0				679	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1751	1728	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	18.0	18.1	0.0	0.0	0.0				32.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.0	18.1	0.0	0.0	0.0				32.0	0.0	0.0
Prop In Lane	0.00		0.35	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	960	945	2419	4478	0				570	0	
V/C Ratio(X)	0.00	0.52	0.52	0.12	0.15	0.00				1.19	0.00	
Avail Cap(c_a), veh/h	0	960	945	2419	4478	0				570	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.56	0.56	0.26	0.26	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.7	14.9	0.0	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.0	0.0				102.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.6	6.6	0.0	0.0	0.0				29.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.9	15.1	0.0	0.0	0.0				136.5	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				F	A	
Approach Vol, veh/h		992		941						679		A
Approach Delay, s/veh		15.0		0.0						136.5		
Approach LOS		B		A						F		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	58.0		36.0		134.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	31.0	24.0		30.7		* 61						
Max Q Clear Time (g_c+1), s	12.0	20.1		34.0		2.0						
Green Ext Time (p_c), s	1.0	1.9		0.0		0.8						

Intersection Summary

HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & 3rd Street

UCR North District Transportation Study  
Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑			↔	↔			
Traffic Volume (veh/h)	320	940	0	0	540	890	250	0	440	0	0	0
Future Volume (veh/h)	320	940	0	0	540	890	250	0	440	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	368	1080	0	0	621	757	287	0	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	422	2575	0	0	1000	879	348	0				
Arrive On Green	0.12	0.72	0.00	0.00	0.56	0.55	0.20	0.00	0.00			
Sat Flow, veh/h	3456	3647	0	0	1870	1563	1781	0	1585			
Grp Volume(v), veh/h	368	1080	0	0	621	757	287	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1563	1781	0	1585			
Q Serve(g_s), s	10.5	12.0	0.0	0.0	23.5	41.3	15.5	0.0	0.0			
Cycle Q Clear(g_c), s	10.5	12.0	0.0	0.0	23.5	41.3	15.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	422	2575	0	0	1000	879	348	0				
V/C Ratio(X)	0.87	0.42	0.00	0.00	0.62	0.86	0.82	0.00				
Avail Cap(c_a), veh/h	422	2575	0	0	1000	879	534	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.50	0.50	1.00	0.00	0.00			
Uniform Delay (d), s/veh	43.1	5.5	0.0	0.0	14.7	19.0	38.6	0.0	0.0			
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.0	1.5	5.8	3.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.4	3.4	0.0	0.0	8.8	14.6	6.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	5.5	0.0	0.0	16.2	24.8	42.0	0.0	0.0			
LnGrp LOS	D	A	A	A	B	C	D	A				
Approach Vol, veh/h		1448			1378			287	A			
Approach Delay, s/veh		15.6			20.9			42.0				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.5			16.2	60.3		23.5				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		61.0			11.7	44.8		28.7				
Max Q Clear Time (g_c+I1), s		14.0			12.5	43.3		17.5				
Green Ext Time (p_c), s		5.6			0.0	1.0		0.8				

Intersection Summary

HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.  
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & 3rd Street/Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑		↖	↑↑	↖
Traffic Volume (veh/h)	560	530	160	150	700	230	190	620	140	160	540	400
Future Volume (veh/h)	560	530	160	150	700	230	190	620	140	160	540	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	636	602	56	170	795	99	216	705	140	182	614	238
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	620	1159	509	224	973	427	202	810	161	215	1004	441
Arrive On Green	0.18	0.33	0.33	0.13	0.27	0.27	0.11	0.28	0.26	0.12	0.28	0.28
Sat Flow, veh/h	3456	3554	1561	1781	3554	1560	1781	2946	585	1781	3554	1560
Grp Volume(v), veh/h	636	602	56	170	795	99	216	425	420	182	614	238
Grp Sat Flow(s),veh/h/ln	1728	1777	1561	1781	1777	1560	1781	1777	1754	1781	1777	1560
Q Serve(g_s), s	19.0	14.6	2.7	9.8	22.2	5.2	12.0	24.1	24.2	10.6	15.9	13.7
Cycle Q Clear(g_c), s	19.0	14.6	2.7	9.8	22.2	5.2	12.0	24.1	24.2	10.6	15.9	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	620	1159	509	224	973	427	202	489	482	215	1004	441
V/C Ratio(X)	1.03	0.52	0.11	0.76	0.82	0.23	1.07	0.87	0.87	0.85	0.61	0.54
Avail Cap(c_a), veh/h	620	1208	531	323	1214	533	202	520	513	215	1067	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	28.9	24.9	44.7	36.0	29.8	47.0	36.6	36.9	45.6	33.0	32.2
Incr Delay (d2), s/veh	42.9	0.4	0.1	3.1	3.6	0.3	83.3	14.1	14.4	24.3	0.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	6.0	1.0	4.4	9.7	1.9	9.8	11.8	11.8	6.0	6.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	29.3	25.0	47.9	39.6	30.1	130.2	50.7	51.3	69.9	33.9	33.3
LnGrp LOS	F	C	C	D	D	C	F	D	D	E	C	C
Approach Vol, veh/h		1294			1064			1061			1034	
Approach Delay, s/veh		57.2			40.1			67.1			40.1	
Approach LOS		E			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	38.7	16.0	33.9	23.0	33.0	16.8	33.1				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	35	* 35	12.0	30.0	19.0	34.7	12.3	29.2				
Max Q Clear Time (g_c+M), s	16.6	14.0	17.9	21.0	24.2	12.6	26.2					
Green Ext Time (p_c), s	0.2	2.8	0.0	3.1	0.0	3.2	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	51.5
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	610	220	60	600	100	220	80	80	100	50	160
Future Volume (veh/h)	180	610	220	60	600	100	220	80	80	100	50	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	217	735	229	72	723	101	265	96	45	120	60	148
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	974	303	168	974	136	458	386	181	230	119	214
Arrive On Green	0.15	0.37	0.34	0.09	0.31	0.29	0.32	0.32	0.31	0.32	0.32	0.31
Sat Flow, veh/h	1781	2649	825	1781	3120	436	1173	1198	561	439	370	665
Grp Volume(v), veh/h	217	493	471	72	412	412	265	0	141	328	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1697	1781	1777	1778	1173	0	1759	1474	0	0
Q Serve(g_s), s	6.6	13.5	13.6	2.1	11.5	11.6	3.2	0.0	3.3	7.5	0.0	0.0
Cycle Q Clear(g_c), s	6.6	13.5	13.6	2.1	11.5	11.6	14.0	0.0	3.3	10.8	0.0	0.0
Prop In Lane	1.00		0.49	1.00		0.24	1.00		0.32	0.37		0.45
Lane Grp Cap(c), veh/h	267	653	624	168	555	555	458	0	567	563	0	0
V/C Ratio(X)	0.81	0.75	0.75	0.43	0.74	0.74	0.58	0.00	0.25	0.58	0.00	0.00
Avail Cap(c_a), veh/h	320	894	854	168	734	735	607	0	790	750	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.9	15.4	15.7	23.8	17.1	17.3	17.8	0.0	14.0	16.5	0.0	0.0
Incr Delay (d2), s/veh	10.6	2.5	2.6	0.6	2.8	2.8	1.2	0.0	0.2	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	5.1	5.0	0.9	4.6	4.6	3.0	0.0	1.2	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	17.9	18.3	24.4	20.0	20.1	19.0	0.0	14.2	17.4	0.0	0.0
LnGrp LOS	C	B	B	C	B	C	B	A	B	B	A	A
Approach Vol, veh/h		1181			896			406			328	
Approach Delay, s/veh		20.9			20.4			17.3			17.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	24.5		21.9	12.3	21.4		21.9				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	26.6		24.4	10.0	21.6		24.4				
Max Q Clear Time (g_c+1), s	11.0	15.6		12.8	8.6	13.6		16.0				
Green Ext Time (p_c), s	0.0	3.5		1.1	0.1	2.4		1.2				

Intersection Summary

HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↗	↖	↗	
Traffic Volume (veh/h)	50	470	230	150	560	20	60	50	90	10	90	50
Future Volume (veh/h)	50	470	230	150	560	20	60	50	90	10	90	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	57	540	224	172	644	21	69	57	65	11	103	37
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	679	280	172	1162	38	493	672	685	541	470	169
Arrive On Green	0.05	0.31	0.29	0.11	0.37	0.35	0.40	0.40	0.38	0.40	0.40	0.38
Sat Flow, veh/h	1603	2187	904	1603	3158	103	1123	1683	1392	1140	1177	423
Grp Volume(v), veh/h	57	394	370	172	326	339	69	57	65	11	0	140
Grp Sat Flow(s),veh/h/ln	1603	1599	1492	1603	1599	1662	1123	1683	1392	1140	0	1600
Q Serve(g_s), s	2.3	14.8	14.9	7.0	10.6	10.6	2.8	1.4	1.6	0.4	0.0	3.8
Cycle Q Clear(g_c), s	2.3	14.8	14.9	7.0	10.6	10.6	6.6	1.4	1.6	1.8	0.0	3.8
Prop In Lane	1.00		0.61	1.00		0.06	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	79	496	463	172	588	611	493	672	685	541	0	639
V/C Ratio(X)	0.72	0.79	0.80	1.00	0.55	0.55	0.14	0.08	0.09	0.02	0.00	0.22
Avail Cap(c_a), veh/h	172	609	568	172	609	633	493	672	685	541	0	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	20.6	21.1	29.2	16.4	16.4	15.1	12.2	8.9	12.8	0.0	13.0
Incr Delay (d2), s/veh	4.6	5.9	6.5	69.3	1.0	1.0	0.6	0.2	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.6	5.5	5.8	3.5	3.7	0.8	0.5	0.5	0.1	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	26.5	27.6	98.5	17.4	17.4	15.7	12.5	9.2	12.8	0.0	13.2
LnGrp LOS	D	C	C	F	B	B	B	B	A	B	A	B
Approach Vol, veh/h		821			837			191			151	
Approach Delay, s/veh		27.6			34.1			12.5			13.2	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.0	24.3		30.1	7.2	28.1		30.1				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	7.0	23.5		25.0				
Max Q Clear Time (g_c+19), s	16.9			5.8	4.3	12.6		8.6				
Green Ext Time (p_c), s	0.0	1.9		0.5	0.0	2.0		0.7				

Intersection Summary

HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C



HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	10	280	190	60	410	110	290	500	60	40	130	30
Future Volume (veh/h)	10	280	190	60	410	110	290	500	60	40	130	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	304	34	65	446	112	315	543	0	43	141	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	510	421	158	501	126	361	624		60	309	
Arrive On Green	0.01	0.30	0.30	0.10	0.39	0.37	0.22	0.37	0.00	0.04	0.18	0.00
Sat Flow, veh/h	1603	1683	1390	1603	1291	324	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	11	304	34	65	0	558	315	543	0	43	141	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1390	1603	0	1615	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.6	12.9	1.5	3.2	0.0	27.2	15.9	25.2	0.0	2.2	6.3	0.0
Cycle Q Clear(g_c), s	0.6	12.9	1.5	3.2	0.0	27.2	15.9	25.2	0.0	2.2	6.3	0.0
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	22	510	421	158	0	627	361	624		60	309	
V/C Ratio(X)	0.51	0.60	0.08	0.41	0.00	0.89	0.87	0.87		0.71	0.46	
Avail Cap(c_a), veh/h	95	725	598	248	0	849	553	1057		133	616	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	24.9	21.0	35.6	0.0	24.2	31.4	24.6	0.0	40.0	30.6	0.0
Incr Delay (d2), s/veh	6.7	1.1	0.1	1.7	0.0	9.1	6.5	4.3	0.0	5.7	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.0	0.5	1.3	0.0	11.0	6.3	9.7	0.0	0.9	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	26.1	21.0	37.3	0.0	33.3	37.9	28.9	0.0	45.7	31.7	0.0
LnGrp LOS	D	C	C	D	A	C	D	C		D	C	
Approach Vol, veh/h		349			623			858	A		184	A
Approach Delay, s/veh		26.3			33.7			32.2			34.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	29.5	22.9	19.4	5.1	36.6	7.2	35.2				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	12.5	34.8	28.5	29.0	5.0	42.8	7.0	51.0				
Max Q Clear Time (g_c+1), s	11.2	14.9	17.9	8.3	2.6	29.2	4.2	27.2				
Green Ext Time (p_c), s	0.1	1.2	0.5	0.4	0.0	2.1	0.0	2.2				

Intersection Summary

HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St























UCR North District Transportation Study  
 Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	100	40	110	100	80	160	700	170	140	530	260
Future Volume (veh/h)	120	100	40	110	100	80	160	700	170	140	530	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	122	14	134	122	63	195	854	68	171	646	276
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	339	288	146	185	95	204	1255	560	216	872	373
Arrive On Green	0.10	0.18	0.18	0.08	0.16	0.14	0.11	0.35	0.35	0.12	0.36	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1162	600	1781	3554	1585	1781	2425	1036
Grp Volume(v), veh/h	146	122	14	134	0	185	195	854	68	171	473	449
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1762	1781	1777	1585	1781	1777	1684
Q Serve(g_s), s	4.9	3.5	0.4	4.6	0.0	6.0	6.6	12.5	1.8	5.7	14.2	14.3
Cycle Q Clear(g_c), s	4.9	3.5	0.4	4.6	0.0	6.0	6.6	12.5	1.8	5.7	14.2	14.3
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	186	339	288	146	0	280	204	1255	560	216	639	606
V/C Ratio(X)	0.78	0.36	0.05	0.92	0.00	0.66	0.95	0.68	0.12	0.79	0.74	0.74
Avail Cap(c_a), veh/h	263	1085	920	146	0	907	204	1782	795	380	1066	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	21.9	20.6	27.8	0.0	24.3	26.8	16.8	13.3	26.1	17.1	17.6
Incr Delay (d2), s/veh	9.7	0.6	0.1	49.8	0.0	2.7	49.4	0.7	0.1	2.5	1.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.4	0.2	3.8	0.0	2.5	5.4	4.4	0.6	2.3	5.1	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	22.5	20.7	77.6	0.0	27.0	76.3	17.5	13.4	28.5	18.8	19.4
LnGrp LOS	D	C	C	E	A	C	E	B	B	C	B	B
Approach Vol, veh/h		282			319			1117			1093	
Approach Delay, s/veh		29.6			48.3			27.5			20.5	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	25.5	9.0	15.1	11.0	25.9	10.4	13.7				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	13.0	28.8	5.0	34.0	7.0	34.8	9.0	30.0				
Max Q Clear Time (g_c+1), s	11.0	14.5	6.6	5.5	8.6	16.3	6.9	8.0				
Green Ext Time (p_c), s	0.1	3.8	0.0	0.4	0.0	3.8	0.1	0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				27.4								
HCM 6th LOS				C								

HCM Signalized Intersection Capacity Analysis  
10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
Future (2025) AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	60	90	90	40	50	80	140	310	120	230	80
Future Volume (vph)	50	60	90	90	40	50	80	140	310	120	230	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.91		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1695		1770	1707		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1695		1770	1707		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	64	77	115	115	51	64	103	179	397	154	295	103
RTOR Reduction (vph)	0	86	0	0	48	0	0	0	302	0	0	75
Lane Group Flow (vph)	64	106	0	115	67	0	103	179	95	154	295	28
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7		4
Permitted Phases									8			4
Actuated Green, G (s)	2.6	8.6		4.3	10.3		4.3	9.8	9.8	5.6	11.9	11.9
Effective Green, g (s)	2.6	9.7		4.3	11.4		4.3	11.2	11.2	5.6	12.5	12.5
Actuated g/C Ratio	0.06	0.21		0.09	0.24		0.09	0.24	0.24	0.12	0.27	0.27
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	98	351		162	415		162	445	378	211	497	422
v/s Ratio Prot	0.04	c0.06		c0.06	0.04		0.06	0.10		c0.09	c0.16	
v/s Ratio Perm									0.06			0.02
v/c Ratio	0.65	0.30		0.71	0.16		0.64	0.40	0.25	0.73	0.59	0.07
Uniform Delay, d1	21.7	15.7		20.6	13.9		20.5	15.0	14.4	19.9	14.9	12.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.3	0.5		11.0	0.2		5.9	0.6	0.4	10.2	1.9	0.1
Delay (s)	32.9	16.2		31.7	14.1		26.4	15.6	14.8	30.1	16.8	12.9
Level of Service	C	B		C	B		C	B	B	C	B	B
Approach Delay (s)		20.4			22.9			16.7			19.8	
Approach LOS		C			C			B			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			19.1				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			46.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			44.5%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

**Intersection**

Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	90	180	40	40	110	40
Future Vol, veh/h	90	180	40	40	110	40
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	217	48	48	133	48
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.5	8.6	9.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	73%	0%	50%
Vol Thru, %	0%	33%	50%
Vol Right, %	27%	67%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	150	270	80
LT Vol	110	0	40
Through Vol	0	90	40
RT Vol	40	180	0
Lane Flow Rate	181	325	96
Geometry Grp	1	1	1
Degree of Util (X)	0.242	0.371	0.129
Departure Headway (Hd)	4.826	4.107	4.825
Convergence, Y/N	Yes	Yes	Yes
Cap	743	875	742
Service Time	2.865	2.13	2.86
HCM Lane V/C Ratio	0.244	0.371	0.129
HCM Control Delay	9.4	9.5	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	1.7	0.4

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖↗
Traffic Volume (veh/h)	180	280	60	100	350	150	90	700	190	130	330	150
Future Volume (veh/h)	180	280	60	100	350	150	90	700	190	130	330	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	189	295	24	105	368	46	95	737	109	137	347	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	768	605	134	665	291	337	1130	491	175	595	195
Arrive On Green	0.10	0.22	0.20	0.08	0.19	0.19	0.19	0.32	0.32	0.10	0.23	0.19
Sat Flow, veh/h	3456	3554	1558	1781	3554	1557	1781	3554	1545	1781	2615	859
Grp Volume(v), veh/h	189	295	24	105	368	46	95	737	109	137	234	229
Grp Sat Flow(s),veh/h/ln	1728	1777	1558	1781	1777	1557	1781	1777	1545	1781	1777	1698
Q Serve(g_s), s	2.8	3.9	0.1	3.2	5.1	0.9	2.5	9.8	1.6	4.1	6.4	6.7
Cycle Q Clear(g_c), s	2.8	3.9	0.1	3.2	5.1	0.9	2.5	9.8	1.6	4.1	6.4	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	361	768	605	134	665	291	337	1130	491	175	404	386
V/C Ratio(X)	0.52	0.38	0.04	0.78	0.55	0.16	0.28	0.65	0.22	0.78	0.58	0.59
Avail Cap(c_a), veh/h	378	1829	1070	195	1829	802	337	2063	897	260	1064	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	18.4	3.1	24.9	20.2	7.9	19.0	16.1	4.6	24.1	18.8	19.3
Incr Delay (d2), s/veh	0.4	0.3	0.0	6.7	0.7	0.2	0.2	0.6	0.2	4.5	1.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.5	0.0	1.5	2.0	0.4	0.9	3.3	0.8	1.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	18.7	3.1	31.6	20.9	8.1	19.2	16.7	4.8	28.7	20.1	20.8
LnGrp LOS	C	B	A	C	C	A	B	B	A	C	C	C
Approach Vol, veh/h		508			519			941			600	
Approach Delay, s/veh		19.8			21.9			15.6			22.3	
Approach LOS		B			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	15.8	14.4	16.5	9.7	14.3	9.4	21.4				
Change Period (Y+Rc), s	4.0	5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	27.1	7.0	31.0	5.0	27.1	8.0	30.0				
Max Q Clear Time (g_c+1), s	11.8	5.9	4.5	8.7	4.8	7.1	6.1	11.8				
Green Ext Time (p_c), s	3.6	0.0	1.3	0.0	1.7	0.0	1.7	3.6				

Intersection Summary

HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

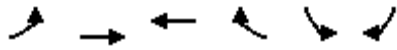
HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Future (2025) AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↗	↑				↖		↗
Traffic Volume (veh/h)	0	460	270	60	370	0	0	0	0	490	0	210
Future Volume (veh/h)	0	460	270	60	370	0	0	0	0	490	0	210
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	495	136	65	398	0				527	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	814	673	178	1084	0				590	0	525
Arrive On Green	0.00	0.44	0.44	0.03	0.19	0.00				0.33	0.00	0.00
Sat Flow, veh/h	0	1870	1547	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	495	136	65	398	0				527	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1547	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	18.3	4.9	3.2	16.7	0.0				25.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.3	4.9	3.2	16.7	0.0				25.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	814	673	178	1084	0				590	0	525
V/C Ratio(X)	0.00	0.61	0.20	0.36	0.37	0.00				0.89	0.00	0.00
Avail Cap(c_a), veh/h	0	814	673	178	1084	0				792	0	704
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.92	0.92	0.87	0.87	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	19.5	15.7	40.7	22.0	0.0				28.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.6	5.0	0.8	0.0				8.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.1	1.8	1.7	8.5	0.0				11.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.6	16.4	45.7	22.9	0.0				36.9	0.0	0.0
LnGrp LOS	A	C	B	D	C	A				D	A	A
Approach Vol, veh/h		631			463						527	
Approach Delay, s/veh		21.3			26.1						36.9	
Approach LOS		C			C						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	3.0	43.2		33.8		56.2						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	3.5	27.3		38.5		40.3						
Max Q Clear Time (g_c+1), s	1.2	20.3		27.3		18.7						
Green Ext Time (p_c), s	0.0	1.0		1.1		0.8						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											27.7	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	290	660	180	350	60	250
Future Volume (veh/h)	290	660	180	350	60	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	305	695	189	217	63	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	349	1630	1181	978	137	63
Arrive On Green	0.39	1.00	0.63	0.63	0.04	0.04
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	305	695	189	217	63	26
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	14.3	0.0	3.7	5.4	1.6	1.4
Cycle Q Clear(g_c), s	14.3	0.0	3.7	5.4	1.6	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	349	1630	1181	978	137	63
V/C Ratio(X)	0.87	0.43	0.16	0.22	0.46	0.41
Avail Cap(c_a), veh/h	534	1630	1181	978	653	299
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	6.8	7.1	42.3	42.2
Incr Delay (d2), s/veh	6.3	0.5	0.3	0.5	2.4	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.2	1.4	1.7	0.7	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.6	0.5	7.1	7.6	44.7	46.5
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1000	406		89	
Approach Delay, s/veh		10.3	7.4		45.2	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.4		7.6	21.6	60.8
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		63.3		17.0	26.5	32.3
Max Q Clear Time (g_c+I1), s		2.0		3.6	16.3	7.4
Green Ext Time (p_c), s		1.7		0.2	0.9	0.9
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			11.6			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 91.7

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	20	10	40	20	40	160	140	650	30	20	210	90
Future Vol, veh/h	20	10	40	20	40	160	140	650	30	20	210	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	11	43	22	43	174	152	707	33	22	228	98
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	12.4	14.3	148.8	15.9
HCM LOS	B	B	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	0%	33%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	33%	0%	67%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	650	30	30	40	60	160	20	210	90
LT Vol	140	0	0	20	0	20	0	20	0	0
Through Vol	0	650	0	10	0	40	0	0	210	0
RT Vol	0	0	30	0	40	0	160	0	0	90
Lane Flow Rate	152	707	33	33	43	65	174	22	228	98
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.309	1.336	0.055	0.08	0.094	0.148	0.353	0.049	0.479	0.186
Departure Headway (Hd)	7.313	6.805	6.094	9.478	8.427	8.72	7.845	8.622	8.111	7.395
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	490	537	585	380	428	414	461	418	447	488
Service Time	5.083	4.575	3.864	7.178	6.127	6.42	5.545	6.322	5.811	5.095
HCM Lane V/C Ratio	0.31	1.317	0.056	0.087	0.1	0.157	0.377	0.053	0.51	0.201
HCM Control Delay	13.4	184.4	9.2	13	12	12.9	14.8	11.8	18	11.8
HCM Lane LOS	B	F	A	B	B	B	B	B	C	B
HCM 95th-tile Q	1.3	30.6	0.2	0.3	0.3	0.5	1.6	0.2	2.5	0.7



HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Future (2025) PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	40	170	90	30	90	150	880	80	130	1360	120
Future Volume (veh/h)	150	40	170	90	30	90	150	880	80	130	1360	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	43	27	98	33	10	163	957	83	141	1478	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	108	68	232	124	38	198	1837	159	185	1803	166
Arrive On Green	0.06	0.10	0.08	0.05	0.09	0.07	0.11	0.56	0.54	0.10	0.55	0.53
Sat Flow, veh/h	1781	1063	668	1781	1368	415	1781	3301	286	1781	3283	302
Grp Volume(v), veh/h	163	0	70	98	0	43	163	515	525	141	795	820
Grp Sat Flow(s),veh/h/ln	1781	0	1731	1781	0	1783	1781	1777	1811	1781	1777	1808
Q Serve(g_s), s	5.0	0.0	3.2	4.0	0.0	1.9	7.6	15.3	15.4	6.5	30.8	31.7
Cycle Q Clear(g_c), s	5.0	0.0	3.2	4.0	0.0	1.9	7.6	15.3	15.4	6.5	30.8	31.7
Prop In Lane	1.00		0.39	1.00		0.23	1.00		0.16	1.00		0.17
Lane Grp Cap(c), veh/h	259	0	176	232	0	162	198	989	1008	185	976	993
V/C Ratio(X)	0.63	0.00	0.40	0.42	0.00	0.27	0.82	0.52	0.52	0.76	0.81	0.83
Avail Cap(c_a), veh/h	259	0	676	232	0	675	253	1035	1055	375	1157	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	35.8	34.8	0.0	35.9	36.7	11.7	11.8	36.8	15.5	15.9
Incr Delay (d2), s/veh	3.7	0.0	1.5	1.2	0.0	0.9	12.5	0.4	0.4	2.4	3.9	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.4	1.9	0.0	0.9	3.9	5.6	5.7	2.8	11.1	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	0.0	37.2	36.0	0.0	36.8	49.2	12.1	12.2	39.2	19.5	20.1
LnGrp LOS	D	A	D	D	A	D	D	B	B	D	B	C
Approach Vol, veh/h		233			141			1203			1756	
Approach Delay, s/veh		38.8			36.2			17.2			21.4	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	12.7	13.4	50.4	9.0	11.7	12.8	51.0				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 32	12.0	53.2	5.0	30.5	17.3	47.4				
Max Q Clear Time (g_c+I1), s	6.0	5.2	9.6	33.7	7.0	3.9	8.5	17.4				
Green Ext Time (p_c), s	0.0	0.3	0.1	10.9	0.0	0.2	0.1	8.1				

Intersection Summary

HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	650	150	180	230	130	120	690	180	310	990	110
Future Volume (veh/h)	110	650	150	180	230	130	120	690	180	310	990	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	699	143	194	247	73	129	742	174	333	1065	110
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	814	166	209	848	245	144	774	182	337	1234	127
Arrive On Green	0.08	0.28	0.27	0.12	0.31	0.30	0.08	0.27	0.26	0.19	0.38	0.37
Sat Flow, veh/h	1781	2929	599	1781	2711	781	1781	2847	667	1781	3246	335
Grp Volume(v), veh/h	118	424	418	194	160	160	129	463	453	333	583	592
Grp Sat Flow(s),veh/h/ln	1781	1777	1751	1781	1777	1715	1781	1777	1737	1781	1777	1804
Q Serve(g_s), s	7.2	25.1	25.2	12.0	7.5	7.9	8.0	28.5	28.5	20.7	33.6	33.7
Cycle Q Clear(g_c), s	7.2	25.1	25.2	12.0	7.5	7.9	8.0	28.5	28.5	20.7	33.6	33.7
Prop In Lane	1.00		0.34	1.00		0.46	1.00		0.38	1.00		0.19
Lane Grp Cap(c), veh/h	146	494	486	209	556	537	144	483	473	337	675	686
V/C Ratio(X)	0.81	0.86	0.86	0.93	0.29	0.30	0.89	0.96	0.96	0.99	0.86	0.86
Avail Cap(c_a), veh/h	241	557	549	209	556	537	144	483	473	337	675	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.0	38.3	48.6	28.8	29.2	50.5	39.8	40.1	44.9	31.7	31.9
Incr Delay (d2), s/veh	4.0	11.7	12.0	42.6	0.3	0.3	43.9	30.5	31.0	45.7	11.1	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	12.5	12.4	7.7	3.2	3.2	5.2	16.1	15.8	13.4	16.4	16.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	49.7	50.2	91.2	29.1	29.5	94.4	70.3	71.0	90.6	42.9	43.0
LnGrp LOS	D	D	D	F	C	C	F	E	E	F	D	D
Approach Vol, veh/h		960			514			1045			1508	
Approach Delay, s/veh		50.5			52.6			73.6			53.5	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	34.8	13.0	46.2	13.1	38.8	25.0	34.2				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	13.0	33.4	9.0	40.8	15.0	31.4	21.0	28.8				
Max Q Clear Time (g_c+M), s	14.0	27.2	10.0	35.7	9.2	9.9	22.7	30.5				
Green Ext Time (p_c), s	0.0	2.1	0.0	2.6	0.1	1.1	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	57.9
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary  
3: 3rd Street & I-215 SB

UCR North District Transportation Study  
Future (2025) PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑						↑	↑
Traffic Volume (veh/h)	0	560	650	470	470	0	0	0	0	510	0	150
Future Volume (veh/h)	0	560	650	470	470	0	0	0	0	510	0	150
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	577	321	485	485	0				526	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1128	627	4037	6100	0				445	0	
Arrive On Green	0.00	0.52	0.50	0.39	0.57	0.00				0.25	0.00	0.00
Sat Flow, veh/h	0	2283	1218	3456	3647	0				1781	0	1585
Grp Volume(v), veh/h	0	468	430	485	485	0				526	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1631	1728	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	10.4	10.6	0.0	0.0	0.0				15.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.4	10.6	0.0	0.0	0.0				15.0	0.0	0.0
Prop In Lane	0.00		0.75	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	915	840	4037	6100	0				445	0	
V/C Ratio(X)	0.00	0.51	0.51	0.12	0.08	0.00				1.18	0.00	
Avail Cap(c_a), veh/h	0	915	840	4037	6100	0				445	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.31	0.31	0.41	0.41	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.6	9.9	0.0	0.0	0.0				22.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.7	0.0	0.0	0.0				102.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	3.0	0.0	0.0	0.0				18.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.2	10.6	0.0	0.0	0.0				125.0	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				F	A	
Approach Vol, veh/h		898			970						526	A
Approach Delay, s/veh		10.4			0.0						125.0	
Approach LOS		B			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	35.0		19.0		111.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	30.0	24.0		13.7		* 38						
Max Q Clear Time (g_c+1), s	12.0	12.6		17.0		2.0						
Green Ext Time (p_c), s	1.0	3.6		0.0		0.6						

Intersection Summary

HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & 3rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑			↑↑			↖↗	↖↗			
Traffic Volume (veh/h)	240	840	0	0	740	820	200	0	400	0	0	0
Future Volume (veh/h)	240	840	0	0	740	820	200	0	400	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	247	866	0	0	763	522	206	0	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	346	2497	0	0	1081	730	292	0				
Arrive On Green	0.10	0.70	0.00	0.00	0.54	0.52	0.16	0.00	0.00			
Sat Flow, veh/h	3456	3647	0	0	2111	1362	1781	0	1585			
Grp Volume(v), veh/h	247	866	0	0	671	614	206	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1602	1781	0	1585			
Q Serve(g_s), s	4.2	5.7	0.0	0.0	16.9	17.5	6.6	0.0	0.0			
Cycle Q Clear(g_c), s	4.2	5.7	0.0	0.0	16.9	17.5	6.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.85	1.00		1.00			
Lane Grp Cap(c), veh/h	346	2497	0	0	953	859	292	0				
V/C Ratio(X)	0.71	0.35	0.00	0.00	0.70	0.71	0.71	0.00				
Avail Cap(c_a), veh/h	346	2497	0	0	953	859	416	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.45	0.45	1.00	0.00	0.00			
Uniform Delay (d), s/veh	26.2	3.5	0.0	0.0	10.4	10.8	23.7	0.0	0.0			
Incr Delay (d2), s/veh	3.6	0.2	0.0	0.0	2.0	2.3	1.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	1.0	0.0	0.0	5.3	5.2	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	3.7	0.0	0.0	12.4	13.2	24.9	0.0	0.0			
LnGrp LOS	C	A	A	A	B	B	C	A				
Approach Vol, veh/h		1113			1285			206	A			
Approach Delay, s/veh		9.5			12.7			24.9				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.2			10.0	36.2		13.8				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		37.0			5.5	27.0		12.7				
Max Q Clear Time (g_c+I1), s		7.7			6.2	19.5		8.6				
Green Ext Time (p_c), s		4.0			0.0	3.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Future (2025) PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑		↖	↑↑	↖
Traffic Volume (veh/h)	370	390	160	120	610	220	250	560	210	300	780	570
Future Volume (veh/h)	370	390	160	120	610	220	250	560	210	300	780	570
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	381	402	40	124	629	58	258	577	180	309	804	418
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	859	377	184	860	377	248	780	243	310	1167	513
Arrive On Green	0.10	0.24	0.24	0.10	0.24	0.24	0.14	0.29	0.27	0.17	0.33	0.33
Sat Flow, veh/h	3456	3554	1559	1781	3554	1559	1781	2657	826	1781	3554	1561
Grp Volume(v), veh/h	381	402	40	124	629	58	258	385	372	309	804	418
Grp Sat Flow(s),veh/h/ln	1728	1777	1559	1781	1777	1559	1781	1777	1706	1781	1777	1561
Q Serve(g_s), s	9.0	8.3	1.7	5.8	14.0	2.5	12.0	16.8	17.0	14.9	16.9	21.1
Cycle Q Clear(g_c), s	9.0	8.3	1.7	5.8	14.0	2.5	12.0	16.8	17.0	14.9	16.9	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	361	859	377	184	860	377	248	522	501	310	1167	513
V/C Ratio(X)	1.05	0.47	0.11	0.67	0.73	0.15	1.04	0.74	0.74	1.00	0.69	0.82
Avail Cap(c_a), veh/h	361	1420	623	223	1494	656	248	594	571	310	1312	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	27.9	25.4	37.2	30.1	25.7	37.1	27.4	27.9	35.5	25.1	26.5
Incr Delay (d2), s/veh	62.5	0.4	0.1	3.6	1.2	0.2	67.7	4.2	4.5	49.8	1.3	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	3.4	0.6	2.6	5.8	0.9	9.6	7.2	7.1	10.3	6.7	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.1	28.3	25.5	40.8	31.3	25.9	104.8	31.7	32.4	85.4	26.4	34.6
LnGrp LOS	F	C	C	D	C	C	F	C	C	F	C	C
Approach Vol, veh/h		823			811			1015			1531	
Approach Delay, s/veh		61.9			32.4			50.5			40.5	
Approach LOS		E			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	24.9	16.0	32.3	13.0	24.8	19.0	29.3				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	33	* 33	12.0	30.0	9.0	34.7	14.5	27.0				
Max Q Clear Time (g_c+1T), s	10.3	14.0	23.1	11.0	16.0	16.9	19.0					
Green Ext Time (p_c), s	0.0	1.9	0.0	3.2	0.0	3.0	0.0	2.0				

Intersection Summary

HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	590	150	40	680	70	150	40	40	80	40	100
Future Volume (veh/h)	160	590	150	40	680	70	150	40	40	80	40	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	621	129	42	716	61	158	42	10	84	42	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1019	211	219	1165	99	492	250	60	272	75	61
Arrive On Green	0.12	0.35	0.31	0.12	0.35	0.31	0.17	0.17	0.15	0.17	0.17	0.15
Sat Flow, veh/h	1781	2915	604	1781	3306	281	1312	1454	346	647	436	352
Grp Volume(v), veh/h	168	378	372	42	385	392	158	0	52	167	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1743	1781	1777	1811	1312	0	1800	1436	0	0
Q Serve(g_s), s	3.1	5.9	6.0	0.7	6.0	6.1	0.0	0.0	0.8	3.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	5.9	6.0	0.7	6.0	6.1	2.7	0.0	0.8	3.8	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.16	1.00		0.19	0.50		0.25
Lane Grp Cap(c), veh/h	213	621	609	219	626	638	492	0	310	407	0	0
V/C Ratio(X)	0.79	0.61	0.61	0.19	0.61	0.61	0.32	0.00	0.17	0.41	0.00	0.00
Avail Cap(c_a), veh/h	264	969	951	264	969	988	1223	0	1313	1245	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.4	9.1	9.3	13.3	9.0	9.1	12.7	0.0	12.0	13.3	0.0	0.0
Incr Delay (d2), s/veh	9.4	1.0	1.0	0.2	1.0	1.0	0.4	0.0	0.3	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.7	1.7	0.2	1.7	1.8	0.9	0.0	0.3	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	10.0	10.3	13.4	10.0	10.1	13.1	0.0	12.2	13.9	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		918			819			210			167	
Approach Delay, s/veh		12.7			10.2			12.8			13.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	15.8		9.8	8.0	15.9		9.8				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	17.0		24.0	5.0	17.0		24.0				
Max Q Clear Time (g_c+1), s	12.5	8.0		5.8	5.1	8.1		4.7				
Green Ext Time (p_c), s	0.0	2.3		0.6	0.0	2.4		0.8				

Intersection Summary

HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↑	↖↗	↖	↗	
Traffic Volume (veh/h)	40	490	170	140	520	20	180	90	150	20	110	60
Future Volume (veh/h)	40	490	170	140	520	20	180	90	150	20	110	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	43	521	132	149	553	18	191	96	66	21	117	32
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	772	195	184	1187	39	434	539	576	462	406	111
Arrive On Green	0.05	0.31	0.28	0.11	0.38	0.35	0.32	0.32	0.30	0.32	0.32	0.30
Sat Flow, veh/h	1603	2515	634	1603	3158	103	1113	1683	1390	1099	1268	347
Grp Volume(v), veh/h	43	330	323	149	280	291	191	96	66	21	0	149
Grp Sat Flow(s),veh/h/ln	1603	1599	1549	1603	1599	1662	1113	1683	1390	1099	0	1614
Q Serve(g_s), s	1.2	8.4	8.5	4.2	6.2	6.2	7.2	1.9	1.4	0.7	0.0	3.2
Cycle Q Clear(g_c), s	1.2	8.4	8.5	4.2	6.2	6.2	10.5	1.9	1.4	2.6	0.0	3.2
Prop In Lane	1.00		0.41	1.00		0.06	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	73	491	476	184	601	625	434	539	576	462	0	517
V/C Ratio(X)	0.59	0.67	0.68	0.81	0.47	0.47	0.44	0.18	0.11	0.05	0.00	0.29
Avail Cap(c_a), veh/h	207	856	829	241	890	925	702	944	910	726	0	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	14.1	14.4	20.1	11.0	11.0	15.8	11.4	8.5	12.3	0.0	11.9
Incr Delay (d2), s/veh	2.7	1.6	1.7	11.0	0.6	0.5	0.7	0.2	0.1	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.5	2.6	1.9	1.7	1.8	1.7	0.6	0.4	0.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	15.7	16.1	31.1	11.5	11.6	16.5	11.5	8.5	12.4	0.0	12.2
LnGrp LOS	C	B	B	C	B	B	B	B	A	B	A	B
Approach Vol, veh/h		696			720			353				170
Approach Delay, s/veh		16.4			15.6			13.6				12.3
Approach LOS		B			B			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	18.3		18.9	6.1	21.5		18.9				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	6.0	24.5		25.0				
Max Q Clear Time (g_c+10), s	10.5			5.2	3.2	8.2		12.5				
Green Ext Time (p_c), s	0.0	2.2		0.6	0.0	2.0		1.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				15.2								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	380	250	60	260	50	270	260	80	180	450	50
Future Volume (veh/h)	20	380	250	60	260	50	270	260	80	180	450	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	21	396	98	62	271	45	281	271	0	188	469	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	450	372	139	466	77	288	589		218	515	
Arrive On Green	0.02	0.27	0.27	0.09	0.33	0.32	0.18	0.35	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1603	1683	1389	1603	1402	233	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	21	396	98	62	0	316	281	271	0	188	469	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1389	1603	0	1634	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	1.3	22.6	5.6	3.7	0.0	16.1	17.5	12.5	0.0	11.5	26.9	0.0
Cycle Q Clear(g_c), s	1.3	22.6	5.6	3.7	0.0	16.1	17.5	12.5	0.0	11.5	26.9	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	450	372	139	0	543	288	589		218	515	
V/C Ratio(X)	0.59	0.88	0.26	0.44	0.00	0.58	0.98	0.46		0.86	0.91	
Avail Cap(c_a), veh/h	96	499	412	168	0	558	288	589		336	517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.6	35.2	28.9	43.4	0.0	27.8	40.9	25.2	0.0	42.4	33.4	0.0
Incr Delay (d2), s/veh	5.8	15.4	0.4	2.2	0.0	1.5	46.1	0.6	0.0	8.6	20.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	10.8	1.8	1.5	0.0	6.2	10.3	4.8	0.0	4.9	13.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	50.5	29.3	45.7	0.0	29.2	87.0	25.8	0.0	51.0	53.5	0.0
LnGrp LOS	D	D	C	D	A	C	F	C		D	D	
Approach Vol, veh/h		515		378		552		A		657		A
Approach Delay, s/veh		46.6		31.9		56.9				52.8		
Approach LOS		D		C		E				D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	30.8	22.0	34.7	6.2	37.3	17.6	39.1				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	28.3	17.5	29.0	6.0	32.8	21.0	26.0				
Max Q Clear Time (g_c+1/3), s	11.5	24.6	19.5	28.9	3.3	18.1	13.5	14.5				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.0	0.0	1.0	0.2	0.7				

Intersection Summary

HCM 6th Ctrl Delay	48.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St























UCR North District Transportation Study  
 Future (2025) PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	130	110	220	90	80	60	820	170	110	970	110
Future Volume (veh/h)	110	130	110	220	90	80	60	820	170	110	970	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	135	26	229	94	44	62	854	75	115	1010	107
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	240	203	218	201	94	98	1371	611	148	1342	142
Arrive On Green	0.08	0.13	0.13	0.12	0.17	0.14	0.05	0.39	0.39	0.08	0.41	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1205	564	1781	3554	1585	1781	3242	343
Grp Volume(v), veh/h	115	135	26	229	0	138	62	854	75	115	553	564
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1769	1781	1777	1585	1781	1777	1809
Q Serve(g_s), s	3.6	3.9	0.8	7.0	0.0	4.0	1.9	11.1	1.7	3.6	15.1	15.2
Cycle Q Clear(g_c), s	3.6	3.9	0.8	7.0	0.0	4.0	1.9	11.1	1.7	3.6	15.1	15.2
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	149	240	203	218	0	295	98	1371	611	148	736	749
V/C Ratio(X)	0.77	0.56	0.13	1.05	0.00	0.47	0.63	0.62	0.12	0.78	0.75	0.75
Avail Cap(c_a), veh/h	281	1160	983	218	0	1035	156	2030	905	281	1139	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	23.4	22.1	25.0	0.0	21.7	26.4	14.2	11.3	25.6	14.2	14.4
Incr Delay (d2), s/veh	8.1	2.1	0.3	74.2	0.0	1.1	2.5	0.5	0.1	3.3	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	0.3	7.1	0.0	1.6	0.8	3.7	0.5	1.5	5.1	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	25.4	22.3	99.2	0.0	22.8	29.0	14.6	11.4	28.9	15.8	16.0
LnGrp LOS	C	C	C	F	A	C	C	B	B	C	B	B
Approach Vol, veh/h		276			367			991			1232	
Approach Delay, s/veh		28.6			70.5			15.3			17.1	
Approach LOS		C			E			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	26.0	11.0	11.3	7.1	27.6	8.8	13.5				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	30.8	7.0	34.0	5.0	34.8	9.0	32.0					
Max Q Clear Time (g_c+1), s	13.1	9.0	5.9	3.9	17.2	5.6	6.0					
Green Ext Time (p_c), s	0.1	4.1	0.0	0.5	0.0	4.6	0.1	0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				24.4								
HCM 6th LOS				C								

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Future (2025) PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	100	120	330	100	150	90	210	210	140	300	50
Future Volume (vph)	60	100	120	330	100	150	90	210	210	140	300	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.92		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1710		1770	1695		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1710		1770	1695		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	110	132	363	110	165	99	231	231	154	330	55
RTOR Reduction (vph)	0	40	0	0	45	0	0	0	175	0	0	42
Lane Group Flow (vph)	66	202	0	363	230	0	99	231	56	154	330	13
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7		4
Permitted Phases									8			4
Actuated Green, G (s)	4.8	11.7		19.0	25.9		6.0	12.6	12.6	9.0	16.4	16.4
Effective Green, g (s)	4.8	12.8		19.0	27.0		6.0	14.0	14.0	9.0	17.0	17.0
Actuated g/C Ratio	0.07	0.18		0.27	0.38		0.08	0.20	0.20	0.13	0.24	0.24
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	120	309		475	646		150	368	313	225	447	380
v/s Ratio Prot	0.04	c0.12		c0.21	0.14		0.06	0.12		c0.09	c0.18	
v/s Ratio Perm									0.04			0.01
v/c Ratio	0.55	0.65		0.76	0.36		0.66	0.63	0.18	0.68	0.74	0.03
Uniform Delay, d1	32.0	26.9		23.8	15.7		31.4	26.0	23.6	29.5	24.8	20.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	4.9		6.5	0.3		8.1	3.3	0.3	6.7	6.3	0.0
Delay (s)	35.0	31.8		30.3	16.0		39.6	29.3	23.9	36.2	31.1	20.7
Level of Service	D	C		C	B		D	C	C	D	C	C
Approach Delay (s)		32.5			24.2			28.9			31.5	
Approach LOS		C			C			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			28.7			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			70.8			Sum of lost time (s)			18.0			
Intersection Capacity Utilization			65.0%			ICU Level of Service			C			
Analysis Period (min)			15									

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh 14.2  
 Intersection LOS B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	90	250	40	120	280	50
Future Vol, veh/h	90	250	40	120	280	50
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	105	291	47	140	326	58
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.7	11.1	16.1
HCM LOS	B	B	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	85%	0%	25%
Vol Thru, %	0%	26%	75%
Vol Right, %	15%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	330	340	160
LT Vol	280	0	40
Through Vol	0	90	120
RT Vol	50	250	0
Lane Flow Rate	384	395	186
Geometry Grp	1	1	1
Degree of Util (X)	0.586	0.541	0.294
Departure Headway (Hd)	5.501	4.923	5.682
Convergence, Y/N	Yes	Yes	Yes
Cap	656	731	631
Service Time	3.536	2.961	3.727
HCM Lane V/C Ratio	0.585	0.54	0.295
HCM Control Delay	16.1	13.7	11.1
HCM Lane LOS	C	B	B
HCM 95th-tile Q	3.8	3.3	1.2

HCM 6th Signalized Intersection Summary  
12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
Future (2025) PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖↗
Traffic Volume (veh/h)	300	720	150	170	400	120	160	540	120	240	660	230
Future Volume (veh/h)	300	720	150	170	400	120	160	540	120	240	660	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	319	766	99	181	426	38	170	574	34	255	702	205
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	1007	546	142	1059	465	142	834	362	311	889	260
Arrive On Green	0.08	0.28	0.27	0.08	0.30	0.30	0.08	0.23	0.23	0.17	0.33	0.31
Sat Flow, veh/h	3456	3554	1560	1781	3554	1561	1781	3554	1542	1781	2702	789
Grp Volume(v), veh/h	319	766	99	181	426	38	170	574	34	255	462	445
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1561	1781	1777	1542	1781	1777	1714
Q Serve(g_s), s	6.0	14.8	0.0	6.0	7.2	0.7	6.0	11.1	1.3	10.4	17.7	17.8
Cycle Q Clear(g_c), s	6.0	14.8	0.0	6.0	7.2	0.7	6.0	11.1	1.3	10.4	17.7	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	276	1007	546	142	1059	465	142	834	362	311	585	564
V/C Ratio(X)	1.16	0.76	0.18	1.27	0.40	0.08	1.19	0.69	0.09	0.82	0.79	0.79
Avail Cap(c_a), veh/h	276	1382	711	142	1382	607	142	1505	653	311	776	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	24.6	17.0	34.5	21.0	5.9	34.5	26.2	22.5	29.9	22.8	23.2
Incr Delay (d2), s/veh	102.7	1.7	0.2	165.8	0.2	0.1	137.0	1.0	0.1	15.0	4.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	6.0	1.1	9.0	2.8	0.4	7.8	4.4	0.4	5.4	7.2	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	137.3	26.3	17.1	200.3	21.3	6.0	171.5	27.3	22.6	44.8	26.9	27.4
LnGrp LOS	F	C	B	F	C	A	F	C	C	D	C	C
Approach Vol, veh/h		1184			645			778			1162	
Approach Delay, s/veh		55.4			70.6			58.6			31.0	
Approach LOS		E			E			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	25.3	10.0	28.7	10.0	26.4	17.1	21.6				
Change Period (Y+Rc), s	5.1	* 5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	* 28	6.0	31.0	5.0	28.1	7.0	30.0				
Max Q Clear Time (g_c+10), s	19.0	16.8	8.0	19.8	8.0	9.2	12.4	13.1				
Green Ext Time (p_c), s	0.0	3.2	0.0	3.0	0.0	1.9	0.0	2.4				

Intersection Summary

HCM 6th Ctrl Delay	51.1
HCM 6th LOS	D

Notes

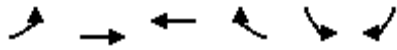
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑					↖		↗
Traffic Volume (veh/h)	0	520	790	170	550	0	0	0	0	100	0	90
Future Volume (veh/h)	0	520	790	170	550	0	0	0	0	100	0	90
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	542	537	177	573	0				104	0	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1159	960	303	1552	0				161	0	143
Arrive On Green	0.00	0.62	0.62	0.34	1.00	0.00				0.09	0.00	0.09
Sat Flow, veh/h	0	1870	1549	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	542	537	177	573	0				104	0	11
Grp Sat Flow(s),veh/h/ln	0	1870	1549	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	15.5	20.2	8.2	0.0	0.0				5.6	0.0	0.6
Cycle Q Clear(g_c), s	0.0	15.5	20.2	8.2	0.0	0.0				5.6	0.0	0.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1159	960	303	1552	0				161	0	143
V/C Ratio(X)	0.00	0.47	0.56	0.58	0.37	0.00				0.65	0.00	0.08
Avail Cap(c_a), veh/h	0	1159	960	303	1552	0				525	0	468
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.62	0.84	0.84	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.2	11.1	30.1	0.0	0.0				44.0	0.0	41.7
Incr Delay (d2), s/veh	0.0	0.8	1.5	6.8	0.6	0.0				1.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	6.5	3.6	0.2	0.0				2.5	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.0	12.5	36.9	0.6	0.0				45.6	0.0	41.8
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		1079			750						115	
Approach Delay, s/veh		11.8			9.1						45.2	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	31.0	66.0		13.0		87.0						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	10.5	39.8		28.0		60.8						
Max Q Clear Time (g_c+I), s	11.0	22.2		7.6		2.0						
Green Ext Time (p_c), s	0.2	2.8		0.2		1.3						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				12.7								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	190	390	460	470	80	230
Future Volume (veh/h)	190	390	460	470	80	230
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	429	505	390	88	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	1635	1298	1076	158	73
Arrive On Green	0.28	1.00	0.69	0.69	0.05	0.05
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	209	429	505	390	88	20
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	11.0	0.0	11.3	10.3	2.5	1.2
Cycle Q Clear(g_c), s	11.0	0.0	11.3	10.3	2.5	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	249	1635	1298	1076	158	73
V/C Ratio(X)	0.84	0.26	0.39	0.36	0.56	0.28
Avail Cap(c_a), veh/h	410	1635	1298	1076	726	333
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	6.4	6.2	46.7	46.1
Incr Delay (d2), s/veh	6.8	0.3	0.9	0.9	3.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.2	4.0	3.1	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.8	0.3	7.3	7.2	49.7	48.1
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		638	895		108	
Approach Delay, s/veh		13.9	7.2		49.4	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		91.4		8.6	18.0	73.4
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		69.3		21.0	22.5	42.3
Max Q Clear Time (g_c+I1), s		2.0		4.5	13.0	13.3
Green Ext Time (p_c), s		0.9		0.3	0.5	2.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

**Intersection**

Intersection Delay, s/veh 72

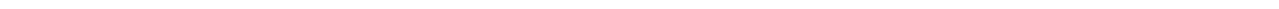
Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	160	30	210	80	50	40	80	350	40	100	440	50
Future Vol, veh/h	160	30	210	80	50	40	80	350	40	100	440	50
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	176	33	231	88	55	44	88	385	44	110	484	55
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	25	20.4	60.7	127.6
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	84%	0%	62%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	16%	0%	38%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	350	40	190	210	130	40	100	440	50
LT Vol	80	0	0	160	0	80	0	100	0	0
Through Vol	0	350	0	30	0	50	0	0	440	0
RT Vol	0	0	40	0	210	0	40	0	0	50
Lane Flow Rate	88	385	44	209	231	143	44	110	484	55
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.238	0.988	0.104	0.579	0.563	0.426	0.119	0.303	1.264	0.132
Departure Headway (Hd)	10.418	9.895	9.163	10.494	9.342	11.333	10.29	9.932	9.411	8.681
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	347	369	393	347	388	320	350	364	387	415
Service Time	8.118	7.595	6.863	8.194	7.042	9.033	7.99	7.65	7.129	6.399
HCM Lane V/C Ratio	0.254	1.043	0.112	0.602	0.595	0.447	0.126	0.302	1.251	0.133
HCM Control Delay	16.3	76.3	12.9	26.7	23.4	22.2	14.4	16.9	165.8	12.7
HCM Lane LOS	C	F	B	D	C	C	B	C	F	B
HCM 95th-tile Q	0.9	11.3	0.3	3.5	3.3	2	0.4	1.3	21.2	0.5

## Future Plus Buildout Conditions





HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	50	120	250	40	250	120	1005	160	160	833	80
Future Volume (veh/h)	130	50	120	250	40	250	120	1005	160	160	833	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	60	64	298	48	113	143	1196	179	190	992	89
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	127	135	281	76	179	177	1425	212	237	1627	146
Arrive On Green	0.06	0.15	0.14	0.06	0.16	0.14	0.10	0.46	0.44	0.13	0.49	0.47
Sat Flow, veh/h	1781	819	874	1781	488	1149	1781	3091	460	1781	3290	295
Grp Volume(v), veh/h	155	0	124	298	0	161	143	685	690	190	536	545
Grp Sat Flow(s),veh/h/ln	1781	0	1693	1781	0	1637	1781	1777	1774	1781	1777	1809
Q Serve(g_s), s	5.0	0.0	5.6	5.0	0.0	7.8	6.6	28.3	28.8	8.7	18.3	18.4
Cycle Q Clear(g_c), s	5.0	0.0	5.6	5.0	0.0	7.8	6.6	28.3	28.8	8.7	18.3	18.4
Prop In Lane	1.00		0.52	1.00		0.70	1.00		0.26	1.00		0.16
Lane Grp Cap(c), veh/h	247	0	262	281	0	255	177	819	818	237	878	894
V/C Ratio(X)	0.63	0.00	0.47	1.06	0.00	0.63	0.81	0.84	0.84	0.80	0.61	0.61
Avail Cap(c_a), veh/h	247	0	654	281	0	633	255	890	889	310	945	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	32.7	35.7	0.0	33.7	37.0	19.8	20.2	35.3	15.3	15.5
Incr Delay (d2), s/veh	3.7	0.0	1.3	70.2	0.0	2.6	7.5	6.6	7.0	8.2	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.4	8.8	0.0	3.2	3.2	12.3	12.6	4.1	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	34.0	105.9	0.0	36.2	44.5	26.4	27.2	43.5	16.4	16.5
LnGrp LOS	D	A	C	F	A	D	D	C	C	D	B	B
Approach Vol, veh/h		279			459			1518			1271	
Approach Delay, s/veh		34.8			81.4			28.4			20.5	
Approach LOS		C			F			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	17.1	12.3	45.4	9.0	17.1	15.1	42.7				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	5.0	* 31	12.0	42.8	5.0	30.9	14.1	40.2				
Max Q Clear Time (g_c+I1), s	7.0	7.6	8.6	20.4	7.0	9.8	10.7	30.8				
Green Ext Time (p_c), s	0.0	0.7	0.1	6.8	0.0	0.9	0.1	6.0				

Intersection Summary

HCM 6th Ctrl Delay	33.0
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	403	70	183	429	290	190	820	261	200	410	70
Future Volume (veh/h)	100	403	70	183	429	290	190	820	261	200	410	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	491	74	223	523	264	232	1000	297	244	500	76
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	683	102	224	602	303	260	1039	307	252	1177	178
Arrive On Green	0.08	0.22	0.21	0.13	0.26	0.25	0.15	0.39	0.37	0.14	0.38	0.37
Sat Flow, veh/h	1781	3091	463	1781	2275	1144	1781	2695	795	1781	3088	467
Grp Volume(v), veh/h	122	281	284	223	408	379	232	657	640	244	287	289
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	1781	1777	1642	1781	1777	1713	1781	1777	1778
Q Serve(g_s), s	8.6	18.6	18.8	15.9	27.9	28.1	16.2	45.8	46.6	17.3	15.1	15.3
Cycle Q Clear(g_c), s	8.6	18.6	18.8	15.9	27.9	28.1	16.2	45.8	46.6	17.3	15.1	15.3
Prop In Lane	1.00		0.26	1.00		0.70	1.00		0.46	1.00		0.26
Lane Grp Cap(c), veh/h	147	393	393	224	470	434	260	685	661	252	677	678
V/C Ratio(X)	0.83	0.72	0.72	0.99	0.87	0.87	0.89	0.96	0.97	0.97	0.42	0.43
Avail Cap(c_a), veh/h	182	503	504	224	545	504	392	685	661	252	677	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	45.8	46.1	55.5	44.6	45.2	53.3	38.1	38.6	54.2	29.0	29.2
Incr Delay (d2), s/veh	18.9	3.5	3.7	58.4	12.6	13.9	11.4	24.7	27.2	47.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	8.7	8.8	10.6	13.6	12.9	8.0	23.9	23.8	11.1	6.6	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	49.3	49.7	113.9	57.3	59.1	64.7	62.8	65.9	101.4	29.4	29.6
LnGrp LOS	E	D	D	F	E	E	E	E	E	F	C	C
Approach Vol, veh/h		687			1010			1529			820	
Approach Delay, s/veh		54.3			70.5			64.4			50.9	
Approach LOS		D			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	32.1	22.6	52.4	14.5	37.6	22.0	53.0				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	10.0	34.6	28.0	37.6	13.0	37.6	18.0	47.6				
Max Q Clear Time (g_c+M), s	10.0	20.8	18.2	17.3	10.6	30.1	19.3	48.6				
Green Ext Time (p_c), s	0.0	2.1	0.3	2.4	0.1	2.1	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary  
3: 3rd Street & I-215 SB

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖↗	↑↑						↑	↖↗
Traffic Volume (veh/h)	0	744	170	240	612	0	0	0	0	587	3	450
Future Volume (veh/h)	0	744	170	240	612	0	0	0	0	587	3	450
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	886	182	286	729	0				699	4	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1581	325	2419	4478	0				567	3	
Arrive On Green	0.00	0.54	0.53	1.00	1.00	0.00				0.32	0.32	0.00
Sat Flow, veh/h	0	3021	601	3456	3647	0				1772	10	1585
Grp Volume(v), veh/h	0	538	530	286	729	0				703	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1752	1728	1777	0				1782	0	1585
Q Serve(g_s), s	0.0	20.0	20.1	0.0	0.0	0.0				32.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.0	20.1	0.0	0.0	0.0				32.0	0.0	0.0
Prop In Lane	0.00		0.34	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	960	946	2419	4478	0				570	0	
V/C Ratio(X)	0.00	0.56	0.56	0.12	0.16	0.00				1.23	0.00	
Avail Cap(c_a), veh/h	0	960	946	2419	4478	0				570	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.53	0.53	0.11	0.11	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	15.2	15.3	0.0	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.0	0.0				119.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	7.3	0.0	0.0	0.0				32.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.5	15.6	0.0	0.0	0.0				153.5	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				F	A	
Approach Vol, veh/h		1068			1015						703	A
Approach Delay, s/veh		15.6			0.0						153.5	
Approach LOS		B			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	58.0		36.0		134.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	31.0	24.0		30.7		* 61						
Max Q Clear Time (g_c+1), s	12.0	22.1		34.0		2.0						
Green Ext Time (p_c), s	1.0	1.1		0.0		0.9						

Intersection Summary

HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & 3rd Street

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑			↔	↔			
Traffic Volume (veh/h)	320	1011	0	0	602	903	250	0	440	0	0	0
Future Volume (veh/h)	320	1011	0	0	602	903	250	0	440	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	368	1162	0	0	692	767	287	0	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	422	2575	0	0	1000	879	348	0				
Arrive On Green	0.12	0.72	0.00	0.00	0.56	0.55	0.20	0.00	0.00			
Sat Flow, veh/h	3456	3647	0	0	1870	1563	1781	0	1585			
Grp Volume(v), veh/h	368	1162	0	0	692	767	287	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1563	1781	0	1585			
Q Serve(g_s), s	10.5	13.4	0.0	0.0	27.9	42.4	15.5	0.0	0.0			
Cycle Q Clear(g_c), s	10.5	13.4	0.0	0.0	27.9	42.4	15.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	422	2575	0	0	1000	879	348	0				
V/C Ratio(X)	0.87	0.45	0.00	0.00	0.69	0.87	0.82	0.00				
Avail Cap(c_a), veh/h	422	2575	0	0	1000	879	534	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.45	0.45	1.00	0.00	0.00			
Uniform Delay (d), s/veh	43.1	5.6	0.0	0.0	15.7	19.3	38.6	0.0	0.0			
Incr Delay (d2), s/veh	2.0	0.1	0.0	0.0	1.8	5.7	3.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.4	3.7	0.0	0.0	10.5	15.0	6.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	5.7	0.0	0.0	17.5	25.0	42.0	0.0	0.0			
LnGrp LOS	D	A	A	A	B	C	D	A				
Approach Vol, veh/h		1530			1459			287	A			
Approach Delay, s/veh		15.2			21.4			42.0				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.5			16.2	60.3		23.5				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		61.0			11.7	44.8		28.7				
Max Q Clear Time (g_c+I1), s		15.4			12.5	44.4		17.5				
Green Ext Time (p_c), s		6.2			0.0	0.3		0.8				

Intersection Summary

HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.  
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑		↔	↑↑	↔
Traffic Volume (veh/h)	560	601	160	167	775	255	190	630	154	170	543	400
Future Volume (veh/h)	560	601	160	167	775	255	190	630	154	170	543	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	636	683	68	190	881	125	216	716	159	193	617	210
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	594	1159	509	242	1034	454	193	797	177	206	1009	443
Arrive On Green	0.17	0.33	0.33	0.14	0.29	0.29	0.11	0.28	0.26	0.12	0.28	0.28
Sat Flow, veh/h	3456	3554	1561	1781	3554	1560	1781	2880	639	1781	3554	1560
Grp Volume(v), veh/h	636	683	68	190	881	125	216	442	433	193	617	210
Grp Sat Flow(s),veh/h/ln	1728	1777	1561	1781	1777	1560	1781	1777	1743	1781	1777	1560
Q Serve(g_s), s	19.0	17.7	3.4	11.4	25.8	6.8	12.0	26.4	26.5	11.9	16.6	12.3
Cycle Q Clear(g_c), s	19.0	17.7	3.4	11.4	25.8	6.8	12.0	26.4	26.5	11.9	16.6	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	594	1159	509	242	1034	454	193	492	482	206	1009	443
V/C Ratio(X)	1.07	0.59	0.13	0.79	0.85	0.28	1.12	0.90	0.90	0.94	0.61	0.47
Avail Cap(c_a), veh/h	594	1159	509	309	1163	511	193	498	489	206	1022	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	31.1	26.3	46.2	37.0	30.2	49.3	38.5	38.8	48.5	34.3	32.8
Incr Delay (d2), s/veh	57.5	0.8	0.1	7.4	5.7	0.3	99.8	18.8	19.1	44.4	1.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	7.5	1.2	5.4	11.6	2.5	10.5	13.5	13.4	7.6	7.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.3	31.9	26.4	53.6	42.7	30.5	149.1	57.2	58.0	92.9	35.4	33.5
LnGrp LOS	F	C	C	D	D	C	F	E	E	F	D	C
Approach Vol, veh/h		1387			1196			1091			1020	
Approach Delay, s/veh		64.3			43.1			75.7			45.9	
Approach LOS		E			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	40.2	16.0	35.4	23.0	36.2	16.8	34.6				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	35	* 35	12.0	30.0	19.0	34.7	12.3	29.2				
Max Q Clear Time (g_c+M), s	19.7	14.0	18.6	21.0	27.8	13.9	28.5					
Green Ext Time (p_c), s	0.1	3.0	0.0	2.9	0.0	2.8	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	57.6
HCM 6th LOS	E

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	705	220	60	717	100	220	80	80	100	50	160
Future Volume (veh/h)	180	705	220	60	717	100	220	80	80	100	50	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	217	849	223	72	864	104	265	96	44	120	60	164
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	1049	275	177	1054	127	430	399	183	217	114	232
Arrive On Green	0.15	0.38	0.36	0.10	0.33	0.31	0.33	0.33	0.32	0.33	0.33	0.32
Sat Flow, veh/h	1781	2768	727	1781	3183	383	1156	1207	553	424	347	702
Grp Volume(v), veh/h	217	545	527	72	482	486	265	0	140	344	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1718	1781	1777	1790	1156	0	1761	1473	0	0
Q Serve(g_s), s	7.4	17.2	17.3	2.4	15.6	15.7	4.3	0.0	3.6	9.2	0.0	0.0
Cycle Q Clear(g_c), s	7.4	17.2	17.3	2.4	15.6	15.7	17.2	0.0	3.6	12.8	0.0	0.0
Prop In Lane	1.00		0.42	1.00		0.21	1.00		0.31	0.35		0.48
Lane Grp Cap(c), veh/h	262	673	651	177	588	593	430	0	581	564	0	0
V/C Ratio(X)	0.83	0.81	0.81	0.41	0.82	0.82	0.62	0.00	0.24	0.61	0.00	0.00
Avail Cap(c_a), veh/h	284	793	767	177	652	656	509	0	702	665	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.0	17.4	17.7	26.5	19.2	19.4	20.4	0.0	15.4	18.4	0.0	0.0
Incr Delay (d2), s/veh	15.5	5.4	5.6	0.6	7.5	7.5	1.6	0.0	0.2	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.3	7.2	1.0	7.0	7.1	3.6	0.0	1.4	4.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	22.9	23.4	27.0	26.8	26.9	22.0	0.0	15.6	19.6	0.0	0.0
LnGrp LOS	D	C	C	C	C	C	C	A	B	B	A	A
Approach Vol, veh/h		1289			1040			405			344	
Approach Delay, s/veh		26.2			26.8			19.8			19.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	27.8		24.7	13.2	24.8		24.7				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	26.6		24.4	10.0	21.6		24.4				
Max Q Clear Time (g_c+1), s	14.5	19.3		14.8	9.4	17.7		19.2				
Green Ext Time (p_c), s	0.0	3.0		1.1	0.0	1.7		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											24.8	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	560	235	173	664	20	73	50	104	10	90	50
Future Volume (veh/h)	50	560	235	173	664	20	73	50	104	10	90	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	57	644	217	199	763	20	84	57	71	11	103	29
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	771	260	167	1228	32	483	652	664	522	488	137
Arrive On Green	0.05	0.33	0.31	0.10	0.39	0.37	0.39	0.39	0.37	0.39	0.39	0.37
Sat Flow, veh/h	1603	2332	785	1603	3182	83	1131	1683	1391	1134	1259	354
Grp Volume(v), veh/h	57	441	420	199	383	400	84	57	71	11	0	132
Grp Sat Flow(s),veh/h/ln	1603	1599	1518	1603	1599	1666	1131	1683	1391	1134	0	1613
Q Serve(g_s), s	2.4	17.2	17.3	7.0	13.1	13.1	3.6	1.4	1.9	0.4	0.0	3.7
Cycle Q Clear(g_c), s	2.4	17.2	17.3	7.0	13.1	13.1	7.3	1.4	1.9	1.9	0.0	3.7
Prop In Lane	1.00		0.52	1.00		0.05	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	78	529	502	167	617	643	483	652	664	522	0	625
V/C Ratio(X)	0.73	0.83	0.84	1.19	0.62	0.62	0.17	0.09	0.11	0.02	0.00	0.21
Avail Cap(c_a), veh/h	167	591	561	167	617	643	483	652	664	522	0	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.6	20.8	21.2	30.2	16.7	16.7	16.2	13.1	9.8	13.7	0.0	13.9
Incr Delay (d2), s/veh	4.8	9.2	9.8	131.8	1.9	1.9	0.8	0.3	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0	7.0	6.8	8.6	4.4	4.6	1.0	0.6	0.6	0.1	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	30.1	31.0	162.0	18.6	18.6	17.0	13.4	10.1	13.7	0.0	14.0
LnGrp LOS	D	C	C	F	B	B	B	B	B	B	A	B
Approach Vol, veh/h		918		982		212		143				
Approach Delay, s/veh		30.9		47.7		13.7		14.0				
Approach LOS		C		D		B		B				
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.0	26.3		30.1	7.3	30.0		30.1				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	7.0	23.5		25.0				
Max Q Clear Time (g_c+19), s	19.3			5.7	4.4	15.1		9.3				
Green Ext Time (p_c), s	0.0	1.6		0.4	0.0	2.2		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				35.5								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	10	280	197	60	410	110	296	500	60	40	130	30
Future Volume (veh/h)	10	280	197	60	410	110	296	500	60	40	130	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	304	62	65	446	113	322	543	0	43	141	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	511	422	158	501	127	367	624		60	301	
Arrive On Green	0.01	0.30	0.30	0.10	0.39	0.37	0.23	0.37	0.00	0.04	0.18	0.00
Sat Flow, veh/h	1603	1683	1390	1603	1288	326	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	11	304	62	65	0	559	322	543	0	43	141	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1390	1603	0	1615	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	0.6	12.9	2.7	3.2	0.0	27.3	16.3	25.3	0.0	2.2	6.3	0.0
Cycle Q Clear(g_c), s	0.6	12.9	2.7	3.2	0.0	27.3	16.3	25.3	0.0	2.2	6.3	0.0
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	22	511	422	158	0	628	367	624		60	301	
V/C Ratio(X)	0.51	0.60	0.15	0.41	0.00	0.89	0.88	0.87		0.71	0.47	
Avail Cap(c_a), veh/h	95	723	597	247	0	847	552	1054		133	615	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	25.0	21.4	35.7	0.0	24.2	31.3	24.7	0.0	40.1	31.0	0.0
Incr Delay (d2), s/veh	6.7	1.1	0.2	1.7	0.0	9.2	7.2	4.3	0.0	5.7	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.0	0.8	1.3	0.0	11.0	6.6	9.7	0.0	0.9	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	26.1	21.6	37.4	0.0	33.4	38.6	29.0	0.0	45.8	32.1	0.0
LnGrp LOS	D	C	C	D	A	C	D	C		D	C	
Approach Vol, veh/h		377			624			865	A		184	A
Approach Delay, s/veh		26.0			33.8			32.6			35.3	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	29.6	23.3	19.1	5.1	36.8	7.2	35.2				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	12.5	34.8	28.5	29.0	5.0	42.8	7.0	51.0				
Max Q Clear Time (g_c+1), s	11.2	14.9	18.3	8.3	2.6	29.3	4.2	27.3				
Green Ext Time (p_c), s	0.1	1.3	0.5	0.4	0.0	2.1	0.0	2.2				

Intersection Summary

HCM 6th Ctrl Delay	32.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St























UCR North District Transportation Study  
 Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	111	40	130	113	90	160	714	187	148	542	260
Future Volume (veh/h)	120	111	40	130	113	90	160	714	187	148	542	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	135	14	159	138	76	195	871	87	180	661	257
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	377	319	141	200	110	198	1204	537	225	885	344
Arrive On Green	0.10	0.20	0.20	0.08	0.18	0.15	0.11	0.34	0.34	0.13	0.35	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1134	624	1781	3554	1585	1781	2500	972
Grp Volume(v), veh/h	146	135	14	159	0	214	195	871	87	180	470	448
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1758	1781	1777	1585	1781	1777	1695
Q Serve(g_s), s	5.0	3.9	0.4	5.0	0.0	7.2	6.9	13.5	2.4	6.2	14.6	14.7
Cycle Q Clear(g_c), s	5.0	3.9	0.4	5.0	0.0	7.2	6.9	13.5	2.4	6.2	14.6	14.7
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	186	377	319	141	0	310	198	1204	537	225	629	600
V/C Ratio(X)	0.79	0.36	0.04	1.12	0.00	0.69	0.98	0.72	0.16	0.80	0.75	0.75
Avail Cap(c_a), veh/h	255	1051	891	141	0	876	198	1727	770	368	1033	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	21.7	20.3	29.0	0.0	24.6	27.9	18.2	14.6	26.7	17.9	18.4
Incr Delay (d2), s/veh	10.6	0.6	0.1	113.0	0.0	2.7	59.3	0.9	0.1	2.5	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.6	0.2	6.4	0.0	3.0	5.9	4.9	0.8	2.5	5.4	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	22.2	20.3	141.9	0.0	27.3	87.2	19.1	14.7	29.2	19.7	20.2
LnGrp LOS	D	C	C	F	A	C	F	B	B	C	B	C
Approach Vol, veh/h		295			373			1153			1098	
Approach Delay, s/veh		30.0			76.2			30.3			21.5	
Approach LOS		C			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	25.3	9.0	16.7	11.0	26.3	10.6	15.1				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	13.0	28.8	5.0	34.0	7.0	34.8	9.0	30.0				
Max Q Clear Time (g_c+1), s	19.2	15.5	7.0	5.9	8.9	16.7	7.0	9.2				
Green Ext Time (p_c), s	0.1	3.8	0.0	0.5	0.0	3.8	0.1	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											32.8	
HCM 6th LOS											C	

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	93	90	140	80	63	80	146	221	135	240	83
Future Volume (vph)	53	93	90	140	80	63	80	146	221	135	240	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.93		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1725		1770	1740		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1725		1770	1740		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	68	119	115	179	103	81	103	187	283	173	308	106
RTOR Reduction (vph)	0	55	0	0	42	0	0	0	220	0	0	76
Lane Group Flow (vph)	68	179	0	179	142	0	103	187	63	173	308	30
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	2.9	10.0		6.0	13.1		4.6	10.3	10.3	7.6	14.1	14.1
Effective Green, g (s)	2.9	11.1		6.0	14.2		4.6	11.7	11.7	7.6	14.7	14.7
Actuated g/C Ratio	0.06	0.21		0.11	0.27		0.09	0.22	0.22	0.15	0.28	0.28
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	97	365		202	471		155	415	353	256	522	444
v/s Ratio Prot	0.04	c0.10		c0.10	c0.08		0.06	0.10		c0.10	c0.17	
v/s Ratio Perm									0.04			0.02
v/c Ratio	0.70	0.49		0.89	0.30		0.66	0.45	0.18	0.68	0.59	0.07
Uniform Delay, d1	24.3	18.2		22.9	15.2		23.2	17.6	16.5	21.2	16.3	13.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.0	1.0		33.1	0.4		8.0	0.8	0.2	5.5	1.8	0.1
Delay (s)	41.3	19.2		55.9	15.5		31.2	18.4	16.7	26.7	18.0	13.9
Level of Service	D	B		E	B		C	B	B	C	B	B
Approach Delay (s)		24.2			35.4			19.8			19.8	
Approach LOS		C			D			B			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			23.7				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			52.4			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			48.6%			ICU Level of Service		A				
Analysis Period (min)			15									

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	170	40	123	100	40
Future Vol, veh/h	183	170	40	123	100	40
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	220	205	48	148	120	48
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	11.9	9.7	10.1
HCM LOS	B	A	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	71%	0%	25%
Vol Thru, %	0%	52%	75%
Vol Right, %	29%	48%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	140	353	163
LT Vol	100	0	40
Through Vol	0	183	123
RT Vol	40	170	0
Lane Flow Rate	169	425	196
Geometry Grp	1	1	1
Degree of Util (X)	0.246	0.512	0.267
Departure Headway (Hd)	5.26	4.333	4.89
Convergence, Y/N	Yes	Yes	Yes
Cap	678	829	731
Service Time	3.334	2.379	2.949
HCM Lane V/C Ratio	0.249	0.513	0.268
HCM Control Delay	10.1	11.9	9.7
HCM Lane LOS	B	B	A
HCM 95th-tile Q	1	3	1.1

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↖	↑↑	↗	↖	↑↑	↗	↖	↑↑	↔↔
Traffic Volume (veh/h)	188	295	60	100	370	150	90	722	185	125	357	160
Future Volume (veh/h)	188	295	60	100	370	150	90	722	185	125	357	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	198	311	23	105	389	39	95	760	89	132	376	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	784	607	135	683	299	331	1143	497	169	630	177
Arrive On Green	0.10	0.22	0.20	0.08	0.19	0.19	0.19	0.32	0.32	0.09	0.23	0.20
Sat Flow, veh/h	3456	3554	1558	1781	3554	1558	1781	3554	1545	1781	2728	766
Grp Volume(v), veh/h	198	311	23	105	389	39	95	760	89	132	243	240
Grp Sat Flow(s),veh/h/ln	1728	1777	1558	1781	1777	1558	1781	1777	1545	1781	1777	1717
Q Serve(g_s), s	3.0	4.2	0.1	3.2	5.5	0.8	2.6	10.3	1.3	4.0	6.8	7.0
Cycle Q Clear(g_c), s	3.0	4.2	0.1	3.2	5.5	0.8	2.6	10.3	1.3	4.0	6.8	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	360	784	607	135	683	299	331	1143	497	169	411	397
V/C Ratio(X)	0.55	0.40	0.04	0.78	0.57	0.13	0.29	0.66	0.18	0.78	0.59	0.60
Avail Cap(c_a), veh/h	372	1799	1052	192	1799	789	331	2029	882	256	1046	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	18.5	3.2	25.3	20.4	8.0	19.5	16.3	4.6	24.6	19.1	19.5
Incr Delay (d2), s/veh	0.8	0.3	0.0	7.4	0.8	0.2	0.2	0.7	0.2	4.0	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.6	0.0	1.5	2.1	0.4	0.9	3.5	0.7	1.7	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	18.9	3.2	32.7	21.2	8.2	19.7	17.0	4.8	28.6	20.4	21.0
LnGrp LOS	C	B	A	C	C	A	B	B	A	C	C	C
Approach Vol, veh/h		532			533			944			615	
Approach Delay, s/veh		20.3			22.5			16.1			22.4	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	16.3	14.3	16.9	9.8	14.7	9.3	21.9				
Change Period (Y+Rc), s	4.0	5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	27.1	7.0	31.0	5.0	27.1	8.0	30.0				
Max Q Clear Time (g_c+1/2), s	12.3	6.2	4.6	9.0	5.0	7.5	6.0	12.3				
Green Ext Time (p_c), s	3.6	0.0	1.4	0.0	1.8	0.0	1.8	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											19.7	
HCM 6th LOS											B	

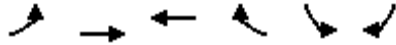
HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Future (2025) Plus Buildout AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↗	↑				↖		↗
Traffic Volume (veh/h)	0	465	270	87	390	0	0	0	0	375	2	210
Future Volume (veh/h)	0	465	270	87	390	0	0	0	0	375	2	210
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	500	158	94	419	0				403	2	68
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	936	774	178	1206	0				474	0	415
Arrive On Green	0.00	0.50	0.50	0.03	0.21	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1870	1548	1781	1870	0				1781	0	1560
Grp Volume(v), veh/h	0	500	158	94	419	0				403	0	68
Grp Sat Flow(s),veh/h/ln	0	1870	1548	1781	1870	0				1781	0	1560
Q Serve(g_s), s	0.0	16.4	5.1	4.7	17.1	0.0				19.3	0.0	3.0
Cycle Q Clear(g_c), s	0.0	16.4	5.1	4.7	17.1	0.0				19.3	0.0	3.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	936	774	178	1206	0				474	0	415
V/C Ratio(X)	0.00	0.53	0.20	0.53	0.35	0.00				0.85	0.00	0.16
Avail Cap(c_a), veh/h	0	936	774	178	1206	0				792	0	693
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.92	0.92	0.88	0.88	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	12.5	41.4	19.3	0.0				31.3	0.0	25.3
Incr Delay (d2), s/veh	0.0	2.0	0.5	9.5	0.7	0.0				2.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	1.8	2.5	8.7	0.0				8.2	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.3	13.1	50.9	20.0	0.0				33.3	0.0	25.4
LnGrp LOS	A	B	B	D	C	A				C	A	C
Approach Vol, veh/h		658			513						471	
Approach Delay, s/veh		16.3			25.7						32.2	
Approach LOS		B			C						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	3.0	49.0		28.0		62.0						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	5	27.3		38.5		40.3						
Max Q Clear Time (g_c+1), s	10	18.4		21.3		19.1						
Green Ext Time (p_c), s	0.0	1.2		1.0		0.9						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				23.8								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	290	550	227	293	82	250
Future Volume (veh/h)	290	550	227	293	82	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	305	579	239	172	86	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	349	1617	1168	968	160	73
Arrive On Green	0.39	1.00	0.62	0.62	0.05	0.05
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	305	579	239	172	86	22
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	14.3	0.0	4.9	4.2	2.2	1.2
Cycle Q Clear(g_c), s	14.3	0.0	4.9	4.2	2.2	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	349	1617	1168	968	160	73
V/C Ratio(X)	0.87	0.36	0.20	0.18	0.54	0.30
Avail Cap(c_a), veh/h	534	1617	1168	968	653	299
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.72	0.72	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	7.3	7.1	42.0	41.5
Incr Delay (d2), s/veh	7.5	0.4	0.4	0.4	2.8	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.2	1.8	1.3	1.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.9	0.4	7.7	7.5	44.8	43.8
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		884	411		108	
Approach Delay, s/veh		12.0	7.6		44.5	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.8		8.2	21.6	60.2
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		63.3		17.0	26.5	32.3
Max Q Clear Time (g_c+I1), s		2.0		4.2	16.3	6.9
Green Ext Time (p_c), s		1.3		0.3	0.9	0.9
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			13.2			
HCM 6th LOS			B			

**Intersection**

Intersection Delay, s/veh 102.3  
Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	17	9	34	20	35	160	130	672	30	20	237	85
Future Vol, veh/h	17	9	34	20	35	160	130	672	30	20	237	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	10	37	22	38	174	141	730	33	22	258	92
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	12.4	14.4	166.4	17.2
HCM LOS	B	B	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	65%	0%	36%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	35%	0%	64%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	672	30	26	34	55	160	20	237	85
LT Vol	130	0	0	17	0	20	0	20	0	0
Through Vol	0	672	0	9	0	35	0	0	237	0
RT Vol	0	0	30	0	34	0	160	0	0	85
Lane Flow Rate	141	730	33	28	37	60	174	22	258	92
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.287	1.381	0.055	0.07	0.081	0.136	0.353	0.048	0.534	0.174
Departure Headway (Hd)	7.311	6.804	6.093	9.579	8.533	8.806	7.915	8.599	8.088	7.373
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	490	533	585	376	422	410	457	419	448	490
Service Time	5.079	4.571	3.86	7.279	6.233	6.506	5.615	6.299	5.788	5.073
HCM Lane V/C Ratio	0.288	1.37	0.056	0.074	0.088	0.146	0.381	0.053	0.576	0.188
HCM Control Delay	13	203.1	9.2	13	12	12.9	14.9	11.7	19.7	11.6
HCM Lane LOS	B	F	A	B	B	B	B	B	C	B
HCM 95th-tile Q	1.2	33.1	0.2	0.2	0.3	0.5	1.6	0.2	3.1	0.6

HCM 6th Signalized Intersection Summary  
1: Iowa Avenue & Massachusetts Ave

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (veh/h)	150	40	170	90	30	90	150	982	80	130	1425	120
Future Volume (veh/h)	150	40	170	90	30	90	150	982	80	130	1425	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	43	27	98	33	10	163	1067	83	141	1549	138
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	105	66	223	121	37	197	1891	147	185	1845	163
Arrive On Green	0.06	0.10	0.08	0.05	0.09	0.07	0.11	0.57	0.55	0.10	0.56	0.54
Sat Flow, veh/h	1781	1063	667	1781	1368	415	1781	3334	259	1781	3296	291
Grp Volume(v), veh/h	163	0	70	98	0	43	163	568	582	141	828	859
Grp Sat Flow(s),veh/h/ln	1781	0	1730	1781	0	1782	1781	1777	1816	1781	1777	1810
Q Serve(g_s), s	5.0	0.0	3.3	4.0	0.0	2.0	7.8	17.7	17.8	6.7	33.5	34.7
Cycle Q Clear(g_c), s	5.0	0.0	3.3	4.0	0.0	2.0	7.8	17.7	17.8	6.7	33.5	34.7
Prop In Lane	1.00		0.39	1.00		0.23	1.00		0.14	1.00		0.16
Lane Grp Cap(c), veh/h	251	0	171	223	0	158	197	1008	1030	185	995	1013
V/C Ratio(X)	0.65	0.00	0.41	0.44	0.00	0.27	0.83	0.56	0.56	0.76	0.83	0.85
Avail Cap(c_a), veh/h	251	0	655	223	0	654	245	1008	1030	364	1121	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	0.0	37.2	36.2	0.0	37.3	37.9	12.0	12.1	38.0	15.8	16.2
Incr Delay (d2), s/veh	4.6	0.0	1.6	1.4	0.0	0.9	14.0	0.7	0.7	2.5	5.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	1.5	2.0	0.0	0.9	4.1	6.6	6.8	2.9	12.4	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	0.0	38.7	37.6	0.0	38.2	51.9	12.7	12.8	40.5	20.8	21.8
LnGrp LOS	D	A	D	D	A	D	D	B	B	D	C	C
Approach Vol, veh/h		233			141			1313			1828	
Approach Delay, s/veh		41.0			37.8			17.6			22.8	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	12.7	13.7	52.8	9.0	11.7	13.0	53.4				
Change Period (Y+Rc), s	4.0	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	4.0	* 32	12.0	53.2	5.0	30.5	17.3	47.4				
Max Q Clear Time (g_c+I1), s	6.0	5.3	9.8	36.7	7.0	4.0	8.7	19.8				
Green Ext Time (p_c), s	0.0	0.3	0.0	10.3	0.0	0.2	0.1	9.1				

Intersection Summary

HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↖↗		↖	↖↗	
Traffic Volume (veh/h)	110	744	150	216	355	130	120	690	208	310	990	110
Future Volume (veh/h)	110	744	150	216	355	130	120	690	208	310	990	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	800	146	232	382	108	129	742	202	333	1065	110
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	886	162	203	898	251	141	729	198	328	1202	124
Arrive On Green	0.08	0.30	0.28	0.11	0.33	0.32	0.08	0.27	0.25	0.18	0.37	0.36
Sat Flow, veh/h	1781	2993	546	1781	2733	763	1781	2750	748	1781	3246	335
Grp Volume(v), veh/h	118	475	471	232	247	243	129	479	465	333	583	592
Grp Sat Flow(s),veh/h/ln	1781	1777	1762	1781	1777	1719	1781	1777	1721	1781	1777	1804
Q Serve(g_s), s	7.4	29.3	29.3	13.0	12.3	12.7	8.2	30.2	30.2	21.0	35.0	35.1
Cycle Q Clear(g_c), s	7.4	29.3	29.3	13.0	12.3	12.7	8.2	30.2	30.2	21.0	35.0	35.1
Prop In Lane	1.00		0.31	1.00		0.44	1.00		0.43	1.00		0.19
Lane Grp Cap(c), veh/h	145	526	521	203	584	565	141	471	456	328	658	668
V/C Ratio(X)	0.81	0.90	0.90	1.14	0.42	0.43	0.92	1.02	1.02	1.01	0.89	0.89
Avail Cap(c_a), veh/h	235	543	538	203	584	565	141	471	456	328	658	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	38.5	38.7	50.5	29.8	30.2	52.1	41.9	42.2	46.5	33.6	33.7
Incr Delay (d2), s/veh	4.4	18.1	18.2	106.4	0.5	0.5	50.7	46.1	46.8	53.3	13.7	13.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	15.4	15.3	11.7	5.2	5.2	5.6	18.8	18.4	14.2	17.5	17.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	56.7	57.0	156.8	30.3	30.7	102.8	87.9	88.9	99.8	47.3	47.4
LnGrp LOS	E	E	E	F	C	C	F	F	F	F	D	D
Approach Vol, veh/h		1064			722			1073			1508	
Approach Delay, s/veh		56.7			71.1			90.1			58.9	
Approach LOS		E			E			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	37.7	13.0	46.2	13.3	41.4	25.0	34.2				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	13.0	33.4	9.0	40.8	15.0	31.4	21.0	28.8				
Max Q Clear Time (g_c+1/3), s	11.0	31.3	10.2	37.1	9.4	14.7	23.0	32.2				
Green Ext Time (p_c), s	0.0	1.0	0.0	2.0	0.1	1.7	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					68.1							
HCM 6th LOS					E							

HCM 6th Signalized Intersection Summary  
 3: 3rd Street & I-215 SB

UCR North District Transportation Study  
 Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑↑	↑↑					↑		↑
Traffic Volume (veh/h)	0	682	650	470	631	0	0	0	0	567	19	150
Future Volume (veh/h)	0	682	650	470	631	0	0	0	0	567	19	150
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	703	370	485	651	0				585	20	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1153	606	4037	6100	0				445	0	
Arrive On Green	0.00	0.52	0.50	0.39	0.57	0.00				0.25	0.25	0.00
Sat Flow, veh/h	0	2332	1177	3456	3647	0				1781	0	1585
Grp Volume(v), veh/h	0	558	515	485	651	0				585	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1639	1728	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	13.3	13.5	0.0	0.0	0.0				15.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.3	13.5	0.0	0.0	0.0				15.0	0.0	0.0
Prop In Lane	0.00		0.72	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	915	844	4037	6100	0				445	0	
V/C Ratio(X)	0.00	0.61	0.61	0.12	0.11	0.00				1.31	0.00	
Avail Cap(c_a), veh/h	0	915	844	4037	6100	0				445	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.21	0.21	0.10	0.10	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.3	10.6	0.0	0.0	0.0				22.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.7	0.0	0.0	0.0				156.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	3.9	0.0	0.0	0.0				25.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.9	11.3	0.0	0.0	0.0				178.9	0.0	0.0
LnGrp LOS	A	B	B	A	A	A				F	A	
Approach Vol, veh/h		1073			1136						585	A
Approach Delay, s/veh		11.1			0.0						178.9	
Approach LOS		B			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	35.0		19.0		111.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	30.0	24.0		13.7		* 38						
Max Q Clear Time (g_c+1), s	12.0	15.5		17.0		2.0						
Green Ext Time (p_c), s	1.0	3.7		0.0		0.8						

Intersection Summary

HCM 6th Ctrl Delay		41.7										
HCM 6th LOS			D									

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
4: I-215 NB & 3rd Street

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑			↑↑			↑	↗			
Traffic Volume (veh/h)	240	1019	0	0	901	856	200	1	400	0	0	0
Future Volume (veh/h)	240	1019	0	0	901	856	200	1	400	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	247	1051	0	0	929	603	206	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	346	2495	0	0	1118	698	292	1				
Arrive On Green	0.10	0.70	0.00	0.00	0.54	0.52	0.16	0.16	0.00			
Sat Flow, veh/h	3456	3647	0	0	2181	1303	1773	9	1585			
Grp Volume(v), veh/h	247	1051	0	0	785	747	207	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1614	1782	0	1585			
Q Serve(g_s), s	4.2	7.5	0.0	0.0	22.1	24.2	6.6	0.0	0.0			
Cycle Q Clear(g_c), s	4.2	7.5	0.0	0.0	22.1	24.2	6.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.81	1.00		1.00			
Lane Grp Cap(c), veh/h	346	2495	0	0	952	864	293	0				
V/C Ratio(X)	0.71	0.42	0.00	0.00	0.83	0.86	0.71	0.00				
Avail Cap(c_a), veh/h	346	2495	0	0	952	864	416	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.14	0.14	0.00	0.00	0.34	0.34	1.00	0.00	0.00			
Uniform Delay (d), s/veh	26.2	3.8	0.0	0.0	11.6	12.4	23.7	0.0	0.0			
Incr Delay (d2), s/veh	0.9	0.1	0.0	0.0	2.9	4.2	1.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.6	1.2	0.0	0.0	7.0	7.4	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	3.9	0.0	0.0	14.5	16.6	24.9	0.0	0.0			
LnGrp LOS	C	A	A	A	B	B	C	A				
Approach Vol, veh/h		1298			1532			207	A			
Approach Delay, s/veh		8.3			15.6			24.9				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.1			10.0	36.1		13.9				
Change Period (Y+Rc), s		5.0			4.5	5.0		5.3				
Max Green Setting (Gmax), s		37.0			5.5	27.0		12.7				
Max Q Clear Time (g_c+I1), s		9.5			6.2	26.2		8.6				
Green Ext Time (p_c), s		5.1			0.0	0.6		0.3				

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔	↑↑	↔	↔	↑↑		↔	↑↑	↔
Traffic Volume (veh/h)	370	569	160	165	807	295	250	587	246	344	801	570
Future Volume (veh/h)	370	569	160	165	807	295	250	587	246	344	801	570
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	381	587	46	170	832	90	258	605	222	355	826	432
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	967	424	202	1037	456	224	730	268	280	1136	499
Arrive On Green	0.09	0.27	0.27	0.11	0.29	0.29	0.13	0.29	0.27	0.16	0.32	0.32
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	2534	928	1781	3554	1561
Grp Volume(v), veh/h	381	587	46	170	832	90	258	424	403	355	826	432
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1686	1781	1777	1561
Q Serve(g_s), s	9.0	13.7	2.1	8.9	20.6	4.1	12.0	21.2	21.4	15.0	19.6	24.8
Cycle Q Clear(g_c), s	9.0	13.7	2.1	8.9	20.6	4.1	12.0	21.2	21.4	15.0	19.6	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	326	967	424	202	1037	456	224	512	486	280	1136	499
V/C Ratio(X)	1.17	0.61	0.11	0.84	0.80	0.20	1.15	0.83	0.83	1.27	0.73	0.87
Avail Cap(c_a), veh/h	326	1283	563	202	1350	593	224	537	510	280	1186	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	30.2	26.0	41.4	31.2	25.3	41.6	31.7	32.2	40.1	28.7	30.5
Incr Delay (d2), s/veh	103.3	0.6	0.1	24.9	2.7	0.2	106.5	10.0	10.6	144.9	2.2	13.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	5.7	0.8	5.2	8.8	1.5	11.7	9.9	9.7	17.5	8.1	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	146.4	30.9	26.1	66.3	33.9	25.6	148.1	41.7	42.8	185.0	30.9	44.3
LnGrp LOS	F	C	C	E	C	C	F	D	D	F	C	D
Approach Vol, veh/h		1014			1092			1085			1613	
Approach Delay, s/veh		74.1			38.3			67.4			68.4	
Approach LOS		E			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	30.0	16.0	34.5	13.0	31.8	19.0	31.5				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	33	* 33	12.0	30.0	9.0	34.7	14.5	27.0				
Max Q Clear Time (g_c+M), s	15.7	15.7	14.0	26.8	11.0	22.6	17.0	23.4				
Green Ext Time (p_c), s	0.0	2.6	0.0	1.8	0.0	3.5	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay	62.5
HCM 6th LOS	E

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
6: Rustin Ave & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	848	150	40	997	70	150	40	40	80	40	100
Future Volume (veh/h)	160	848	150	40	997	70	150	40	40	80	40	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	893	140	42	1049	66	158	42	10	84	42	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1210	190	238	1385	87	439	242	58	246	76	58
Arrive On Green	0.12	0.39	0.36	0.13	0.41	0.37	0.17	0.17	0.15	0.17	0.17	0.15
Sat Flow, veh/h	1781	3066	481	1781	3389	213	1313	1454	346	647	455	350
Grp Volume(v), veh/h	168	518	515	42	550	565	158	0	52	166	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1769	1781	1777	1826	1313	0	1800	1452	0	0
Q Serve(g_s), s	3.6	9.8	9.8	0.8	10.4	10.5	0.0	0.0	1.0	3.3	0.0	0.0
Cycle Q Clear(g_c), s	3.6	9.8	9.8	0.8	10.4	10.5	3.5	0.0	1.0	4.3	0.0	0.0
Prop In Lane	1.00		0.27	1.00		0.12	1.00		0.19	0.51		0.24
Lane Grp Cap(c), veh/h	213	702	699	238	726	746	439	0	300	380	0	0
V/C Ratio(X)	0.79	0.74	0.74	0.18	0.76	0.76	0.36	0.00	0.17	0.44	0.00	0.00
Avail Cap(c_a), veh/h	226	831	827	238	831	853	1041	0	1125	1068	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	10.2	10.3	15.1	10.0	10.0	15.1	0.0	14.1	15.6	0.0	0.0
Incr Delay (d2), s/veh	14.3	2.9	2.9	0.1	3.5	3.4	0.5	0.0	0.3	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.3	3.3	0.3	3.6	3.7	1.1	0.0	0.4	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	13.0	13.2	15.3	13.5	13.5	15.6	0.0	14.4	16.4	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		1201			1157			210			166	
Approach Delay, s/veh		15.7			13.5			15.3			16.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	19.5		10.6	8.7	20.1		10.6				
Change Period (Y+Rc), s	4.0	5.4		4.6	4.0	5.4		4.6				
Max Green Setting (Gmax), s	5.0	17.0		24.0	5.0	17.0		24.0				
Max Q Clear Time (g_c+1), s	12.8	11.8		6.3	5.6	12.5		5.5				
Green Ext Time (p_c), s	0.0	2.3		0.5	0.0	2.2		0.8				

Intersection Summary

HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	
Traffic Volume (veh/h)	40	714	204	203	785	20	232	90	186	20	110	60
Future Volume (veh/h)	40	714	204	203	785	20	232	90	186	20	110	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	43	760	197	216	835	19	247	96	165	21	117	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	897	232	176	1364	31	421	577	609	417	438	116
Arrive On Green	0.04	0.36	0.34	0.11	0.43	0.41	0.34	0.34	0.33	0.34	0.34	0.33
Sat Flow, veh/h	1603	2499	648	1603	3195	73	1114	1683	1390	1005	1278	339
Grp Volume(v), veh/h	43	486	471	216	418	436	247	96	165	21	0	148
Grp Sat Flow(s),veh/h/ln	1603	1599	1547	1603	1599	1668	1114	1683	1390	1005	0	1616
Q Serve(g_s), s	1.7	17.8	17.9	7.0	12.9	12.9	13.1	2.5	4.8	0.9	0.0	4.2
Cycle Q Clear(g_c), s	1.7	17.8	17.9	7.0	12.9	12.9	17.4	2.5	4.8	3.5	0.0	4.2
Prop In Lane	1.00		0.42	1.00		0.04	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	67	574	555	176	683	712	421	577	609	417	0	554
V/C Ratio(X)	0.64	0.85	0.85	1.23	0.61	0.61	0.59	0.17	0.27	0.05	0.00	0.27
Avail Cap(c_a), veh/h	151	626	605	176	683	712	496	690	703	485	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.0	18.8	19.1	28.3	14.1	14.2	21.4	14.6	11.5	15.8	0.0	15.2
Incr Delay (d2), s/veh	3.8	9.9	10.2	141.2	1.6	1.5	1.3	0.1	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.2	7.1	9.4	4.1	4.3	3.4	0.9	1.4	0.2	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	28.7	29.3	169.5	15.8	15.7	22.7	14.7	11.8	15.9	0.0	15.5
LnGrp LOS	C	C	C	F	B	B	C	B	B	B	A	B
Approach Vol, veh/h		1000			1070			508			169	
Approach Delay, s/veh		29.2			46.8			17.7			15.5	
Approach LOS		C			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.0	26.8		25.8	6.7	31.2		25.8				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	6.0	24.5		25.0				
Max Q Clear Time (g_c+19), s	19.9			6.2	3.7	14.9		19.4				
Green Ext Time (p_c), s	0.0	1.5		0.6	0.0	2.5		1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				33.1								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
8: Watkins Dr & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	380	268	60	260	50	284	260	80	180	450	50
Future Volume (veh/h)	20	380	268	60	260	50	284	260	80	180	450	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	21	396	72	62	271	45	296	271	0	188	469	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	450	371	140	465	77	288	589		218	516	
Arrive On Green	0.02	0.27	0.27	0.09	0.33	0.32	0.18	0.35	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1603	1683	1389	1603	1402	233	1603	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	21	396	72	62	0	316	296	271	0	188	469	0
Grp Sat Flow(s),veh/h/ln	1603	1683	1389	1603	0	1634	1603	1683	1427	1603	1683	1427
Q Serve(g_s), s	1.3	22.6	4.0	3.7	0.0	16.1	18.0	12.5	0.0	11.5	26.8	0.0
Cycle Q Clear(g_c), s	1.3	22.6	4.0	3.7	0.0	16.1	18.0	12.5	0.0	11.5	26.8	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	450	371	140	0	543	288	589		218	516	
V/C Ratio(X)	0.59	0.88	0.19	0.44	0.00	0.58	1.03	0.46		0.86	0.91	
Avail Cap(c_a), veh/h	96	499	412	168	0	558	288	589		336	518	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.5	35.2	28.4	43.4	0.0	27.8	41.1	25.2	0.0	42.3	33.4	0.0
Incr Delay (d2), s/veh	5.8	15.5	0.3	2.2	0.0	1.5	60.2	0.6	0.0	8.6	20.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	10.7	1.3	1.5	0.0	6.2	11.6	4.8	0.0	4.9	13.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	50.6	28.6	45.6	0.0	29.2	101.3	25.8	0.0	50.9	53.5	0.0
LnGrp LOS	D	D	C	D	A	C	F	C		D	D	
Approach Vol, veh/h		489			378			567	A		657	A
Approach Delay, s/veh		47.6			31.9			65.2			52.7	
Approach LOS		D			C			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	30.8	22.0	34.7	6.2	37.3	17.6	39.1				
Change Period (Y+Rc), s	4.5	5.4	4.5	5.8	4.0	5.4	4.0	5.8				
Max Green Setting (Gmax), s	10.0	28.3	17.5	29.0	6.0	32.8	21.0	26.0				
Max Q Clear Time (g_c+1/3), s	11.5	24.6	20.0	28.8	3.3	18.1	13.5	14.5				
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	1.0	0.2	0.7				

Intersection Summary

HCM 6th Ctrl Delay	51.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Buildout PM

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	149	110	274	116	107	60	856	213	131	1015	110
Future Volume (veh/h)	110	149	110	274	116	107	60	856	213	131	1015	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	155	28	285	121	66	62	892	80	136	1057	107
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	261	221	209	197	107	96	1343	599	174	1374	139
Arrive On Green	0.08	0.14	0.14	0.12	0.17	0.15	0.05	0.38	0.38	0.10	0.42	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1138	621	1781	3554	1585	1781	3258	330
Grp Volume(v), veh/h	115	155	28	285	0	187	62	892	80	136	576	588
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1759	1781	1777	1585	1781	1777	1811
Q Serve(g_s), s	3.8	4.6	0.9	7.0	0.0	5.9	2.0	12.5	2.0	4.5	16.6	16.7
Cycle Q Clear(g_c), s	3.8	4.6	0.9	7.0	0.0	5.9	2.0	12.5	2.0	4.5	16.6	16.7
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	149	261	221	209	0	304	96	1343	599	174	750	764
V/C Ratio(X)	0.77	0.59	0.13	1.37	0.00	0.62	0.65	0.66	0.13	0.78	0.77	0.77
Avail Cap(c_a), veh/h	268	1108	939	209	0	983	149	1939	865	268	1089	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	24.1	22.5	26.4	0.0	23.1	27.7	15.4	12.2	26.3	14.8	14.9
Incr Delay (d2), s/veh	8.2	2.2	0.3	192.0	0.0	2.0	2.7	0.6	0.1	3.3	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.0	0.3	13.8	0.0	2.4	0.9	4.3	0.6	1.9	5.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	26.3	22.8	218.3	0.0	25.1	30.4	16.0	12.3	29.7	16.8	17.0
LnGrp LOS	C	C	C	F	A	C	C	B	B	C	B	B
Approach Vol, veh/h		298			472			1034			1300	
Approach Delay, s/veh		29.3			141.8			16.6			18.2	
Approach LOS		C			F			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	26.6	11.0	12.3	7.2	29.2	9.0	14.3				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	30.8	7.0	34.0	5.0	34.8	9.0	32.0					
Max Q Clear Time (g_c+1), s	14.5	9.0	6.6	4.0	18.7	5.8	7.9					
Green Ext Time (p_c), s	0.1	4.2	0.0	0.6	0.0	4.7	0.1	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				37.5								
HCM 6th LOS				D								



HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	176	120	439	198	212	85	234	282	184	344	59
Future Volume (vph)	67	176	120	439	198	212	85	234	282	184	344	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.94		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1749		1770	1718		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1749		1770	1718		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	74	193	132	482	218	233	93	257	310	202	378	65
RTOR Reduction (vph)	0	23	0	0	32	0	0	0	211	0	0	49
Lane Group Flow (vph)	74	302	0	482	419	0	93	257	99	202	378	16
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	4.8	11.7		19.0	25.9		6.0	12.6	12.6	9.0	16.4	16.4
Effective Green, g (s)	4.8	12.8		19.0	27.0		6.0	14.0	14.0	9.0	17.0	17.0
Actuated g/C Ratio	0.07	0.18		0.27	0.38		0.08	0.20	0.20	0.13	0.24	0.24
Clearance Time (s)	4.0	5.1		4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	120	316		475	655		150	368	313	225	447	380
v/s Ratio Prot	0.04	c0.17		c0.27	0.24		0.05	0.14		c0.11	c0.20	
v/s Ratio Perm									0.06			0.01
v/c Ratio	0.62	0.96		1.01	0.64		0.62	0.70	0.32	0.90	0.85	0.04
Uniform Delay, d1	32.1	28.7		25.9	17.9		31.3	26.4	24.3	30.4	25.6	20.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	38.6		45.0	2.1		5.3	5.7	0.6	32.9	13.7	0.0
Delay (s)	38.6	67.3		70.9	20.1		36.6	32.1	24.9	63.3	39.4	20.7
Level of Service	D	E		E	C		D	C	C	E	D	C
Approach Delay (s)		62.0			46.4			29.4			45.0	
Approach LOS		E			D			C			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			44.1			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			70.8			Sum of lost time (s)			18.0			
Intersection Capacity Utilization			77.1%			ICU Level of Service			D			
Analysis Period (min)			15									

c Critical Lane Group

**Intersection**

Intersection Delay, s/veh 46.3

Intersection LOS E

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	322	230	40	334	255	50
Future Vol, veh/h	322	230	40	334	255	50
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	374	267	47	388	297	58
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	72.1	27	23.2
HCM LOS	F	D	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	84%	0%	11%
Vol Thru, %	0%	58%	89%
Vol Right, %	16%	42%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	305	552	374
LT Vol	255	0	40
Through Vol	0	322	334
RT Vol	50	230	0
Lane Flow Rate	355	642	435
Geometry Grp	1	1	1
Degree of Util (X)	0.673	1.044	0.76
Departure Headway (Hd)	6.987	5.858	6.453
Convergence, Y/N	Yes	Yes	Yes
Cap	521	623	565
Service Time	4.987	3.858	4.453
HCM Lane V/C Ratio	0.681	1.03	0.77
HCM Control Delay	23.2	72.1	27
HCM Lane LOS	C	F	D
HCM 95th-tile Q	5	17.3	6.8

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖↗
Traffic Volume (veh/h)	321	779	150	160	475	120	160	597	120	240	732	257
Future Volume (veh/h)	321	779	150	160	475	120	160	597	120	240	732	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	341	829	99	170	505	39	170	635	27	255	779	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1038	552	132	1086	477	132	874	379	315	935	281
Arrive On Green	0.07	0.29	0.28	0.07	0.31	0.31	0.07	0.25	0.25	0.18	0.35	0.33
Sat Flow, veh/h	3456	3554	1560	1781	3554	1561	1781	3554	1542	1781	2682	806
Grp Volume(v), veh/h	341	829	99	170	505	39	170	635	27	255	516	497
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1561	1781	1777	1542	1781	1777	1711
Q Serve(g_s), s	6.0	17.4	0.0	6.0	9.3	0.8	6.0	13.3	1.1	11.1	21.6	21.7
Cycle Q Clear(g_c), s	6.0	17.4	0.0	6.0	9.3	0.8	6.0	13.3	1.1	11.1	21.6	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	256	1038	552	132	1086	477	132	874	379	315	619	596
V/C Ratio(X)	1.33	0.80	0.18	1.29	0.46	0.08	1.29	0.73	0.07	0.81	0.83	0.83
Avail Cap(c_a), veh/h	256	1281	659	132	1281	563	132	1395	606	315	720	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	26.5	18.1	37.5	22.8	6.4	37.5	28.0	23.4	32.0	24.2	24.6
Incr Delay (d2), s/veh	173.7	3.0	0.2	174.9	0.3	0.1	174.9	1.2	0.1	13.7	7.4	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.4	1.2	8.9	3.7	0.5	8.9	5.3	0.4	5.7	9.3	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	211.2	29.4	18.3	212.4	23.1	6.4	212.4	29.2	23.5	45.8	31.6	32.3
LnGrp LOS	F	C	B	F	C	A	F	C	C	D	C	C
Approach Vol, veh/h		1269			714			832			1268	
Approach Delay, s/veh		77.4			67.2			66.5			34.7	
Approach LOS		E			E			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	27.7	10.0	32.2	10.0	28.8	18.3	23.9				
Change Period (Y+Rc), s	5.1	* 5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	* 28	6.0	31.0	5.0	28.1	7.0	30.0				
Max Q Clear Time (g_c+10), s	19.4	19.4	8.0	23.7	8.0	11.3	13.1	15.3				
Green Ext Time (p_c), s	0.0	3.0	0.0	2.7	0.0	2.3	0.0	2.6				

Intersection Summary

HCM 6th Ctrl Delay	60.1
HCM 6th LOS	E

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

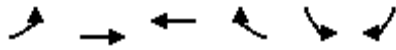
HCM 6th Signalized Intersection Summary  
 13: I-215 SB Ramps & University Avenue

UCR North District Transportation Study  
 Future (2025) Plus Buildout PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑					↖		↗
Traffic Volume (veh/h)	0	579	790	237	615	0	0	0	0	50	2	90
Future Volume (veh/h)	0	579	790	237	615	0	0	0	0	50	2	90
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	603	564	247	641	0				52	2	8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1211	1003	303	1603	0				112	0	97
Arrive On Green	0.00	0.65	0.65	0.34	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	1870	1549	1781	1870	0				1781	0	1540
Grp Volume(v), veh/h	0	603	564	247	641	0				52	0	8
Grp Sat Flow(s),veh/h/ln	0	1870	1549	1781	1870	0				1781	0	1540
Q Serve(g_s), s	0.0	16.8	20.2	12.7	0.0	0.0				2.8	0.0	0.5
Cycle Q Clear(g_c), s	0.0	16.8	20.2	12.7	0.0	0.0				2.8	0.0	0.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1211	1003	303	1603	0				112	0	97
V/C Ratio(X)	0.00	0.50	0.56	0.82	0.40	0.00				0.47	0.00	0.08
Avail Cap(c_a), veh/h	0	1211	1003	303	1603	0				525	0	454
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.58	0.58	0.77	0.77	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	9.8	31.6	0.0	0.0				45.2	0.0	44.2
Incr Delay (d2), s/veh	0.0	0.9	1.3	16.8	0.6	0.0				1.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.2	6.3	5.8	0.3	0.0				1.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.0	11.1	48.4	0.6	0.0				46.4	0.0	44.3
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		1167			888						60	
Approach Delay, s/veh		10.6			13.9						46.1	
Approach LOS		B			B						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	31.0	68.7		10.3		89.7						
Change Period (Y+Rc), s	4.5	5.7		5.5		5.7						
Max Green Setting (Gmax), s	10.5	39.8		28.0		60.8						
Max Q Clear Time (g_c+M), s	11.7	22.2		4.8		2.0						
Green Ext Time (p_c), s	0.1	3.1		0.1		1.5						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												13.0
HCM 6th LOS												B

HCM 6th Signalized Intersection Summary  
 14: University Avenue & I-215 NB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	190	399	592	446	137	230
Future Volume (veh/h)	190	399	592	446	137	230
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	438	651	401	151	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	1594	1258	1042	234	107
Arrive On Green	0.28	1.00	0.67	0.67	0.07	0.07
Sat Flow, veh/h	1781	1870	1870	1549	3456	1585
Grp Volume(v), veh/h	209	438	651	401	151	20
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1549	1728	1585
Q Serve(g_s), s	11.0	0.0	17.5	11.4	4.3	1.2
Cycle Q Clear(g_c), s	11.0	0.0	17.5	11.4	4.3	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	249	1594	1258	1042	234	107
V/C Ratio(X)	0.84	0.27	0.52	0.38	0.65	0.19
Avail Cap(c_a), veh/h	410	1594	1258	1042	726	333
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	8.2	7.2	45.5	44.0
Incr Delay (d2), s/veh	6.3	0.3	1.5	1.1	3.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.1	6.5	3.6	1.9	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.2	0.3	9.8	8.3	48.4	44.9
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		647	1052		171	
Approach Delay, s/veh		13.6	9.2		48.0	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.2		10.8	18.0	71.2
Change Period (Y+Rc), s		5.7		4.0	4.5	5.7
Max Green Setting (Gmax), s		69.3		21.0	22.5	42.3
Max Q Clear Time (g_c+I1), s		2.0		6.3	13.0	19.5
Green Ext Time (p_c), s		0.9		0.6	0.5	2.7
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			14.3			
HCM 6th LOS			B			

**Intersection**

Intersection Delay, s/veh 106.6

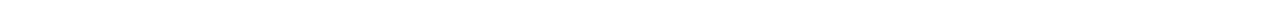
Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	150	30	190	80	45	40	80	407	40	100	512	45
Future Vol, veh/h	150	30	190	80	45	40	80	407	40	100	512	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	165	33	209	88	49	44	88	447	44	110	563	49
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	24.1	20.4	97	182.3
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	83%	0%	64%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	17%	0%	36%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	407	40	180	190	125	40	100	512	45
LT Vol	80	0	0	150	0	80	0	100	0	0
Through Vol	0	407	0	30	0	45	0	0	512	0
RT Vol	0	0	40	0	190	0	40	0	0	45
Lane Flow Rate	88	447	44	198	209	137	44	110	563	49
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.236	1.137	0.103	0.548	0.514	0.407	0.118	0.293	1.421	0.115
Departure Headway (Hd)	10.461	9.938	9.206	10.872	9.721	11.701	10.641	10.012	9.49	8.761
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	345	367	392	334	374	309	339	362	388	411
Service Time	8.161	7.638	6.906	8.572	7.421	9.401	8.341	7.712	7.19	6.461
HCM Lane V/C Ratio	0.255	1.218	0.112	0.593	0.559	0.443	0.13	0.304	1.451	0.119
HCM Control Delay	16.4	121.1	13	26	22.3	22.2	14.8	16.8	229.6	12.6
HCM Lane LOS	C	F	B	D	C	C	B	C	F	B
HCM 95th-tile Q	0.9	15.9	0.3	3.1	2.8	1.9	0.4	1.2	27.4	0.4

## Future Plus Buildout Mitigated Conditions



HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street

UCR North District Transportation Study  
Future Plus Buildout Mitigated - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘	↗	↗	↗↘	↗
Traffic Volume (veh/h)	100	403	70	183	429	290	190	820	261	200	410	70
Future Volume (veh/h)	100	403	70	183	429	290	190	820	261	200	410	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	491	74	223	523	264	232	1000	297	244	500	76
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	678	102	254	632	318	266	1191	518	276	1211	532
Arrive On Green	0.08	0.22	0.21	0.14	0.28	0.26	0.15	0.34	0.34	0.15	0.34	0.34
Sat Flow, veh/h	1781	3091	463	1781	2275	1144	1781	3554	1545	1781	3554	1561
Grp Volume(v), veh/h	122	281	284	223	408	379	232	1000	297	244	500	76
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1781	1777	1643	1781	1777	1545	1781	1777	1561
Q Serve(g_s), s	7.3	15.8	16.0	13.2	23.2	23.4	13.8	28.1	17.1	14.5	11.7	3.6
Cycle Q Clear(g_c), s	7.3	15.8	16.0	13.2	23.2	23.4	13.8	28.1	17.1	14.5	11.7	3.6
Prop In Lane	1.00		0.26	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	390	390	254	493	456	266	1191	518	276	1211	532
V/C Ratio(X)	0.81	0.72	0.73	0.88	0.83	0.83	0.87	0.84	0.57	0.88	0.41	0.14
Avail Cap(c_a), veh/h	215	609	609	314	708	654	462	1383	601	347	1211	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	39.1	39.3	45.4	36.6	37.1	44.9	33.2	29.5	44.7	27.3	24.7
Incr Delay (d2), s/veh	9.6	2.5	2.6	18.0	5.5	6.1	3.7	4.2	1.0	17.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	7.2	7.3	7.0	10.4	9.9	6.2	12.2	6.2	7.7	5.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	41.6	41.9	63.4	42.0	43.2	48.6	37.5	30.6	61.8	27.5	24.8
LnGrp LOS	E	D	D	E	D	D	D	D	C	E	C	C
Approach Vol, veh/h		687			1010			1529			820	
Approach Delay, s/veh		44.7			47.2			37.8			37.5	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.4	27.7	20.1	40.8	13.1	34.0	20.7	40.2				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	19.0	35.6	28.0	33.6	13.0	41.6	21.0	40.6				
Max Q Clear Time (g_c+I1), s	15.2	18.0	15.8	13.7	9.3	25.4	16.5	30.1				
Green Ext Time (p_c), s	0.2	2.3	0.4	2.7	0.1	3.0	0.2	4.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				41.3								
HCM 6th LOS				D								



HCM 6th Signalized Intersection Summary  
 3: 3rd Street & I-215 SB

UCR North District Transportation Study  
 Future Plus Buildout Mitigated - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↗	↘					↑	↗
Traffic Volume (veh/h)	0	744	170	240	612	0	0	0	0	587	0	450
Future Volume (veh/h)	0	744	170	240	612	0	0	0	0	587	0	450
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	886	182	286	729	0				699	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	991	828	2419	4442	0				588	0	
Arrive On Green	0.00	0.53	0.53	1.00	1.00	0.00				0.33	0.00	0.00
Sat Flow, veh/h	0	1870	1563	3456	3647	0				1781	0	1585
Grp Volume(v), veh/h	0	886	182	286	729	0				699	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1563	1728	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	42.3	6.2	0.0	0.0	0.0				33.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	42.3	6.2	0.0	0.0	0.0				33.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	991	828	2419	4442	0				588	0	
V/C Ratio(X)	0.00	0.89	0.22	0.12	0.16	0.00				1.19	0.00	
Avail Cap(c_a), veh/h	0	991	828	2419	4442	0				588	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.68	0.11	0.11	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	21.0	12.5	0.0	0.0	0.0				33.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.4	0.1	0.0	0.0	0.0				101.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.4	2.0	0.0	0.0	0.0				30.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.4	12.6	0.0	0.0	0.0				134.8	0.0	0.0
LnGrp LOS	A	C	B	A	A	A				F	A	
Approach Vol, veh/h		1068			1015						699	A
Approach Delay, s/veh		25.7			0.0						134.8	
Approach LOS		C			A						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	57.0		37.0		133.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	30.0	24.0		31.7		* 60						
Max Q Clear Time (g_c+I), s	12.0	44.3		35.0		2.0						
Green Ext Time (p_c), s	1.0	0.0		0.0		0.9						

Intersection Summary

HCM 6th Ctrl Delay	43.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Future Plus Buildout Mitigated - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↖	↑↑	↗	↖	↑↑	↗	↔↔	↑↑	↗
Traffic Volume (veh/h)	560	601	160	167	775	255	190	630	154	170	543	400
Future Volume (veh/h)	560	601	160	167	775	255	190	630	154	170	543	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	636	683	68	190	881	125	216	716	159	193	617	210
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	654	1243	546	248	1068	469	213	961	422	278	822	361
Arrive On Green	0.19	0.35	0.35	0.14	0.30	0.30	0.12	0.27	0.27	0.08	0.23	0.23
Sat Flow, veh/h	3456	3554	1561	1781	3554	1561	1781	3554	1560	3456	3554	1559
Grp Volume(v), veh/h	636	683	68	190	881	125	216	716	159	193	617	210
Grp Sat Flow(s),veh/h/ln	1728	1777	1561	1781	1777	1561	1781	1777	1560	1728	1777	1559
Q Serve(g_s), s	18.4	15.5	3.0	10.3	23.1	6.1	12.0	18.5	8.3	5.5	16.2	12.0
Cycle Q Clear(g_c), s	18.4	15.5	3.0	10.3	23.1	6.1	12.0	18.5	8.3	5.5	16.2	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	654	1243	546	248	1068	469	213	961	422	278	822	361
V/C Ratio(X)	0.97	0.55	0.12	0.77	0.82	0.27	1.01	0.75	0.38	0.69	0.75	0.58
Avail Cap(c_a), veh/h	654	1243	546	374	1281	563	213	1143	502	396	1126	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	26.3	22.2	41.6	32.7	26.7	44.2	33.5	29.7	45.0	35.9	34.3
Incr Delay (d2), s/veh	28.2	0.5	0.1	2.2	3.9	0.3	65.4	2.2	0.6	1.2	1.9	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	6.3	1.0	4.5	10.1	2.2	8.9	7.8	3.0	2.3	6.9	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.6	26.8	22.3	43.8	36.5	27.0	109.6	35.7	30.3	46.1	37.8	35.8
LnGrp LOS	E	C	C	D	D	C	F	D	C	D	D	D
Approach Vol, veh/h		1387			1196			1091			1020	
Approach Delay, s/veh		45.7			36.7			49.5			38.9	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	39.2	16.0	27.2	23.0	34.2	12.1	31.1				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	19.5	* 33	12.0	30.0	19.0	34.7	11.0	30.5				
Max Q Clear Time (g_c+M2), s	17.5	17.5	14.0	18.2	20.4	25.1	7.5	20.5				
Green Ext Time (p_c), s	0.2	3.1	0.0	3.0	0.0	3.4	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑	↗	↖	↑↑		↖	↑	↗	↖	↗	
Traffic Volume (veh/h)	50	560	235	173	664	20	73	50	104	10	90	50
Future Volume (veh/h)	50	560	235	173	664	20	73	50	104	10	90	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	57	644	217	199	763	20	84	57	71	11	103	29
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	906	394	178	1096	29	524	698	712	561	522	147
Arrive On Green	0.05	0.28	0.28	0.11	0.34	0.32	0.41	0.41	0.40	0.41	0.41	0.40
Sat Flow, veh/h	1603	3198	1389	1603	3182	83	1131	1683	1392	1134	1259	354
Grp Volume(v), veh/h	57	644	217	199	383	400	84	57	71	11	0	132
Grp Sat Flow(s),veh/h/ln	1603	1599	1389	1603	1599	1666	1131	1683	1392	1134	0	1613
Q Serve(g_s), s	2.2	11.4	8.3	7.0	13.0	13.0	3.2	1.3	1.7	0.4	0.0	3.3
Cycle Q Clear(g_c), s	2.2	11.4	8.3	7.0	13.0	13.0	6.5	1.3	1.7	1.7	0.0	3.3
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	80	906	394	178	551	574	524	698	712	561	0	669
V/C Ratio(X)	0.71	0.71	0.55	1.12	0.70	0.70	0.16	0.08	0.10	0.02	0.00	0.20
Avail Cap(c_a), veh/h	127	1266	550	178	684	712	524	698	712	561	0	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.4	20.2	19.2	28.0	17.8	17.8	13.8	11.2	8.0	11.7	0.0	11.8
Incr Delay (d2), s/veh	4.3	1.1	1.2	101.9	2.3	2.2	0.7	0.2	0.3	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.8	2.5	7.5	4.4	4.6	0.9	0.5	0.5	0.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	21.3	20.4	129.9	20.1	20.0	14.5	11.4	8.3	11.7	0.0	12.0
LnGrp LOS	C	C	C	F	C	C	B	B	A	B	A	B
Approach Vol, veh/h		918			982			212			143	
Approach Delay, s/veh		21.9			42.3			11.6			11.9	
Approach LOS		C			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.0	21.8		30.1	7.2	25.7		30.1				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	23.5			25.0	5.0	25.5		25.0				
Max Q Clear Time (g_c+1/3), s	13.4			5.3	4.2	15.0		8.5				
Green Ext Time (p_c), s	0.0	2.9		0.5	0.0	2.4		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				29.2								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St
























UCR North District Transportation Study  
 Future Plus Buildout Mitigated - AM



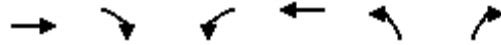
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	111	40	130	113	90	160	714	187	148	542	260
Future Volume (veh/h)	120	111	40	130	113	90	160	714	187	148	542	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	135	14	159	138	76	195	871	87	180	661	257
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	377	319	141	200	110	198	1204	537	225	885	344
Arrive On Green	0.10	0.20	0.20	0.08	0.18	0.15	0.11	0.34	0.34	0.13	0.35	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1134	624	1781	3554	1585	1781	2500	972
Grp Volume(v), veh/h	146	135	14	159	0	214	195	871	87	180	470	448
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1758	1781	1777	1585	1781	1777	1695
Q Serve(g_s), s	5.0	3.9	0.4	5.0	0.0	7.2	6.9	13.5	2.4	6.2	14.6	14.7
Cycle Q Clear(g_c), s	5.0	3.9	0.4	5.0	0.0	7.2	6.9	13.5	2.4	6.2	14.6	14.7
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	186	377	319	141	0	310	198	1204	537	225	629	600
V/C Ratio(X)	0.79	0.36	0.04	1.12	0.00	0.69	0.98	0.72	0.16	0.80	0.75	0.75
Avail Cap(c_a), veh/h	255	1051	891	141	0	876	198	1727	770	368	1033	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	21.7	20.3	29.0	0.0	24.6	27.9	18.2	14.6	26.7	17.9	18.4
Incr Delay (d2), s/veh	10.6	0.6	0.1	113.0	0.0	2.7	59.3	0.9	0.1	2.5	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.6	0.2	6.4	0.0	3.0	5.9	4.9	0.8	2.5	5.4	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	22.2	20.3	141.9	0.0	27.3	87.2	19.1	14.7	29.2	19.7	20.2
LnGrp LOS	D	C	C	F	A	C	F	B	B	C	B	C
Approach Vol, veh/h		295			373			1153			1098	
Approach Delay, s/veh		30.0			76.2			30.3			21.5	
Approach LOS		C			E			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	25.3	9.0	16.7	11.0	26.3	10.6	15.1				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	13.0	28.8	5.0	34.0	7.0	34.8	9.0	30.0				
Max Q Clear Time (g_c+1/2), s	19.2	15.5	7.0	5.9	8.9	16.7	7.0	9.2				
Green Ext Time (p_c), s	0.1	3.8	0.0	0.5	0.0	3.8	0.1	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											32.8	
HCM 6th LOS											C	

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Future Plus Buildout Mitigated - AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	93	90	140	80	63	80	146	221	135	240	83
Future Volume (vph)	53	93	90	140	80	63	80	146	221	135	240	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1740		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1740		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	68	119	115	179	103	81	103	187	283	173	308	106
RTOR Reduction (vph)	0	0	96	0	44	0	0	0	216	0	0	74
Lane Group Flow (vph)	68	119	19	179	140	0	103	187	67	173	308	32
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7		4
Permitted Phases			2						8			4
Actuated Green, G (s)	2.8	7.3	7.3	6.5	11.0		4.5	10.5	10.5	7.7	14.5	14.5
Effective Green, g (s)	2.8	8.4	8.4	6.5	12.1		4.5	11.9	11.9	7.7	15.1	15.1
Actuated g/C Ratio	0.06	0.17	0.17	0.13	0.24		0.09	0.24	0.24	0.15	0.30	0.30
Clearance Time (s)	4.0	5.1	5.1	4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	98	309	263	227	416		157	439	373	269	557	473
v/s Ratio Prot	0.04	0.06		c0.10	c0.08		0.06	0.10		c0.10	c0.17	
v/s Ratio Perm			0.01						0.04			0.02
v/c Ratio	0.69	0.39	0.07	0.79	0.34		0.66	0.43	0.18	0.64	0.55	0.07
Uniform Delay, d1	23.4	18.7	17.8	21.3	15.9		22.3	16.4	15.4	20.1	14.9	12.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.8	0.8	0.1	15.3	0.5		7.3	0.7	0.2	3.9	1.2	0.1
Delay (s)	39.2	19.6	17.9	36.6	16.4		29.6	17.1	15.6	24.0	16.1	12.7
Level of Service	D	B	B	D	B		C	B	B	C	B	B
Approach Delay (s)		23.3			26.4			18.6			17.8	
Approach LOS		C			C			B			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.7			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			50.5			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			43.0%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis  
 11: Aberdeen Dr & Linden St



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (vph)	183	170	40	123	100	40
Future Volume (vph)	183	170	40	123	100	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.93			1.00	0.96	
Flt Protected	1.00			0.99	0.97	
Satd. Flow (prot)	1741			1840	1729	
Flt Permitted	1.00			0.83	0.97	
Satd. Flow (perm)	1741			1553	1729	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	220	205	48	148	120	48
RTOR Reduction (vph)	60	0	0	0	26	0
Lane Group Flow (vph)	365	0	0	196	142	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	4			8	5	
Permitted Phases			8			
Actuated Green, G (s)	12.4			12.4	5.7	
Effective Green, g (s)	12.4			12.4	5.7	
Actuated g/C Ratio	0.34			0.34	0.16	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	599			534	273	
v/s Ratio Prot	c0.21				c0.08	
v/s Ratio Perm				0.13		
v/c Ratio	0.61			0.37	0.52	
Uniform Delay, d1	9.8			8.9	13.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	1.8			0.4	1.7	
Delay (s)	11.6			9.3	15.6	
Level of Service	B			A	B	
Approach Delay (s)	11.6			9.3	15.6	
Approach LOS	B			A	B	

Intersection Summary

HCM 2000 Control Delay	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	36.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue























UCR North District Transportation Study  
 Future Plus Buildout Mitigated - AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖
Traffic Volume (veh/h)	188	295	60	100	370	150	90	722	185	125	357	160
Future Volume (veh/h)	188	295	60	100	370	150	90	722	185	125	357	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	198	311	23	105	389	39	95	760	89	132	376	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	784	650	135	683	299	378	1143	497	169	725	318
Arrive On Green	0.10	0.22	0.20	0.08	0.19	0.19	0.21	0.32	0.32	0.09	0.20	0.20
Sat Flow, veh/h	3456	3554	1558	1781	3554	1558	1781	3554	1545	1781	3554	1558
Grp Volume(v), veh/h	198	311	23	105	389	39	95	760	89	132	376	107
Grp Sat Flow(s),veh/h/ln	1728	1777	1558	1781	1777	1558	1781	1777	1545	1781	1777	1558
Q Serve(g_s), s	3.0	4.2	0.1	3.2	5.5	0.8	2.5	10.3	1.3	4.0	5.2	2.0
Cycle Q Clear(g_c), s	3.0	4.2	0.1	3.2	5.5	0.8	2.5	10.3	1.3	4.0	5.2	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	784	650	135	683	299	378	1143	497	169	725	318
V/C Ratio(X)	0.55	0.40	0.04	0.78	0.57	0.13	0.25	0.66	0.18	0.78	0.52	0.34
Avail Cap(c_a), veh/h	372	1799	1095	192	1799	789	378	2029	882	256	2093	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	18.5	2.8	25.3	20.4	8.0	18.2	16.3	4.6	24.6	19.7	7.0
Incr Delay (d2), s/veh	0.8	0.3	0.0	7.4	0.8	0.2	0.1	0.7	0.2	4.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.6	0.0	1.5	2.1	0.4	0.9	3.5	0.7	1.7	1.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	18.9	2.8	32.7	21.2	8.2	18.4	17.0	4.8	28.6	20.3	7.6
LnGrp LOS	C	B	A	C	C	A	B	B	A	C	C	A
Approach Vol, veh/h		532			533			944			615	
Approach Delay, s/veh		20.3			22.5			16.0			19.9	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	16.3	15.8	15.4	9.8	14.7	9.3	21.9				
Change Period (Y+Rc), s	4.0	5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	30.0	27.1	7.0	31.0	5.0	27.1	8.0	30.0				
Max Q Clear Time (g_c+1), s	12.3	6.2	4.5	7.2	5.0	7.5	6.0	12.3				
Green Ext Time (p_c), s	3.6	0.0	1.4	2.0	0.0	1.8	0.0	3.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					19.1							
HCM 6th LOS					B							

HCM 6th Signalized Intersection Summary  
2: Chicago Avenue & 3rd Street

UCR North District Transportation Study  
Future (2025) Plus Buildout Mitigated - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	744	150	216	355	130	120	690	208	310	990	110
Future Volume (veh/h)	110	744	150	216	355	130	120	690	208	310	990	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	800	146	232	382	108	129	742	202	333	1065	110
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	889	162	237	953	266	142	857	376	332	1235	543
Arrive On Green	0.08	0.30	0.28	0.13	0.35	0.34	0.08	0.24	0.24	0.19	0.35	0.35
Sat Flow, veh/h	1781	2993	546	1781	2733	763	1781	3554	1559	1781	3554	1561
Grp Volume(v), veh/h	118	475	471	232	247	243	129	742	202	333	1065	110
Grp Sat Flow(s),veh/h/ln	1781	1777	1762	1781	1777	1719	1781	1777	1559	1781	1777	1561
Q Serve(g_s), s	7.3	28.9	28.9	14.6	11.8	12.2	8.1	22.5	12.7	21.0	31.4	5.6
Cycle Q Clear(g_c), s	7.3	28.9	28.9	14.6	11.8	12.2	8.1	22.5	12.7	21.0	31.4	5.6
Prop In Lane	1.00		0.31	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	528	523	237	619	599	142	857	376	332	1235	543
V/C Ratio(X)	0.81	0.90	0.90	0.98	0.40	0.41	0.91	0.87	0.54	1.00	0.86	0.20
Avail Cap(c_a), veh/h	237	546	542	237	619	599	142	897	393	332	1276	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	38.0	38.2	48.6	27.7	28.1	51.4	41.0	37.2	45.8	34.2	25.8
Incr Delay (d2), s/veh	4.1	17.6	17.7	51.6	0.4	0.4	47.4	8.7	1.3	49.8	6.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	15.1	15.0	9.7	4.9	4.9	5.4	10.6	4.9	13.9	14.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	55.6	55.9	100.2	28.1	28.5	98.7	49.6	38.6	95.6	40.3	25.9
LnGrp LOS	D	E	E	F	C	C	F	D	D	F	D	C
Approach Vol, veh/h		1064			722			1073			1508	
Approach Delay, s/veh		55.6			51.4			53.5			51.5	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	37.4	13.0	43.1	13.2	43.2	25.0	31.1				
Change Period (Y+Rc), s	4.0	5.4	4.0	5.4	4.0	5.4	4.0	5.4				
Max Green Setting (Gmax), s	15.0	33.2	9.0	39.0	15.0	33.2	21.0	27.0				
Max Q Clear Time (g_c+I1), s	16.6	30.9	10.1	33.4	9.3	14.2	23.0	24.5				
Green Ext Time (p_c), s	0.0	1.1	0.0	2.9	0.1	1.8	0.0	1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				53.0								
HCM 6th LOS				D								



HCM 6th Signalized Intersection Summary  
 3: 3rd St & I-215 SB

UCR North District Transportation Study  
 Future (2025) Plus Buildout Mitigated - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖↗	↑↑						↑	↖↗
Traffic Volume (veh/h)	0	682	650	470	631	0	0	0	0	567	19	150
Future Volume (veh/h)	0	682	650	470	631	0	0	0	0	567	19	150
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	703	274	485	651	0				585	20	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1242	484	4034	6041	0				460	16	
Arrive On Green	0.00	0.50	0.48	0.39	0.56	0.00				0.27	0.27	0.00
Sat Flow, veh/h	0	2581	969	3456	3647	0				1725	59	1585
Grp Volume(v), veh/h	0	502	475	485	651	0				605	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1679	1728	1777	0				1784	0	1585
Q Serve(g_s), s	0.0	11.8	12.0	0.0	0.0	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.8	12.0	0.0	0.0	0.0				16.0	0.0	0.0
Prop In Lane	0.00		0.58	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	887	838	4034	6041	0				476	0	
V/C Ratio(X)	0.00	0.57	0.57	0.12	0.11	0.00				1.27	0.00	
Avail Cap(c_a), veh/h	0	887	838	4034	6041	0				476	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.38	0.38	0.10	0.10	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.5	10.7	0.0	0.0	0.0				22.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	1.1	0.0	0.0	0.0				137.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	3.7	0.0	0.0	0.0				24.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.5	11.8	0.0	0.0	0.0				159.9	0.0	0.0
LnGrp LOS		A	B	A	A	A				F	A	
Approach Vol, veh/h		977		1136						605		A
Approach Delay, s/veh		11.6		0.0						159.9		
Approach LOS		B		A						F		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	34.0		20.0		110.0						
Change Period (Y+Rc), s	4.0	5.0		5.3		* 5						
Max Green Setting (Gmax), s	24.0			14.7		* 37						
Max Q Clear Time (g_c+1/2), s	14.0			18.0		2.0						
Green Ext Time (p_c), s	0.8	3.6		0.0		0.8						

Intersection Summary

HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
5: Iowa Avenue & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout Mitigated - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↖	↑↑	↗	↖	↑↑	↗	↔↔	↑↑	↗
Traffic Volume (veh/h)	370	569	160	165	807	295	250	587	246	344	801	570
Future Volume (veh/h)	370	569	160	165	807	295	250	587	246	344	801	570
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	381	587	46	170	832	90	258	605	222	355	826	432
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	959	421	206	1037	456	224	1128	496	443	1136	499
Arrive On Green	0.09	0.27	0.27	0.12	0.29	0.29	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	3456	3554	1560	1781	3554	1560	1781	3554	1561	3456	3554	1561
Grp Volume(v), veh/h	381	587	46	170	832	90	258	605	222	355	826	432
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1560	1781	1777	1561	1728	1777	1561
Q Serve(g_s), s	9.0	13.8	2.1	8.9	20.6	4.1	12.0	13.3	10.8	9.5	19.6	24.8
Cycle Q Clear(g_c), s	9.0	13.8	2.1	8.9	20.6	4.1	12.0	13.3	10.8	9.5	19.6	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	959	421	206	1037	456	224	1128	496	443	1136	499
V/C Ratio(X)	1.17	0.61	0.11	0.83	0.80	0.20	1.15	0.54	0.45	0.80	0.73	0.87
Avail Cap(c_a), veh/h	326	1276	560	206	1350	593	224	1128	496	504	1186	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	30.4	26.2	41.2	31.2	25.3	41.6	26.7	25.9	40.4	28.7	30.5
Incr Delay (d2), s/veh	103.3	0.6	0.1	22.1	2.7	0.2	106.5	0.5	0.6	6.9	2.2	13.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	5.7	0.8	5.0	8.8	1.5	11.7	5.4	3.8	4.3	8.1	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	146.4	31.1	26.3	63.4	33.9	25.6	148.1	27.2	26.5	47.3	30.9	44.3
LnGrp LOS	F	C	C	E	C	C	F	C	C	D	C	D
Approach Vol, veh/h		1014			1092			1085			1613	
Approach Delay, s/veh		74.2			37.8			55.8			38.1	
Approach LOS		E			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	29.8	16.0	34.5	13.0	31.8	16.2	34.3				
Change Period (Y+Rc), s	5.5	* 5.5	4.0	5.8	4.0	5.5	4.5	5.8				
Max Green Setting (Gmax), s	5	* 33	12.0	30.0	9.0	34.7	13.4	28.1				
Max Q Clear Time (g_c+M), s	15.8	15.8	14.0	26.8	11.0	22.6	11.5	15.3				
Green Ext Time (p_c), s	0.0	2.6	0.0	1.8	0.0	3.5	0.2	3.1				

Intersection Summary

HCM 6th Ctrl Delay	49.7
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
7: Canyon Crest Dr & Blaine St

UCR North District Transportation Study  
Future (2025) Plus Buildout Mitigated - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	714	204	203	785	20	232	90	186	20	110	60
Future Volume (veh/h)	40	714	204	203	785	20	232	90	186	20	110	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	43	760	197	216	835	19	247	96	165	21	117	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	998	434	256	1374	31	418	575	679	415	436	116
Arrive On Green	0.04	0.31	0.31	0.16	0.43	0.41	0.34	0.34	0.32	0.34	0.34	0.32
Sat Flow, veh/h	1603	3198	1390	1603	3195	73	1114	1683	1390	1005	1278	339
Grp Volume(v), veh/h	43	760	197	216	418	436	247	96	165	21	0	148
Grp Sat Flow(s),veh/h/ln	1603	1599	1390	1603	1599	1668	1114	1683	1390	1005	0	1616
Q Serve(g_s), s	1.7	13.8	7.3	8.4	13.0	13.0	13.3	2.6	4.5	1.0	0.0	4.3
Cycle Q Clear(g_c), s	1.7	13.8	7.3	8.4	13.0	13.0	17.6	2.6	4.5	3.5	0.0	4.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	67	998	434	256	688	718	418	575	679	415	0	552
V/C Ratio(X)	0.64	0.76	0.45	0.84	0.61	0.61	0.59	0.17	0.24	0.05	0.00	0.27
Avail Cap(c_a), veh/h	150	1238	538	299	768	801	490	683	768	480	0	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	20.0	17.7	26.2	14.1	14.2	21.7	14.8	9.7	16.0	0.0	15.4
Incr Delay (d2), s/veh	3.8	2.2	0.7	15.3	1.1	1.1	1.4	0.1	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.8	2.1	4.0	4.1	4.3	3.4	0.9	1.3	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	22.2	18.5	41.5	15.3	15.3	23.1	14.9	9.9	16.1	0.0	15.7
LnGrp LOS	C	C	B	D	B	B	C	B	A	B	A	B
Approach Vol, veh/h		1000			1070			508			169	
Approach Delay, s/veh		22.0			20.6			17.3			15.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	24.1		26.0	6.7	31.7		26.0				
Change Period (Y+Rc), s	4.0	5.4		5.1	4.0	5.4		5.1				
Max Green Setting (Gmax), s	12.0	23.5		25.0	6.0	29.5		25.0				
Max Q Clear Time (g_c+10), s	11.0	15.8		6.3	3.7	15.0		19.6				
Green Ext Time (p_c), s	0.1	2.8		0.6	0.0	3.1		1.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											20.2	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
 9: Iowa Avenue & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Buildout Mitigated - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	149	110	274	116	107	60	856	213	131	1015	110
Future Volume (veh/h)	110	149	110	274	116	107	60	856	213	131	1015	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	155	28	285	121	66	62	892	80	136	1057	107
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	246	209	333	267	145	88	1285	573	172	1331	135
Arrive On Green	0.08	0.13	0.13	0.19	0.23	0.21	0.05	0.36	0.36	0.10	0.41	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1138	621	1781	3554	1585	1781	3258	330
Grp Volume(v), veh/h	115	155	28	285	0	187	62	892	80	136	576	588
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1759	1781	1777	1585	1781	1777	1811
Q Serve(g_s), s	4.5	5.6	1.1	11.1	0.0	6.6	2.5	15.3	2.4	5.3	20.3	20.4
Cycle Q Clear(g_c), s	4.5	5.6	1.1	11.1	0.0	6.6	2.5	15.3	2.4	5.3	20.3	20.4
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	150	246	209	333	0	412	88	1285	573	172	726	740
V/C Ratio(X)	0.77	0.63	0.13	0.86	0.00	0.45	0.70	0.69	0.14	0.79	0.79	0.79
Avail Cap(c_a), veh/h	373	924	783	497	0	992	124	1915	854	249	1081	1102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	29.5	27.5	28.2	0.0	23.7	33.5	19.5	15.4	31.7	18.5	18.7
Incr Delay (d2), s/veh	7.9	2.6	0.3	6.3	0.0	0.8	3.8	0.7	0.1	6.2	2.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.5	0.4	4.9	0.0	2.6	1.1	5.7	0.8	2.4	7.7	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	32.1	27.8	34.4	0.0	24.5	37.3	20.2	15.5	37.9	21.0	21.2
LnGrp LOS	D	C	C	C	A	C	D	C	B	D	C	C
Approach Vol, veh/h		298			472			1034			1300	
Approach Delay, s/veh		34.7			30.5			20.8			22.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	29.9	17.4	13.4	7.5	33.3	10.0	20.8				
Change Period (Y+Rc), s	4.0	5.8	4.0	5.4	4.0	5.8	4.0	5.4				
Max Green Setting (Gmax), s	10.0	36.8	20.0	34.0	5.0	41.8	15.0	39.0				
Max Q Clear Time (g_c+1), s	10.0	17.3	13.1	7.6	4.5	22.4	6.5	8.6				
Green Ext Time (p_c), s	0.1	4.5	0.4	0.6	0.0	5.0	0.2	0.7				

Intersection Summary
























HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM Signalized Intersection Capacity Analysis  
 10: Canyon Crest Dr & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Buildout Mitigated - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	176	120	439	198	212	85	234	282	184	344	59
Future Volume (vph)	67	176	120	439	198	212	85	234	282	184	344	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1718		1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1718		1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	74	193	132	482	218	233	93	257	310	202	378	65
RTOR Reduction (vph)	0	0	111	0	33	0	0	0	212	0	0	49
Lane Group Flow (vph)	74	193	21	482	418	0	93	257	98	202	378	16
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7		4
Permitted Phases			2						8			4
Actuated Green, G (s)	5.0	9.9	9.9	21.0	25.9		5.0	11.6	11.6	9.0	16.4	16.4
Effective Green, g (s)	5.0	11.0	11.0	21.0	27.0		5.0	13.0	13.0	9.0	17.0	17.0
Actuated g/C Ratio	0.07	0.16	0.16	0.30	0.39		0.07	0.19	0.19	0.13	0.24	0.24
Clearance Time (s)	4.0	5.1	5.1	4.0	5.1		4.0	5.4	5.4	4.0	4.6	4.6
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	126	292	248	531	662		126	345	293	227	452	384
v/s Ratio Prot	0.04	0.10		c0.27	c0.24		0.05	0.14		c0.11	c0.20	
v/s Ratio Perm			0.01						0.06			0.01
v/c Ratio	0.59	0.66	0.08	0.91	0.63		0.74	0.74	0.34	0.89	0.84	0.04
Uniform Delay, d1	31.5	27.7	25.2	23.6	17.5		31.9	26.9	24.7	30.0	25.2	20.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.4	5.5	0.1	18.8	2.0		17.5	8.5	0.7	30.9	12.6	0.0
Delay (s)	35.9	33.3	25.3	42.4	19.4		49.4	35.4	25.4	60.9	37.8	20.3
Level of Service	D	C	C	D	B		D	D	C	E	D	C
Approach Delay (s)		31.1			31.3			32.7			43.3	
Approach LOS		C			C			C			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			34.6			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			70.0			Sum of lost time (s)			18.0			
Intersection Capacity Utilization			69.7%			ICU Level of Service			C			
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 11: Aberdeen Dr & Linden St

UCR North District Transportation Study  
 Future (2025) Plus Buildout Mitigated - PM



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↕	↕	
Traffic Volume (vph)	322	230	40	334	255	50
Future Volume (vph)	322	230	40	334	255	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.94			1.00	0.98	
Flt Protected	1.00			0.99	0.96	
Satd. Flow (prot)	1758			1853	1749	
Flt Permitted	1.00			0.76	0.96	
Satd. Flow (perm)	1758			1416	1749	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	374	267	47	388	297	58
RTOR Reduction (vph)	30	0	0	0	8	0
Lane Group Flow (vph)	611	0	0	435	347	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	4			8	5	
Permitted Phases			8			
Actuated Green, G (s)	30.2			30.2	16.6	
Effective Green, g (s)	30.2			30.2	16.6	
Actuated g/C Ratio	0.47			0.47	0.26	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	824			664	450	
v/s Ratio Prot	c0.35				c0.20	
v/s Ratio Perm				0.31		
v/c Ratio	0.74			0.66	0.77	
Uniform Delay, d1	13.9			13.1	22.1	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	3.6			2.3	8.0	
Delay (s)	17.6			15.4	30.1	
Level of Service	B			B	C	
Approach Delay (s)	17.6			15.4	30.1	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary  
 12: Iowa Avenue & University Avenue

UCR North District Transportation Study  
 Future (2025) Plus Buildout Mitigated - PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖	↖	↑↑	↖
Traffic Volume (veh/h)	321	779	150	160	475	120	160	597	120	240	732	257
Future Volume (veh/h)	321	779	150	160	475	120	160	597	120	240	732	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	341	829	99	170	505	39	170	635	27	255	779	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	1085	584	123	1090	479	148	906	393	240	1090	479
Arrive On Green	0.08	0.31	0.29	0.07	0.31	0.31	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	3456	3554	1560	1781	3554	1561	1781	3554	1543	1781	3554	1561
Grp Volume(v), veh/h	341	829	99	170	505	39	170	635	27	255	779	234
Grp Sat Flow(s),veh/h/ln	1728	1777	1560	1781	1777	1561	1781	1777	1543	1781	1777	1561
Q Serve(g_s), s	6.0	15.3	0.0	5.0	8.3	0.8	6.0	11.7	1.0	9.7	14.1	5.8
Cycle Q Clear(g_c), s	6.0	15.3	0.0	5.0	8.3	0.8	6.0	11.7	1.0	9.7	14.1	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	1085	584	123	1090	479	148	906	393	240	1090	479
V/C Ratio(X)	1.19	0.76	0.17	1.38	0.46	0.08	1.15	0.70	0.07	1.06	0.71	0.49
Avail Cap(c_a), veh/h	286	1482	758	123	1433	629	148	1560	677	240	1609	707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	22.8	15.2	33.7	20.3	6.5	33.2	24.5	20.5	31.3	22.3	8.6
Incr Delay (d2), s/veh	115.2	1.6	0.1	214.5	0.3	0.1	120.8	1.0	0.1	76.1	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	6.1	1.0	9.4	3.2	0.4	7.3	4.5	0.3	8.9	5.3	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	148.5	24.4	15.3	248.2	20.6	6.6	154.0	25.5	20.5	107.5	23.2	9.4
LnGrp LOS	F	C	B	F	C	A	F	C	C	F	C	A
Approach Vol, veh/h		1269			714			832			1268	
Approach Delay, s/veh		57.0			74.0			51.6			37.6	
Approach LOS		E			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	26.1	10.0	26.2	10.0	26.2	13.7	22.5				
Change Period (Y+Rc), s	5.1	* 5.1	4.0	5.8	5.0	5.1	4.0	5.8				
Max Green Setting (Gmax), s	5.0	* 29	6.0	31.0	5.0	28.1	7.0	30.0				
Max Q Clear Time (g_c+1T), s	17.3	17.3	8.0	16.1	8.0	10.3	11.7	13.7				
Green Ext Time (p_c), s	0.0	3.6	0.0	4.1	0.0	2.3	0.0	2.7				

Intersection Summary

HCM 6th Ctrl Delay	52.9
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

**Intersection**

Intersection Delay, s/veh 106.6  
 Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	150	30	190	80	45	40	80	407	40	100	512	45
Future Vol, veh/h	150	30	190	80	45	40	80	407	40	100	512	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	165	33	209	88	49	44	88	447	44	110	563	49
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay	24.1	20.4	97	182.3
HCM LOS	C	C	F	F

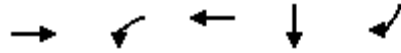
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	83%	0%	64%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	17%	0%	36%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	407	40	180	190	125	40	100	512	45
LT Vol	80	0	0	150	0	80	0	100	0	0
Through Vol	0	407	0	30	0	45	0	0	512	0
RT Vol	0	0	40	0	190	0	40	0	0	45
Lane Flow Rate	88	447	44	198	209	137	44	110	563	49
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.236	1.137	0.103	0.548	0.514	0.407	0.118	0.293	1.421	0.115
Departure Headway (Hd)	10.461	9.938	9.206	10.872	9.721	11.701	10.641	10.012	9.49	8.761
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	345	367	392	334	374	309	339	362	388	411
Service Time	8.161	7.638	6.906	8.572	7.421	9.401	8.341	7.712	7.19	6.461
HCM Lane V/C Ratio	0.255	1.218	0.112	0.593	0.559	0.443	0.13	0.304	1.451	0.119
HCM Control Delay	16.4	121.1	13	26	22.3	22.2	14.8	16.8	229.6	12.6
HCM Lane LOS	C	F	B	D	C	C	B	C	F	B
HCM 95th-tile Q	0.9	15.9	0.3	3.1	2.8	1.9	0.4	1.2	27.4	0.4



# Queuing Analysis



Queues  
3: Blaine St & I-215 SB

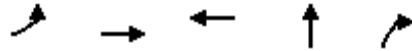


Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	970	226	560	589	523
v/c Ratio	1.11	0.21	0.26	1.04	0.73
Control Delay	98.9	26.2	6.6	82.4	17.9
Queue Delay	0.9	0.0	0.7	24.2	0.0
Total Delay	99.8	26.2	7.3	106.6	17.9
Queue Length 50th (ft)	~366	58	80	~407	110
Queue Length 95th (ft)	#440	66	60	#550	199
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	877	1064	2123	568	717
Starvation Cap Reductn	0	0	1168	0	0
Spillback Cap Reductn	122	0	0	90	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.28	0.21	0.59	1.23	0.73

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	322	977	1484	191	324
v/c Ratio	0.73	0.37	0.71	0.62	0.80
Control Delay	36.8	9.1	11.9	46.4	33.7
Queue Delay	0.0	35.6	0.0	0.0	0.0
Total Delay	36.8	44.7	11.9	46.4	33.7
Queue Length 50th (ft)	97	199	207	114	99
Queue Length 95th (ft)	m93	m212	316	164	175
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	480	2642	2081	425	498
Starvation Cap Reductn	0	1722	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	1.06	0.71	0.45	0.65

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
13: I-215 SB Ramps & University Avenue



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	432	257	60	303	373	228
v/c Ratio	0.49	0.30	0.31	0.26	0.75	0.38
Control Delay	20.1	3.4	41.4	9.2	38.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	3.4	41.4	9.2	38.9	5.0
Queue Length 50th (ft)	161	0	32	69	193	1
Queue Length 95th (ft)	291	47	70	140	257	46
Internal Link Dist (ft)	1158			340		1158
Turn Bay Length (ft)		200	145		350	
Base Capacity (vph)	885	868	196	1175	688	745
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.31	0.26	0.54	0.31

Intersection Summary

Queues  
 14: University Avenue & I-215 NB Ramps

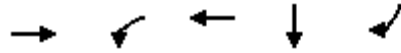


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	256	476	176	286	55	235
v/c Ratio	0.88	0.33	0.17	0.30	0.17	0.65
Control Delay	62.4	3.4	9.0	2.4	29.6	13.7
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	62.4	3.9	9.0	2.4	29.6	13.7
Queue Length 50th (ft)	113	39	33	0	11	0
Queue Length 95th (ft)	#239	105	75	37	25	57
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	290	1451	1042	960	715	506
Starvation Cap Reductn	0	557	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.53	0.17	0.30	0.08	0.46

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues  
3: Blaine St & I-215 SB



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1183	329	423	364	136
v/c Ratio	0.70	0.72	0.19	0.82	0.28
Control Delay	9.8	32.8	2.9	39.2	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.8	32.8	2.9	39.2	5.7
Queue Length 50th (ft)	83	54	16	124	0
Queue Length 95th (ft)	149	m#105	14	#252	36
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	1680	457	2182	444	491
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.72	0.19	0.82	0.28

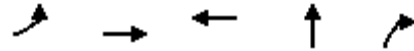
Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St

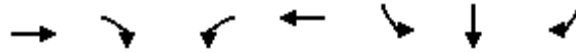


Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	215	676	1267	155	312
v/c Ratio	0.64	0.28	0.66	0.47	0.61
Control Delay	37.2	5.3	7.6	26.2	10.4
Queue Delay	0.0	0.6	0.0	0.0	0.0
Total Delay	37.2	5.8	7.6	26.2	10.4
Queue Length 50th (ft)	42	46	72	51	13
Queue Length 95th (ft)	m57	m82	152	94	70
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	343	2406	1921	413	570
Starvation Cap Reductn	0	1245	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.58	0.66	0.38	0.55

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
13: I-215 SB Ramps & University Avenue

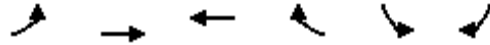


Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	476	722	158	502	49	2	92
v/c Ratio	0.48	0.62	0.58	0.36	0.13	no cap	0.23
Control Delay	20.5	4.3	48.5	8.2	28.6		7.2
Queue Delay	0.0	0.0	0.0	0.5	0.0		0.0
Total Delay	20.5	4.3	48.5	8.8	28.6	Error	7.2
Queue Length 50th (ft)	232	0	95	151	23	0	0
Queue Length 95th (ft)	338	72	162	220	50	0	36
Internal Link Dist (ft)	1158			340		1158	
Turn Bay Length (ft)		200	145		350		350
Base Capacity (vph)	988	1157	274	1385	523	1	526
Starvation Cap Reductn	0	0	0	485	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.62	0.58	0.56	0.09	2.00	0.17

Intersection Summary



Queues  
 14: University Avenue & I-215 NB Ramps

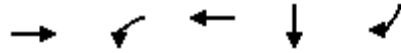


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	184	359	480	323	81	218
v/c Ratio	0.78	0.26	0.49	0.34	0.23	0.62
Control Delay	50.1	3.1	11.4	2.5	25.9	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	3.1	11.4	2.5	25.9	12.8
Queue Length 50th (ft)	65	27	99	0	14	0
Queue Length 95th (ft)	#156	57	180	35	30	52
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	241	1412	1007	949	377	361
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.25	0.48	0.34	0.21	0.60

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues  
3: Blaine St & I-215 SB

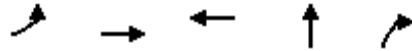


Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1023	286	655	679	536
v/c Ratio	1.17	0.27	0.31	1.20	0.81
Control Delay	121.4	33.6	12.3	138.2	27.4
Queue Delay	0.0	0.0	2.3	0.5	0.0
Total Delay	121.4	33.6	14.6	138.7	27.4
Queue Length 50th (ft)	~404	87	116	~528	168
Queue Length 95th (ft)	#477	m103	m138	#671	267
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	877	1064	2123	566	659
Starvation Cap Reductn	0	0	1296	0	0
Spillback Cap Reductn	2	0	0	33	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.17	0.27	0.79	1.27	0.81

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	368	1080	1644	287	506
v/c Ratio	0.88	0.49	0.99dr	0.55	0.98
Control Delay	47.0	12.8	28.0	34.2	63.3
Queue Delay	0.0	36.1	0.0	0.0	0.0
Total Delay	47.0	48.9	28.0	34.2	63.3
Queue Length 50th (ft)	131	182	375	152	261
Queue Length 95th (ft)	m111	m154	#485	226	#444
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	418	2208	1763	529	524
Starvation Cap Reductn	0	1194	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.88	1.07	0.93	0.54	0.97

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Queues  
13: I-215 SB Ramps & University Avenue



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	495	290	65	398	527	226
v/c Ratio	0.66	0.37	0.37	0.39	0.81	0.33
Control Delay	29.5	4.3	39.6	12.3	35.9	3.8
Queue Delay	0.0	0.0	0.0	0.4	0.4	0.0
Total Delay	29.5	4.3	39.6	12.7	36.3	3.8
Queue Length 50th (ft)	228	0	36	135	263	0
Queue Length 95th (ft)	#422	54	m54	242	345	40
Internal Link Dist (ft)	1158			340		
Turn Bay Length (ft)		200	145		350	350
Base Capacity (vph)	746	791	177	1015	786	796
Starvation Cap Reductn	0	0	0	252	0	0
Spillback Cap Reductn	0	0	0	0	47	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.37	0.37	0.52	0.71	0.28

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

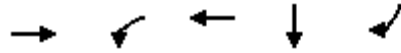
m Volume for 95th percentile queue is metered by upstream signal.

Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	305	695	189	368	63	263
v/c Ratio	0.74	0.46	0.19	0.38	0.19	0.69
Control Delay	40.1	5.3	13.3	3.2	37.4	14.7
Queue Delay	0.0	1.2	0.0	0.0	0.0	0.0
Total Delay	40.1	6.5	13.3	3.2	37.4	14.7
Queue Length 50th (ft)	156	85	50	0	17	0
Queue Length 95th (ft)	213	320	117	54	34	67
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	531	1520	1005	980	648	503
Starvation Cap Reductn	0	570	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.73	0.19	0.38	0.10	0.52
<b>Intersection Summary</b>						

Queues  
3: Blaine St & I-215 SB

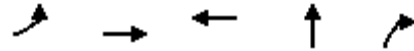


Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1247	485	485	526	155
v/c Ratio	0.74	1.06	0.22	1.19	0.31
Control Delay	10.4	79.9	2.6	131.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	79.9	2.6	131.6	5.7
Queue Length 50th (ft)	91	-98	11	~237	0
Queue Length 95th (ft)	162	m#145	m16	#401	38
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	1694	457	2182	442	505
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.74	1.06	0.22	1.19	0.31

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	247	866	1608	206	412
v/c Ratio	0.72	0.38	0.85	0.54	0.92
Control Delay	38.2	5.1	14.5	26.1	41.8
Queue Delay	0.0	1.3	0.0	0.0	0.0
Total Delay	38.2	6.5	14.5	26.1	41.8
Queue Length 50th (ft)	47	57	158	65	80
Queue Length 95th (ft)	m54	m73	#331	121	#231
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	343	2295	1883	411	471
Starvation Cap Reductn	0	1154	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.72	0.76	0.85	0.50	0.87

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
13: I-215 SB Ramps & University Avenue



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	542	823	177	573	104	94
v/c Ratio	0.49	0.67	0.59	0.38	0.50	0.39
Control Delay	14.3	4.2	54.4	2.5	48.9	13.3
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	14.3	4.2	54.4	2.7	48.9	13.3
Queue Length 50th (ft)	185	8	117	20	63	0
Queue Length 95th (ft)	302	64	189	138	112	45
Internal Link Dist (ft)	1158			340		
Turn Bay Length (ft)		200	145		350	350
Base Capacity (vph)	1102	1236	300	1494	522	504
Starvation Cap Reductn	0	0	0	297	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.67	0.59	0.48	0.20	0.19

Intersection Summary

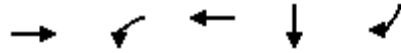


Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	209	429	505	516	88	253
v/c Ratio	0.68	0.28	0.44	0.46	0.29	0.69
Control Delay	54.9	2.1	13.1	2.7	43.8	15.6
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0
Total Delay	54.9	2.3	13.1	2.7	43.8	15.6
Queue Length 50th (ft)	122	31	151	0	27	0
Queue Length 95th (ft)	220	66	306	52	48	70
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	407	1547	1148	1132	720	523
Starvation Cap Reductn	0	493	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.41	0.44	0.46	0.12	0.48
<b>Intersection Summary</b>						

Queues  
3: Blaine St & I-215 SB

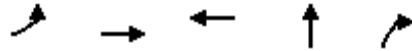


Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1088	286	729	703	536
v/c Ratio	1.24	0.27	0.34	1.24	0.85
Control Delay	151.1	34.5	12.6	153.2	33.2
Queue Delay	0.0	0.0	3.3	0.7	0.0
Total Delay	151.1	34.5	15.9	153.9	33.2
Queue Length 50th (ft)	~452	88	134	~559	197
Queue Length 95th (ft)	#523	m98	m141	#703	#314
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	877	1064	2123	568	631
Starvation Cap Reductn	0	0	1267	0	0
Spillback Cap Reductn	5	0	0	49	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.25	0.27	0.85	1.35	0.85

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	368	1162	1730	287	506
v/c Ratio	0.88	0.53	1.04dr	0.54	0.99
Control Delay	47.5	12.8	41.5	33.8	68.2
Queue Delay	0.0	50.0	0.0	0.0	0.0
Total Delay	47.5	62.7	41.5	33.8	68.2
Queue Length 50th (ft)	131	190	450	152	274
Queue Length 95th (ft)	m106	m153	#602	226	#462
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	418	2194	1732	529	511
Starvation Cap Reductn	0	1177	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.88	1.14	1.00	0.54	0.99

Intersection Summary

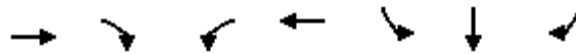
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Queues  
13: I-215 SB Ramps & University Avenue

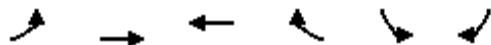


Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	500	290	94	419	403	2	226
v/c Ratio	0.66	0.36	0.53	0.41	0.63	no cap	0.33
Control Delay	30.0	4.3	45.9	12.3	27.4		3.7
Queue Delay	0.0	0.0	0.0	0.3	0.1		0.0
Total Delay	30.0	4.3	45.9	12.5	27.5	Error	3.7
Queue Length 50th (ft)	261	0	52	170	160	0	0
Queue Length 95th (ft)	#430	54	82	258	245	0	40
Internal Link Dist (ft)	1158			340		1158	
Turn Bay Length (ft)		200	145		350		350
Base Capacity (vph)	757	799	177	1026	786	1	796
Starvation Cap Reductn	0	0	0	190	0	0	0
Spillback Cap Reductn	0	0	0	0	36	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.36	0.53	0.50	0.54	2.00	0.28

Intersection Summary

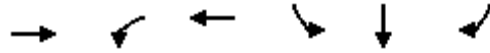
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	305	579	239	308	86	263
v/c Ratio	0.74	0.38	0.24	0.32	0.26	0.68
Control Delay	35.7	6.2	13.8	3.2	38.3	14.4
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.0
Total Delay	35.7	6.9	13.8	3.2	38.3	14.4
Queue Length 50th (ft)	149	148	66	0	24	0
Queue Length 95th (ft)	205	293	147	50	42	67
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	531	1516	1000	948	648	503
Starvation Cap Reductn	0	595	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.63	0.24	0.32	0.13	0.52
<b>Intersection Summary</b>						

Queues  
3: Blaine St & I-215 SB



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1373	485	651	585	20	155
v/c Ratio	0.84	1.06	0.30	1.32	no cap	0.31
Control Delay	15.7	74.7	2.3	185.4		5.7
Queue Delay	0.1	0.0	0.5	0.8		0.0
Total Delay	15.8	74.7	2.8	186.2	Error	5.7
Queue Length 50th (ft)	143	~100	12	~283	0	0
Queue Length 95th (ft)	#238	m#114	m16	#454	0	38
Internal Link Dist (ft)	1327		182		620	
Turn Bay Length (ft)		165		350		350
Base Capacity (vph)	1644	457	2182	442	1	505
Starvation Cap Reductn	0	0	1002	0	0	0
Spillback Cap Reductn	10	0	0	37	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	1.06	0.55	1.44	20.00	0.31

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St

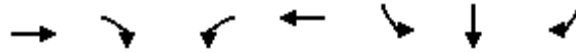


Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	247	1051	1811	207	412
v/c Ratio	0.72	0.47	1.00	0.50	0.97
Control Delay	33.5	6.7	35.5	24.9	58.1
Queue Delay	0.0	7.9	0.0	0.0	0.0
Total Delay	33.5	14.6	35.5	24.9	58.1
Queue Length 50th (ft)	48	87	~248	65	107
Queue Length 95th (ft)	m47	m93	#439	122	#270
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	343	2241	1806	413	424
Starvation Cap Reductn	0	1146	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.72	0.96	1.00	0.50	0.97

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
13: I-215 SB Ramps & University Avenue



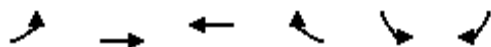
Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	603	823	247	641	52	2	94
v/c Ratio	0.62	0.71	0.82	0.46	0.14	no cap	0.25
Control Delay	24.1	7.2	71.3	7.2	28.8		7.7
Queue Delay	0.0	0.0	0.0	0.2	0.0		0.0
Total Delay	24.1	7.2	71.3	7.4	28.8	Error	7.7
Queue Length 50th (ft)	325	35	138	70	24	0	0
Queue Length 95th (ft)	469	183	#293	257	53	0	37
Internal Link Dist (ft)	1158			340		1158	
Turn Bay Length (ft)		200	145		350		350
Base Capacity (vph)	979	1159	300	1385	522	1	504
Starvation Cap Reductn	0	0	0	178	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.71	0.82	0.53	0.10	2.00	0.19

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	209	438	651	490	151	253
v/c Ratio	0.68	0.29	0.58	0.46	0.43	0.66
Control Delay	56.1	1.7	16.5	4.6	44.9	13.9
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	56.1	2.1	16.5	4.6	44.9	13.9
Queue Length 50th (ft)	144	43	231	25	47	0
Queue Length 95th (ft)	220	25	447	105	74	69
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	407	1520	1122	1067	720	523
Starvation Cap Reductn	0	578	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.46	0.58	0.46	0.21	0.48
<b>Intersection Summary</b>						

Queues  
3: Blaine St & I-215 SB

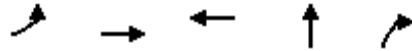


Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	886	202	286	729	699	536
v/c Ratio	1.91	0.44	0.28	0.35	1.20	0.84
Control Delay	440.7	19.4	35.5	13.1	136.4	31.9
Queue Delay	0.0	0.0	0.0	3.3	0.6	0.0
Total Delay	440.7	19.4	35.5	16.4	137.0	31.9
Queue Length 50th (ft)	~871	53	88	135	-543	198
Queue Length 95th (ft)	#1011	106	m98	m142	#686	#302
Internal Link Dist (ft)	1327			182	620	
Turn Bay Length (ft)		200	165			350
Base Capacity (vph)	465	463	1029	2088	584	641
Starvation Cap Reductn	0	0	0	1233	0	0
Spillback Cap Reductn	0	0	0	0	46	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.91	0.44	0.28	0.85	1.30	0.84

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	368	1162	1730	287	506
v/c Ratio	0.88	0.53	1.04dr	0.54	0.99
Control Delay	47.6	12.3	41.5	33.8	68.2
Queue Delay	0.0	50.9	0.0	0.0	0.0
Total Delay	47.6	63.3	41.5	33.8	68.2
Queue Length 50th (ft)	131	187	450	152	274
Queue Length 95th (ft)	m87	m124	#602	226	#462
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	418	2194	1732	529	511
Starvation Cap Reductn	0	1353	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.88	1.38	1.00	0.54	0.99

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

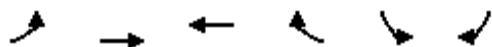
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Queues  
13: I-215 SB Ramps & University Avenue



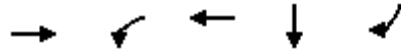
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	500	290	94	419	403	226
v/c Ratio	0.58	0.33	0.53	0.37	0.75	0.37
Control Delay	22.8	3.6	48.3	8.1	37.1	4.7
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	22.8	3.6	48.3	8.4	37.1	4.7
Queue Length 50th (ft)	200	0	39	52	206	0
Queue Length 95th (ft)	362	50	88	109	267	44
Internal Link Dist (ft)	1158			340		
Turn Bay Length (ft)		200	145		350	350
Base Capacity (vph)	865	872	177	1134	786	796
Starvation Cap Reductn	0	0	0	289	0	0
Spillback Cap Reductn	0	0	0	0	13	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.33	0.53	0.50	0.52	0.28
<b>Intersection Summary</b>						

Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	305	579	239	308	86	263
v/c Ratio	0.74	0.38	0.24	0.32	0.26	0.68
Control Delay	39.2	4.1	13.8	3.2	38.3	14.4
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0
Total Delay	39.2	4.9	13.8	3.2	38.3	14.4
Queue Length 50th (ft)	149	26	66	0	24	0
Queue Length 95th (ft)	204	235	147	50	42	67
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	531	1516	1000	948	648	503
Starvation Cap Reductn	0	588	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.62	0.24	0.32	0.13	0.52
<b>Intersection Summary</b>						

Queues  
3: Blaine St & I-215 SB



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1373	485	651	605	155
v/c Ratio	0.84	1.21	0.31	1.28	0.29
Control Delay	15.7	133.8	2.7	165.7	5.3
Queue Delay	0.1	0.0	0.5	0.6	0.0
Total Delay	15.8	133.8	3.2	166.3	5.3
Queue Length 50th (ft)	143	~112	15	~287	0
Queue Length 95th (ft)	#238	m#127	m21	#459	37
Internal Link Dist (ft)	1327		182	620	
Turn Bay Length (ft)		165			350
Base Capacity (vph)	1644	400	2123	473	529
Starvation Cap Reductn	0	0	959	0	0
Spillback Cap Reductn	9	0	0	33	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.84	1.21	0.56	1.38	0.29

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
4: I-215 NB & Blaine St



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	247	1051	1811	206	412
v/c Ratio	0.72	0.47	1.00	0.51	0.92
Control Delay	33.6	6.6	33.7	25.3	45.4
Queue Delay	0.0	5.2	0.0	0.0	0.0
Total Delay	33.6	11.8	33.7	25.3	45.4
Queue Length 50th (ft)	48	87	~248	65	103
Queue Length 95th (ft)	m48	m94	#439	121	#258
Internal Link Dist (ft)		182	890	577	
Turn Bay Length (ft)	125				350
Base Capacity (vph)	343	2257	1819	411	456
Starvation Cap Reductn	0	1127	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.72	0.93	1.00	0.50	0.90

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
13: I-215 SB Ramps & University Avenue



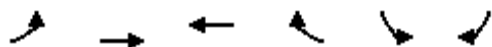
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	603	823	247	641	52	94
v/c Ratio	0.51	0.66	0.82	0.40	0.33	0.42
Control Delay	12.4	4.2	64.5	3.2	47.5	14.8
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	12.4	4.2	64.5	3.4	47.5	14.8
Queue Length 50th (ft)	197	18	167	42	32	0
Queue Length 95th (ft)	313	84	#290	212	67	46
Internal Link Dist (ft)	1158			340		
Turn Bay Length (ft)		200	145		350	350
Base Capacity (vph)	1194	1256	300	1600	522	526
Starvation Cap Reductn	0	0	0	370	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.82	0.52	0.10	0.18

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



Queues  
14: University Avenue & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	209	438	651	490	151	253
v/c Ratio	0.68	0.29	0.58	0.45	0.43	0.66
Control Delay	60.4	1.9	16.5	4.0	44.9	13.9
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0
Total Delay	60.4	2.0	16.5	4.0	44.9	13.9
Queue Length 50th (ft)	145	45	231	21	47	0
Queue Length 95th (ft)	171	28	447	93	74	69
Internal Link Dist (ft)		340	789		324	
Turn Bay Length (ft)	145			185	250	250
Base Capacity (vph)	407	1520	1122	1091	720	523
Starvation Cap Reductn	0	383	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.39	0.58	0.45	0.21	0.48
<b>Intersection Summary</b>						

## Freeway Analysis



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,029	900	485	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,368	976	526	0	pcph
Weaving Flow Rate, vW	1,502	Total Flow Rate, v			5,870
Non-Weaving Flow Rate, vNW	4,368	Volume Ratio, VR			0.256

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,115	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,055	pcph
Demand Flow-Based Capacity, $C_{IW}$	9,108	pch
Weaving Segment Capacity, $C_W$	9,108	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,108	vph
Volume-to-Capacity Ratio, $v/c$	0.63	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,952	lc/h
Weaving Lane Change Rate, $LC_W$	1,892	lc/h
Non-weaving Vehicle Index, $I_{NW}$	262	
Non-weaving Lane Change Rate, $LC_{NW}$	262	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,154	lc/h
Weaving Intensity Factor, $W$	0.619	
Average Weaving Speed, $S_W$	52.0	mph
Average Non-Weaving Speed, $S_{NW}$	55.3	mph
Average Speed, $S$	54.4	mph
Density, $D$	21.6	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,037	9,600	pcph	0.52
Exiting General Purpose Lanes	5,487	2,400	pcph	2.29
On Ramp	976	2,100	pcph	0.46
Off Ramp	526	2,100	pcph	0.25

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,792	919	137	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,196	996	149	0	pcph
Weaving Flow Rate, vW	1,145	Total Flow Rate, v		6,340	
Non-Weaving Flow Rate, vNW	5,196	Volume Ratio, VR		0.181	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,339	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,114	pcph
Demand Flow-Based Capacity, $C_{IW}$	12,904	pch
Weaving Segment Capacity, $C_W$	10,262	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,262	vph
Volume-to-Capacity Ratio, $v/c$	0.60	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,993	lc/h
Weaving Lane Change Rate, $LC_W$	1,933	lc/h
Non-weaving Vehicle Index, $I_{NW}$	312	
Non-weaving Lane Change Rate, $LC_{NW}$	432	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,365	lc/h
Weaving Intensity Factor, $W$	0.667	
Average Weaving Speed, $S_W$	51.0	mph
Average Non-Weaving Speed, $S_{NW}$	54.6	mph
Average Speed, $S$	53.9	mph
Density, $D$	23.5	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,500	9,600	pcph	0.57
Exiting General Purpose Lanes	6,348	2,400	pcph	<b>2.64</b>
On Ramp	996	2,100	pcph	0.47
Off Ramp	149	2,100	pcph	0.07

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,681	845	1,030	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,075	916	1,117	0	pcph
Weaving Flow Rate, vW	2,033	Total Flow Rate, v			7,108
Non-Weaving Flow Rate, vNW	5,075	Volume Ratio, VR			0.286

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,434	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	1,992	pcph
Demand Flow-Based Capacity, $C_{IW}$	8,147	pch
Weaving Segment Capacity, $C_W$	8,147	vph
Adjusted Weaving Area Capacity, $C_{wa}$	8,147	vph
Volume-to-Capacity Ratio, $v/c$	0.85	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,832	lc/h
Weaving Lane Change Rate, $LC_W$	1,655	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	137	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,792	lc/h
Weaving Intensity Factor, $W$	2.203	
Average Weaving Speed, $S_W$	33.7	mph
Average Non-Weaving Speed, $S_{NW}$	55.0	mph
Average Speed, $S$	46.6	mph
Density, $D$	30.5	pcmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,372	12,000	pcph	0.53
Exiting General Purpose Lanes	6,172	2,400	pcph	2.57
On Ramp	916	2,100	pcph	0.44
Off Ramp	1,117	2,100	pcph	0.53



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,133	1,100	275	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,981	1,181	295	0	pcph
Weaving Flow Rate, vW	1,476	Total Flow Rate, v			6,458
Non-Weaving Flow Rate, vNW	4,981	Volume Ratio, VR			0.229

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,831	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{FL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	1,996	pchpl
Demand Flow-Based Capacity, $c_{IW}$	9,425	pch
Weaving Segment Capacity, $c_w$	7,167	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,167	vph
Volume-to-Capacity Ratio, $v/c$	0.81	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,476	lc/h
Weaving Lane Change Rate, $LC_w$	1,333	lc/h
Non-weaving Vehicle Index, $I_{NW}$	199	
Non-weaving Lane Change Rate, $LC_{NW}$	364	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,697	lc/h
Weaving Intensity Factor, $W$	1.221	
Average Weaving Speed, $S_w$	37.5	mph
Average Non-Weaving Speed, $S_{NW}$	46.6	mph
Average Speed, $S$	44.2	mph
Density, $D$	36.6	pcmpl
Level of Service, LOS	E	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,789	515	444	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,192	558	481	0	pcph
Weaving Flow Rate, vW	1,040	Total Flow Rate, v			6,232
Non-Weaving Flow Rate, vNW	5,192	Volume Ratio, VR			0.167

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,200	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	2,061	pchpl
Demand Flow-Based Capacity, $c_{IW}$	13,966	pch
Weaving Segment Capacity, $c_w$	10,004	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,004	vph
Volume-to-Capacity Ratio, $v/c$	0.60	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,040	lc/h
Weaving Lane Change Rate, $LC_w$	797	lc/h
Non-weaving Vehicle Index, $I_{NW}$	436	
Non-weaving Lane Change Rate, $LC_{NW}$	334	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,131	lc/h
Weaving Intensity Factor, $W$	0.494	
Average Weaving Speed, $S_w$	48.5	mph
Average Non-Weaving Speed, $S_{NW}$	51.5	mph
Average Speed, $S$	51.0	mph
Density, $D$	24.4	pcpmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,043	1,074	1,261	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,383	1,164	1,367	0	pcph
Weaving Flow Rate, vW	2,532	Total Flow Rate, v			6,915
Non-Weaving Flow Rate, vNW	4,383	Volume Ratio, VR			0.366

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,304	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,908	pchpl
Demand Flow-Based Capacity, $C_{IW}$	6,365	pch
Weaving Segment Capacity, $C_W$	6,365	vph
Adjusted Weaving Area Capacity, $C_{wa}$	6,365	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.05</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,532	lc/h
Weaving Lane Change Rate, $LC_W$	2,332	lc/h
Non-weaving Vehicle Index, $I_{NW}$	465	
Non-weaving Lane Change Rate, $LC_{NW}$	227	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,559	lc/h
Weaving Intensity Factor, $W$	0.783	
Average Weaving Speed, $S_W$	43.0	mph
Average Non-Weaving Speed, $S_{NW}$	40.1	mph
Average Speed, $S$	41.2	mph
Density, $D$	-	pcmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, $L_s$	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,653	686	272	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,403	737	292	0	pcph
Weaving Flow Rate, vW	1,029	Total Flow Rate, v			5,431
Non-Weaving Flow Rate, vNW	4,403	Volume Ratio, VR			0.189

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,428	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{FL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	2,027	pchpl
Demand Flow-Based Capacity, $c_{IW}$	11,325	pch
Weaving Segment Capacity, $c_w$	7,244	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,244	vph
Volume-to-Capacity Ratio, $v/c$	0.67	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,029	lc/h
Weaving Lane Change Rate, $LC_w$	885	lc/h
Non-weaving Vehicle Index, $I_{NW}$	176	
Non-weaving Lane Change Rate, $LC_{NW}$	245	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,130	lc/h
Weaving Intensity Factor, $W$	0.886	
Average Weaving Speed, $S_w$	41.5	mph
Average Non-Weaving Speed, $S_{NW}$	51.1	mph
Average Speed, $S$	48.9	mph
Density, $D$	27.7	pcmpl
Level of Service, LOS	C	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,886	461	453	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,213	500	491	0	pcph
Weaving Flow Rate, vW	991	Total Flow Rate, v			5,204
Non-Weaving Flow Rate, vNW	4,213	Volume Ratio, VR			0.190

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,438	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	2,043	pchpl
Demand Flow-Based Capacity, $C_{IW}$	12,237	pch
Weaving Segment Capacity, $C_W$	9,915	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,915	vph
Volume-to-Capacity Ratio, $v/c$	0.51	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	991	lc/h
Weaving Lane Change Rate, $LC_W$	748	lc/h
Non-weaving Vehicle Index, $I_{NW}$	354	
Non-weaving Lane Change Rate, $LC_{NW}$	133	lc/h
Total Lane Change Rate, $LC_{ALL}$	881	lc/h
Weaving Intensity Factor, $W$	0.405	
Average Weaving Speed, $S_W$	50.6	mph
Average Non-Weaving Speed, $S_{NW}$	52.9	mph
Average Speed, $S$	52.4	mph
Density, $D$	19.9	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,208	861	1,139	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	3,478	934	1,235	0	pcph
Weaving Flow Rate, vW	2,168	Total Flow Rate, v			5,647
Non-Weaving Flow Rate, vNW	3,478	Volume Ratio, VR			0.384

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,503	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	1,893	pchpl
Demand Flow-Based Capacity, $c_{IW}$	6,068	pch
Weaving Segment Capacity, $c_w$	6,068	vph
Adjusted Weaving Area Capacity, $c_{wa}$	6,068	vph
Volume-to-Capacity Ratio, $v/c$	0.90	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,168	lc/h
Weaving Lane Change Rate, $LC_w$	1,968	lc/h
Non-weaving Vehicle Index, $I_{NW}$	369	
Non-weaving Lane Change Rate, $LC_{NW}$	41	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,009	lc/h
Weaving Intensity Factor, $W$	0.647	
Average Weaving Speed, $S_w$	45.4	mph
Average Non-Weaving Speed, $S_{NW}$	44.0	mph
Average Speed, $S$	44.5	mph
Density, $D$	25.4	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	1,765	1,100	933	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	1,914	1,193	1,012	0	pcph
Weaving Flow Rate, $vW$	2,204	Total Flow Rate, $v$			4,118
Non-Weaving Flow Rate, $vNW$	1,914	Volume Ratio, VR			0.535

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	8,242	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	1,815	pchpl
Demand Flow-Based Capacity, $c_{IW}$	4,353	pch
Weaving Segment Capacity, $c_w$	4,353	vph
Adjusted Weaving Area Capacity, $c_{wa}$	4,353	vph
Volume-to-Capacity Ratio, $v/c$	0.92	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,385	lc/h
Weaving Lane Change Rate, $LC_w$	2,325	lc/h
Non-weaving Vehicle Index, $I_{NW}$	115	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,325	lc/h
Weaving Intensity Factor, $W$	0.658	
Average Weaving Speed, $S_w$	51.2	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	52.4	mph
Density, $D$	15.7	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	2,306	352	559	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	2,500	382	606	0	pcph
Weaving Flow Rate, vW	988	Total Flow Rate, v			3,488
Non-Weaving Flow Rate, vNW	2,500	Volume Ratio, VR			0.283

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,404	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,032	pchpl
Demand Flow-Based Capacity, $c_{IW}$	8,228	pch
Weaving Segment Capacity, $c_w$	8,228	vph
Adjusted Weaving Area Capacity, $c_{wa}$	8,228	vph
Volume-to-Capacity Ratio, $v/c$	0.41	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	763	lc/h
Weaving Lane Change Rate, $LC_w$	703	lc/h
Non-weaving Vehicle Index, $I_{NW}$	150	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	703	lc/h
Weaving Intensity Factor, $W$	0.256	
Average Weaving Speed, $S_w$	62.8	mph
Average Non-Weaving Speed, $S_{NW}$	66.2	mph
Average Speed, $S$	65.2	mph
Density, $D$	10.7	pcmpl
Level of Service, LOS	B	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	2,430	297	228	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	2,635	322	247	0	pcph
Weaving Flow Rate, vW	569	Total Flow Rate, v			3,204
Non-Weaving Flow Rate, vNW	2,635	Volume Ratio, VR			0.178

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,309	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,078	pchpl
Demand Flow-Based Capacity, $C_{IW}$	13,115	pch
Weaving Segment Capacity, $C_W$	10,087	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,087	vph
Volume-to-Capacity Ratio, $v/c$	0.31	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	644	lc/h
Weaving Lane Change Rate, $LC_W$	467	lc/h
Non-weaving Vehicle Index, $I_{NW}$	26	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	467	lc/h
Weaving Intensity Factor, $W$	0.762	
Average Weaving Speed, $S_W$	49.0	mph
Average Non-Weaving Speed, $S_{NW}$	67.3	mph
Average Speed, $S$	63.1	mph
Density, $D$	10.2	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,029	900	485	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,368	976	526	0	pcph
Weaving Flow Rate, vW	1,502	Total Flow Rate, v			5,870
Non-Weaving Flow Rate, vNW	4,368	Volume Ratio, VR			0.256

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,115	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,055	pcph
Demand Flow-Based Capacity, $C_{IW}$	9,108	pch
Weaving Segment Capacity, $C_W$	9,108	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,108	vph
Volume-to-Capacity Ratio, $v/c$	0.63	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,952	lc/h
Weaving Lane Change Rate, $LC_W$	1,892	lc/h
Non-weaving Vehicle Index, $I_{NW}$	262	
Non-weaving Lane Change Rate, $LC_{NW}$	262	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,154	lc/h
Weaving Intensity Factor, $W$	0.619	
Average Weaving Speed, $S_W$	52.0	mph
Average Non-Weaving Speed, $S_{NW}$	55.3	mph
Average Speed, $S$	54.4	mph
Density, $D$	21.6	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,037	9,600	pcph	0.52
Exiting General Purpose Lanes	5,487	2,400	pcph	2.29
On Ramp	976	2,100	pcph	0.46
Off Ramp	526	2,100	pcph	0.25

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,792	919	137	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,196	996	149	0	pcph
Weaving Flow Rate, vW	1,145	Total Flow Rate, v			6,340
Non-Weaving Flow Rate, vNW	5,196	Volume Ratio, VR			0.181

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,339	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,114	pcph
Demand Flow-Based Capacity, $C_{IW}$	12,904	pch
Weaving Segment Capacity, $C_W$	10,262	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,262	vph
Volume-to-Capacity Ratio, $v/c$	0.60	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,993	lc/h
Weaving Lane Change Rate, $LC_W$	1,933	lc/h
Non-weaving Vehicle Index, $I_{NW}$	312	
Non-weaving Lane Change Rate, $LC_{NW}$	432	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,365	lc/h
Weaving Intensity Factor, $W$	0.667	
Average Weaving Speed, $S_W$	51.0	mph
Average Non-Weaving Speed, $S_{NW}$	54.6	mph
Average Speed, $S$	53.9	mph
Density, $D$	23.5	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,500	9,600	pcph	0.57
Exiting General Purpose Lanes	6,348	2,400	pcph	<b>2.64</b>
On Ramp	996	2,100	pcph	0.47
Off Ramp	149	2,100	pcph	0.07

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,681	845	1,030	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,075	916	1,117	0	pcph
Weaving Flow Rate, vW	2,033	Total Flow Rate, v			7,108
Non-Weaving Flow Rate, vNW	5,075	Volume Ratio, VR			0.286

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,434	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	1,992	pcph
Demand Flow-Based Capacity, $C_{IW}$	8,147	pch
Weaving Segment Capacity, $C_W$	8,147	vph
Adjusted Weaving Area Capacity, $C_{wa}$	8,147	vph
Volume-to-Capacity Ratio, $v/c$	0.85	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,832	lc/h
Weaving Lane Change Rate, $LC_W$	1,655	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	137	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,792	lc/h
Weaving Intensity Factor, $W$	2.203	
Average Weaving Speed, $S_W$	33.7	mph
Average Non-Weaving Speed, $S_{NW}$	55.0	mph
Average Speed, $S$	46.6	mph
Density, $D$	30.5	pcmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,372	12,000	pcph	0.53
Exiting General Purpose Lanes	6,172	2,400	pcph	2.57
On Ramp	916	2,100	pcph	0.44
Off Ramp	1,117	2,100	pcph	0.53



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,014	900	500	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,352	976	542	0	pcph
Weaving Flow Rate, vW	1,518	Total Flow Rate, v			5,870
Non-Weaving Flow Rate, vNW	4,352	Volume Ratio, VR			0.259

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,144	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,052	pchpl
Demand Flow-Based Capacity, $c_{IW}$	9,011	pch
Weaving Segment Capacity, $c_w$	9,011	vph
Adjusted Weaving Area Capacity, $c_{wa}$	9,011	vph
Volume-to-Capacity Ratio, $v/c$	0.63	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,952	lc/h
Weaving Lane Change Rate, $LC_w$	1,892	lc/h
Non-weaving Vehicle Index, $I_{NW}$	261	
Non-weaving Lane Change Rate, $LC_{NW}$	259	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,150	lc/h
Weaving Intensity Factor, $W$	0.619	
Average Weaving Speed, $S_w$	52.1	mph
Average Non-Weaving Speed, $S_{NW}$	55.3	mph
Average Speed, $S$	54.4	mph
Density, $D$	21.6	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,777	919	137	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,179	996	149	0	pcph
Weaving Flow Rate, vW	1,145	Total Flow Rate, v			6,324
Non-Weaving Flow Rate, vNW	5,179	Volume Ratio, VR			0.181

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,343	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,114	pchpl
Demand Flow-Based Capacity, $c_{IW}$	12,871	pch
Weaving Segment Capacity, $c_w$	10,260	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,260	vph
Volume-to-Capacity Ratio, $v/c$	0.60	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,993	lc/h
Weaving Lane Change Rate, $LC_w$	1,933	lc/h
Non-weaving Vehicle Index, $I_{NW}$	311	
Non-weaving Lane Change Rate, $LC_{NW}$	429	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,362	lc/h
Weaving Intensity Factor, $W$	0.666	
Average Weaving Speed, $S_w$	51.0	mph
Average Non-Weaving Speed, $S_{NW}$	54.6	mph
Average Speed, $S$	53.9	mph
Density, $D$	23.5	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,666	864	1,030	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,059	937	1,117	0	pcph
Weaving Flow Rate, vW	2,053	Total Flow Rate, v			7,112
Non-Weaving Flow Rate, vNW	5,059	Volume Ratio, VR			0.289

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,463	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,990	pchpl
Demand Flow-Based Capacity, $C_{IW}$	8,070	pch
Weaving Segment Capacity, $C_W$	8,070	vph
Adjusted Weaving Area Capacity, $C_{WA}$	8,070	vph
Volume-to-Capacity Ratio, $v/c$	0.86	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,874	lc/h
Weaving Lane Change Rate, $LC_W$	1,696	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	133	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,830	lc/h
Weaving Intensity Factor, $W$	2.239	
Average Weaving Speed, $S_W$	33.5	mph
Average Non-Weaving Speed, $S_{NW}$	54.7	mph
Average Speed, $S$	46.3	mph
Density, $D$	30.8	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,137	1,100	281	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,986	1,181	302	0	pcph
Weaving Flow Rate, vW	1,483	Total Flow Rate, v			6,469
Non-Weaving Flow Rate, vNW	4,986	Volume Ratio, VR			0.229

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,837	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,995	pchpl
Demand Flow-Based Capacity, $C_{IW}$	9,402	pch
Weaving Segment Capacity, $C_W$	7,166	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,166	vph
Volume-to-Capacity Ratio, $v/c$	0.81	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,483	lc/h
Weaving Lane Change Rate, $LC_W$	1,339	lc/h
Non-weaving Vehicle Index, $I_{NW}$	199	
Non-weaving Lane Change Rate, $LC_{NW}$	365	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,705	lc/h
Weaving Intensity Factor, $W$	1.226	
Average Weaving Speed, $S_W$	37.5	mph
Average Non-Weaving Speed, $S_{NW}$	46.6	mph
Average Speed, $S$	44.1	mph
Density, $D$	36.7	pcmpl
Level of Service, LOS	E	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,793	519	444	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	5,197	563	481	0	pcph
Weaving Flow Rate, vW	1,044	Total Flow Rate, v			6,241
Non-Weaving Flow Rate, vNW	5,197	Volume Ratio, VR			0.167

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,205	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	2,060	pchpl
Demand Flow-Based Capacity, $c_{IW}$	13,927	pch
Weaving Segment Capacity, $c_w$	10,002	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,002	vph
Volume-to-Capacity Ratio, $v/c$	0.61	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,044	lc/h
Weaving Lane Change Rate, $LC_w$	801	lc/h
Non-weaving Vehicle Index, $I_{NW}$	437	
Non-weaving Lane Change Rate, $LC_{NW}$	335	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,136	lc/h
Weaving Intensity Factor, $W$	0.496	
Average Weaving Speed, $S_w$	48.4	mph
Average Non-Weaving Speed, $S_{NW}$	51.5	mph
Average Speed, $S$	51.0	mph
Density, $D$	24.5	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,051	1,078	1,261	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,392	1,169	1,367	0	pcph
Weaving Flow Rate, vW	2,536	Total Flow Rate, v			6,928
Non-Weaving Flow Rate, vNW	4,392	Volume Ratio, VR			0.366

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,303	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,908	pchpl
Demand Flow-Based Capacity, $C_{IW}$	6,366	pch
Weaving Segment Capacity, $C_W$	6,366	vph
Adjusted Weaving Area Capacity, $C_{WA}$	6,366	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.06</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,536	lc/h
Weaving Lane Change Rate, $LC_W$	2,336	lc/h
Non-weaving Vehicle Index, $I_{NW}$	466	
Non-weaving Lane Change Rate, $LC_{NW}$	229	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,565	lc/h
Weaving Intensity Factor, $W$	0.784	
Average Weaving Speed, $S_W$	43.0	mph
Average Non-Weaving Speed, $S_{NW}$	40.1	mph
Average Speed, $S$	41.1	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, $L_s$	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,681	686	287	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,437	737	308	0	pcph
Weaving Flow Rate, vW	1,045	Total Flow Rate, v			5,481
Non-Weaving Flow Rate, vNW	4,437	Volume Ratio, VR			0.191

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to University Off Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,440	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{FL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	2,026	pchpl
Demand Flow-Based Capacity, $c_{IW}$	11,254	pch
Weaving Segment Capacity, $c_w$	7,242	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,242	vph
Volume-to-Capacity Ratio, $v/c$	0.68	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,045	lc/h
Weaving Lane Change Rate, $LC_w$	901	lc/h
Non-weaving Vehicle Index, $I_{NW}$	177	
Non-weaving Lane Change Rate, $LC_{NW}$	252	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,153	lc/h
Weaving Intensity Factor, $W$	0.900	
Average Weaving Speed, $S_w$	41.3	mph
Average Non-Weaving Speed, $S_{NW}$	50.9	mph
Average Speed, $S$	48.7	mph
Density, $D$	28.1	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,914	470	453	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,244	510	491	0	pcph
Weaving Flow Rate, vW	1,001	Total Flow Rate, v			5,244
Non-Weaving Flow Rate, vNW	4,244	Volume Ratio, VR			0.191

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,443	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	2,042	pchpl
Demand Flow-Based Capacity, $C_{IW}$	12,211	pch
Weaving Segment Capacity, $C_W$	9,914	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,914	vph
Volume-to-Capacity Ratio, $v/c$	0.51	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,001	lc/h
Weaving Lane Change Rate, $LC_W$	758	lc/h
Non-weaving Vehicle Index, $I_{NW}$	356	
Non-weaving Lane Change Rate, $LC_{NW}$	139	lc/h
Total Lane Change Rate, $LC_{ALL}$	897	lc/h
Weaving Intensity Factor, $W$	0.411	
Average Weaving Speed, $S_W$	50.4	mph
Average Non-Weaving Speed, $S_{NW}$	52.8	mph
Average Speed, $S$	52.3	mph
Density, $D$	20.1	pcpmpl
Level of Service, LOS	C	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,245	870	1,139	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	3,518	943	1,235	0	pcph
Weaving Flow Rate, $vW$	2,178	Total Flow Rate, v			5,696
Non-Weaving Flow Rate, $v_{NW}$	3,518	Volume Ratio, VR			0.382

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,484	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,894	pchpl
Demand Flow-Based Capacity, $C_{IW}$	6,094	pch
Weaving Segment Capacity, $C_W$	6,094	vph
Adjusted Weaving Area Capacity, $C_{wa}$	6,094	vph
Volume-to-Capacity Ratio, $v/c$	0.91	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,178	lc/h
Weaving Lane Change Rate, $LC_W$	1,978	lc/h
Non-weaving Vehicle Index, $I_{NW}$	373	
Non-weaving Lane Change Rate, $LC_{NW}$	49	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,027	lc/h
Weaving Intensity Factor, $W$	0.651	
Average Weaving Speed, $S_W$	45.3	mph
Average Non-Weaving Speed, $S_{NW}$	43.8	mph
Average Speed, $S$	44.4	mph
Density, $D$	25.7	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	1,766	1,100	939	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	1,915	1,193	1,018	0	pcph
Weaving Flow Rate, vW	2,211	Total Flow Rate, v			4,125
Non-Weaving Flow Rate, vNW	1,915	Volume Ratio, VR			0.536

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	8,249	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	1,815	pchpl
Demand Flow-Based Capacity, $c_{IW}$	4,348	pch
Weaving Segment Capacity, $c_w$	4,348	vph
Adjusted Weaving Area Capacity, $c_{wa}$	4,348	vph
Volume-to-Capacity Ratio, $v/c$	0.92	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,385	lc/h
Weaving Lane Change Rate, $LC_w$	2,325	lc/h
Non-weaving Vehicle Index, $I_{NW}$	115	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,325	lc/h
Weaving Intensity Factor, $W$	0.658	
Average Weaving Speed, $S_w$	51.2	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	52.4	mph
Density, $D$	15.7	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	2,637	352	229	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	2,859	382	248	0	pcph
Weaving Flow Rate, vW	630	Total Flow Rate, v			3,489
Non-Weaving Flow Rate, vNW	2,859	Volume Ratio, VR			0.181

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,338	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,114	pchpl
Demand Flow-Based Capacity, $C_{IW}$	12,906	pch
Weaving Segment Capacity, $C_W$	10,262	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,262	vph
Volume-to-Capacity Ratio, $v/c$	0.33	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	763	lc/h
Weaving Lane Change Rate, $LC_W$	703	lc/h
Non-weaving Vehicle Index, $I_{NW}$	172	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	703	lc/h
Weaving Intensity Factor, $W$	0.256	
Average Weaving Speed, $S_W$	62.8	mph
Average Non-Weaving Speed, $S_{NW}$	66.2	mph
Average Speed, $S$	65.5	mph
Density, $D$	10.7	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	2,761	304	228	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	2,994	330	247	0	pcph
Weaving Flow Rate, vW	577	Total Flow Rate, v			3,570
Non-Weaving Flow Rate, vNW	2,994	Volume Ratio, VR			0.162

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,147	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,090	pchpl
Demand Flow-Based Capacity, $C_{IW}$	14,423	pch
Weaving Segment Capacity, $C_W$	10,148	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,148	vph
Volume-to-Capacity Ratio, $v/c$	0.34	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	659	lc/h
Weaving Lane Change Rate, $LC_W$	482	lc/h
Non-weaving Vehicle Index, $I_{NW}$	30	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	482	lc/h
Weaving Intensity Factor, $W$	0.782	
Average Weaving Speed, $S_W$	48.7	mph
Average Non-Weaving Speed, $S_{NW}$	66.8	mph
Average Speed, $S$	63.0	mph
Density, $D$	11.3	pcmpl
Level of Service, LOS	B	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,014	900	500	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,352	976	542	0	pcph
Weaving Flow Rate, vW	1,518	Total Flow Rate, v			5,870
Non-Weaving Flow Rate, vNW	4,352	Volume Ratio, VR			0.259

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,144	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,052	pchpl
Demand Flow-Based Capacity, $c_{IW}$	9,011	pch
Weaving Segment Capacity, $c_w$	9,011	vph
Adjusted Weaving Area Capacity, $c_{wa}$	9,011	vph
Volume-to-Capacity Ratio, $v/c$	0.63	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,952	lc/h
Weaving Lane Change Rate, $LC_w$	1,892	lc/h
Non-weaving Vehicle Index, $I_{NW}$	261	
Non-weaving Lane Change Rate, $LC_{NW}$	259	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,150	lc/h
Weaving Intensity Factor, $W$	0.619	
Average Weaving Speed, $S_w$	52.1	mph
Average Non-Weaving Speed, $S_{NW}$	55.3	mph
Average Speed, $S$	54.4	mph
Density, $D$	21.6	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,777	919	137	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	5,179	996	149	0	pcph
Weaving Flow Rate, vW	1,145	Total Flow Rate, v			6,324
Non-Weaving Flow Rate, vNW	5,179	Volume Ratio, VR			0.181

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,343	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,114	pchpl
Demand Flow-Based Capacity, $c_{IW}$	12,871	pch
Weaving Segment Capacity, $c_w$	10,260	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,260	vph
Volume-to-Capacity Ratio, $v/c$	0.60	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,993	lc/h
Weaving Lane Change Rate, $LC_w$	1,933	lc/h
Non-weaving Vehicle Index, $I_{NW}$	311	
Non-weaving Lane Change Rate, $LC_{NW}$	429	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,362	lc/h
Weaving Intensity Factor, $W$	0.666	
Average Weaving Speed, $S_w$	51.0	mph
Average Non-Weaving Speed, $S_{NW}$	54.6	mph
Average Speed, $S$	53.9	mph
Density, $D$	23.5	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,666	864	1,030	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,059	937	1,117	0	pcph
Weaving Flow Rate, vW	2,053	Total Flow Rate, v			7,112
Non-Weaving Flow Rate, vNW	5,059	Volume Ratio, VR			0.289

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Existing (2017) Plus Phase 1
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,463	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,990	pchpl
Demand Flow-Based Capacity, $C_{IW}$	8,070	pch
Weaving Segment Capacity, $C_W$	8,070	vph
Adjusted Weaving Area Capacity, $C_{wa}$	8,070	vph
Volume-to-Capacity Ratio, $v/c$	0.86	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,874	lc/h
Weaving Lane Change Rate, $LC_W$	1,696	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	133	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,830	lc/h
Weaving Intensity Factor, $W$	2.239	
Average Weaving Speed, $S_W$	33.5	mph
Average Non-Weaving Speed, $S_{NW}$	54.7	mph
Average Speed, $S$	46.3	mph
Density, $D$	30.8	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,810	990	660	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,131	1,073	716	0	pcph
Weaving Flow Rate, vW	1,789	Total Flow Rate, v			5,920
Non-Weaving Flow Rate, vNW	4,131	Volume Ratio, VR			0.302

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,607	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,017	pchpl
Demand Flow-Based Capacity, $c_{IW}$	7,711	pch
Weaving Segment Capacity, $c_w$	7,711	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,711	vph
Volume-to-Capacity Ratio, $v/c$	0.75	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,147	lc/h
Weaving Lane Change Rate, $LC_w$	2,087	lc/h
Non-weaving Vehicle Index, $I_{NW}$	248	
Non-weaving Lane Change Rate, $LC_{NW}$	213	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,300	lc/h
Weaving Intensity Factor, $W$	0.652	
Average Weaving Speed, $S_w$	51.3	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	53.1	mph
Density, $D$	22.3	pcmpl
Level of Service, LOS	C	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,610	1,120	190	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,998	1,214	206	0	pcph
Weaving Flow Rate, vW	1,420	Total Flow Rate, v			6,419
Non-Weaving Flow Rate, vNW	4,998	Volume Ratio, VR			0.221

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,755	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,082	pchpl
Demand Flow-Based Capacity, $c_{IW}$	10,530	pch
Weaving Segment Capacity, $c_w$	10,107	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,107	vph
Volume-to-Capacity Ratio, $v/c$	0.62	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,429	lc/h
Weaving Lane Change Rate, $LC_w$	2,369	lc/h
Non-weaving Vehicle Index, $I_{NW}$	300	
Non-weaving Lane Change Rate, $LC_{NW}$	392	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,760	lc/h
Weaving Intensity Factor, $W$	0.753	
Average Weaving Speed, $S_w$	49.2	mph
Average Non-Weaving Speed, $S_{NW}$	51.4	mph
Average Speed, $S$	50.9	mph
Density, $D$	25.2	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,520	960	1,210	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,901	1,041	1,312	0	pcph
Weaving Flow Rate, $vW$	2,353	Total Flow Rate, v			7,253
Non-Weaving Flow Rate, $v_{NW}$	4,901	Volume Ratio, VR			0.324

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,847	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	1,960	pchpl
Demand Flow-Based Capacity, $c_{IW}$	7,184	pch
Weaving Segment Capacity, $c_w$	7,184	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,184	vph
Volume-to-Capacity Ratio, $v/c$	0.98	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,082	lc/h
Weaving Lane Change Rate, $LC_w$	1,905	lc/h
Non-weaving Vehicle Index, $I_{NW}$	49	
Non-weaving Lane Change Rate, $LC_{NW}$	101	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,005	lc/h
Weaving Intensity Factor, $W$	2.407	
Average Weaving Speed, $S_w$	32.6	mph
Average Non-Weaving Speed, $S_{NW}$	53.0	mph
Average Speed, $S$	44.1	mph
Density, $D$	32.9	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,580	1,290	310	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,520	1,385	333	0	pcph
Weaving Flow Rate, vW	1,718	Total Flow Rate, v			7,238
Non-Weaving Flow Rate, vNW	5,520	Volume Ratio, VR			0.237

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,922	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	1,989	pchpl
Demand Flow-Based Capacity, $c_{IW}$	9,088	pch
Weaving Segment Capacity, $c_w$	7,150	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,150	vph
Volume-to-Capacity Ratio, $v/c$	0.91	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,718	lc/h
Weaving Lane Change Rate, $LC_w$	1,575	lc/h
Non-weaving Vehicle Index, $I_{NW}$	221	
Non-weaving Lane Change Rate, $LC_{NW}$	475	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,050	lc/h
Weaving Intensity Factor, $W$	1.418	
Average Weaving Speed, $S_w$	35.7	mph
Average Non-Weaving Speed, $S_{NW}$	43.9	mph
Average Speed, $S$	41.7	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,180	640	690	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	5,616	694	748	0	pcph
Weaving Flow Rate, vW	1,442	Total Flow Rate, v		7,058	
Non-Weaving Flow Rate, vNW	5,616	Volume Ratio, VR		0.204	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,580	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	2,032	pchpl
Demand Flow-Based Capacity, $C_{IW}$	11,405	pch
Weaving Segment Capacity, $C_W$	9,863	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,863	vph
Volume-to-Capacity Ratio, $v/c$	0.69	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,442	lc/h
Weaving Lane Change Rate, $LC_W$	1,199	lc/h
Non-weaving Vehicle Index, $I_{NW}$	472	
Non-weaving Lane Change Rate, $LC_{NW}$	422	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,621	lc/h
Weaving Intensity Factor, $W$	0.656	
Average Weaving Speed, $S_W$	45.2	mph
Average Non-Weaving Speed, $S_{NW}$	47.8	mph
Average Speed, $S$	47.3	mph
Density, $D$	29.9	pcmpl
Level of Service, LOS	D	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,430	1,210	1,390	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,803	1,312	1,507	0	pcph
Weaving Flow Rate, vW	2,819	Total Flow Rate, v			7,622
Non-Weaving Flow Rate, vNW	4,803	Volume Ratio, VR			0.370

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,345	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,905	pchpl
Demand Flow-Based Capacity, $C_{IW}$	6,300	pch
Weaving Segment Capacity, $C_W$	6,300	vph
Adjusted Weaving Area Capacity, $C_{wa}$	6,300	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.17</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,819	lc/h
Weaving Lane Change Rate, $LC_W$	2,619	lc/h
Non-weaving Vehicle Index, $I_{NW}$	509	
Non-weaving Lane Change Rate, $LC_{NW}$	314	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,933	lc/h
Weaving Intensity Factor, $W$	0.872	
Average Weaving Speed, $S_W$	41.7	mph
Average Non-Weaving Speed, $S_{NW}$	37.4	mph
Average Speed, $S$	38.9	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,380	810	310	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,074	870	333	0	pcph
Weaving Flow Rate, vW	1,203	Total Flow Rate, v			5,276
Non-Weaving Flow Rate, vNW	4,074	Volume Ratio, VR			0.228

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,824	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	1,996	pchpl
Demand Flow-Based Capacity, $c_{IW}$	9,454	pch
Weaving Segment Capacity, $c_w$	7,169	vph
Adjusted Weaving Area Capacity, $c_{wa}$	7,169	vph
Volume-to-Capacity Ratio, $v/c$	0.66	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,203	lc/h
Weaving Lane Change Rate, $LC_w$	1,059	lc/h
Non-weaving Vehicle Index, $I_{NW}$	163	
Non-weaving Lane Change Rate, $LC_{NW}$	177	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,236	lc/h
Weaving Intensity Factor, $W$	0.951	
Average Weaving Speed, $S_w$	40.6	mph
Average Non-Weaving Speed, $S_{NW}$	50.0	mph
Average Speed, $S$	47.5	mph
Density, $D$	27.8	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,590	660	600	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	3,892	716	651	0	pcph
Weaving Flow Rate, vW	1,366	Total Flow Rate, v			5,258
Non-Weaving Flow Rate, vNW	3,892	Volume Ratio, VR			0.260

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,157	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,350	pchpl
Density-Based Capacity, $c_{IWL}$	1,988	pchpl
Demand Flow-Based Capacity, $c_{IW}$	8,969	pch
Weaving Segment Capacity, $c_w$	8,969	vph
Adjusted Weaving Area Capacity, $c_{wa}$	8,969	vph
Volume-to-Capacity Ratio, $v/c$	0.57	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,366	lc/h
Weaving Lane Change Rate, $LC_w$	1,123	lc/h
Non-weaving Vehicle Index, $I_{NW}$	327	
Non-weaving Lane Change Rate, $LC_{NW}$	66	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,190	lc/h
Weaving Intensity Factor, $W$	0.514	
Average Weaving Speed, $S_w$	48.0	mph
Average Non-Weaving Speed, $S_{NW}$	50.1	mph
Average Speed, $S$	49.6	mph
Density, $D$	21.2	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,140	1,060	1,110	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	3,404	1,149	1,203	0	pcph
Weaving Flow Rate, vW	2,353	Total Flow Rate, v			5,757
Non-Weaving Flow Rate, vNW	3,404	Volume Ratio, VR			0.409

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,778	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,872	pchpl
Demand Flow-Based Capacity, $C_{IW}$	5,702	pch
Weaving Segment Capacity, $C_W$	5,702	vph
Adjusted Weaving Area Capacity, $C_{wa}$	5,702	vph
Volume-to-Capacity Ratio, $v/c$	0.98	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,353	lc/h
Weaving Lane Change Rate, $LC_W$	2,153	lc/h
Non-weaving Vehicle Index, $I_{NW}$	361	
Non-weaving Lane Change Rate, $LC_{NW}$	26	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,178	lc/h
Weaving Intensity Factor, $W$	0.689	
Average Weaving Speed, $S_W$	44.6	mph
Average Non-Weaving Speed, $S_{NW}$	42.5	mph
Average Speed, $S$	43.4	mph
Density, $D$	26.6	pcpmpl
Level of Service, LOS	C	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,170	1,290	1,020	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	3,437	1,399	1,106	0	pcph
Weaving Flow Rate, vW	2,505	Total Flow Rate, v		5,941	
Non-Weaving Flow Rate, vNW	3,437	Volume Ratio, VR		0.422	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,924	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,916	pchpl
Demand Flow-Based Capacity, $C_{IW}$	5,528	pch
Weaving Segment Capacity, $C_W$	5,528	vph
Adjusted Weaving Area Capacity, $C_{WA}$	5,528	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.04</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,797	lc/h
Weaving Lane Change Rate, $LC_W$	2,737	lc/h
Non-weaving Vehicle Index, $I_{NW}$	206	
Non-weaving Lane Change Rate, $LC_{NW}$	70	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,807	lc/h
Weaving Intensity Factor, $W$	0.764	
Average Weaving Speed, $S_W$	49.0	mph
Average Non-Weaving Speed, $S_{NW}$	49.2	mph
Average Speed, $S$	49.1	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,760	410	700	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,077	445	759	0	pcph
Weaving Flow Rate, vW	1,203	Total Flow Rate, v		5,280	
Non-Weaving Flow Rate, vNW	4,077	Volume Ratio, VR		0.228	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,824	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,077	pchpl
Demand Flow-Based Capacity, $C_{IW}$	10,223	pch
Weaving Segment Capacity, $C_W$	10,082	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,082	vph
Volume-to-Capacity Ratio, $v/c$	0.51	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	889	lc/h
Weaving Lane Change Rate, $LC_W$	829	lc/h
Non-weaving Vehicle Index, $I_{NW}$	245	
Non-weaving Lane Change Rate, $LC_{NW}$	202	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,031	lc/h
Weaving Intensity Factor, $W$	0.346	
Average Weaving Speed, $S_W$	59.6	mph
Average Non-Weaving Speed, $S_{NW}$	63.5	mph
Average Speed, $S$	62.6	mph
Density, $D$	16.9	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,900	330	270	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,228	358	293	0	pcph
Weaving Flow Rate, $vW$	651	Total Flow Rate, v			4,879
Non-Weaving Flow Rate, $v_{NW}$	4,228	Volume Ratio, VR			0.133

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future (2025)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	3,866	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,112	pchpl
Demand Flow-Based Capacity, $C_{IW}$	17,476	pch
Weaving Segment Capacity, $C_W$	10,252	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,252	vph
Volume-to-Capacity Ratio, $v/c$	0.46	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	716	lc/h
Weaving Lane Change Rate, $LC_W$	539	lc/h
Non-weaving Vehicle Index, $I_{NW}$	42	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	539	lc/h
Weaving Intensity Factor, $W$	0.853	
Average Weaving Speed, $S_W$	47.4	mph
Average Non-Weaving Speed, $S_{NW}$	65.2	mph
Average Speed, $S$	62.1	mph
Density, $D$	15.7	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,810	990	660	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,131	1,073	716	0	pcph
Weaving Flow Rate, $vW$	1,789	Total Flow Rate, v			5,920
Non-Weaving Flow Rate, $vNW$	4,131	Volume Ratio, VR			0.302

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,607	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,017	pchpl
Demand Flow-Based Capacity, $C_{IW}$	7,711	pch
Weaving Segment Capacity, $C_W$	7,711	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,711	vph
Volume-to-Capacity Ratio, $v/c$	0.75	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,147	lc/h
Weaving Lane Change Rate, $LC_W$	2,087	lc/h
Non-weaving Vehicle Index, $I_{NW}$	248	
Non-weaving Lane Change Rate, $LC_{NW}$	213	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,300	lc/h
Weaving Intensity Factor, $W$	0.652	
Average Weaving Speed, $S_W$	51.3	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	53.1	mph
Density, $D$	22.3	pcmpl
Level of Service, LOS	C	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,610	1,120	190	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,998	1,214	206	0	pcph
Weaving Flow Rate, vW	1,420	Total Flow Rate, v			6,419
Non-Weaving Flow Rate, vNW	4,998	Volume Ratio, VR			0.221

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future (2025)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,755	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $c_{IFL}$	2,400	pchpl
Density-Based Capacity, $c_{IWL}$	2,082	pchpl
Demand Flow-Based Capacity, $c_{IW}$	10,530	pch
Weaving Segment Capacity, $c_w$	10,107	vph
Adjusted Weaving Area Capacity, $c_{wa}$	10,107	vph
Volume-to-Capacity Ratio, $v/c$	0.62	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,429	lc/h
Weaving Lane Change Rate, $LC_w$	2,369	lc/h
Non-weaving Vehicle Index, $I_{NW}$	300	
Non-weaving Lane Change Rate, $LC_{NW}$	392	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,760	lc/h
Weaving Intensity Factor, $W$	0.753	
Average Weaving Speed, $S_w$	49.2	mph
Average Non-Weaving Speed, $S_{NW}$	51.4	mph
Average Speed, $S$	50.9	mph
Density, $D$	25.2	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, $L_s$	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	ln
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,702	1,027	1,000	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	5,098	1,113	1,084	0	pcph
Weaving Flow Rate, vW	2,198	Total Flow Rate, v			7,296
Non-Weaving Flow Rate, vNW	5,098	Volume Ratio, VR			0.301

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,597	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,979	pchpl
Demand Flow-Based Capacity, $C_{IW}$	7,735	pch
Weaving Segment Capacity, $C_W$	7,735	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,735	vph
Volume-to-Capacity Ratio, $v/c$	0.92	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,227	lc/h
Weaving Lane Change Rate, $LC_W$	2,050	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	141	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,191	lc/h
Weaving Intensity Factor, $W$	2.582	
Average Weaving Speed, $S_W$	31.8	mph
Average Non-Weaving Speed, $S_{NW}$	52.0	mph
Average Speed, $S$	43.6	mph
Density, $D$	33.5	pcpmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,734	990	736	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,048	1,073	798	0	pcph
Weaving Flow Rate, vW	1,871	Total Flow Rate, v			5,920
Non-Weaving Flow Rate, vNW	4,048	Volume Ratio, VR			0.316

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,757	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,005	pcph
Demand Flow-Based Capacity, $C_{IW}$	7,371	pch
Weaving Segment Capacity, $C_W$	7,371	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,371	vph
Volume-to-Capacity Ratio, $v/c$	0.78	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,147	lc/h
Weaving Lane Change Rate, $LC_W$	2,087	lc/h
Non-weaving Vehicle Index, $I_{NW}$	243	
Non-weaving Lane Change Rate, $LC_{NW}$	196	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,283	lc/h
Weaving Intensity Factor, $W$	0.649	
Average Weaving Speed, $S_W$	51.4	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	53.1	mph
Density, $D$	22.3	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,988	9,600	pcph	0.52
Exiting General Purpose Lanes	5,263	2,400	pcph	2.19
On Ramp	1,073	2,100	pcph	0.51
Off Ramp	798	2,100	pcph	0.38

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,582	1,120	142	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,968	1,214	154	0	pcph
Weaving Flow Rate, vW	1,368	Total Flow Rate, v			6,336
Non-Weaving Flow Rate, vNW	4,968	Volume Ratio, VR			0.216

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,700	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,086	pcph
Demand Flow-Based Capacity, $C_{IW}$	10,790	pch
Weaving Segment Capacity, $C_W$	10,128	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,128	vph
Volume-to-Capacity Ratio, $v/c$	0.61	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,429	lc/h
Weaving Lane Change Rate, $LC_W$	2,369	lc/h
Non-weaving Vehicle Index, $I_{NW}$	298	
Non-weaving Lane Change Rate, $LC_{NW}$	386	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,754	lc/h
Weaving Intensity Factor, $W$	0.752	
Average Weaving Speed, $S_W$	49.2	mph
Average Non-Weaving Speed, $S_{NW}$	51.4	mph
Average Speed, $S$	50.9	mph
Density, $D$	24.9	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,271	9,600	pcph	0.55
Exiting General Purpose Lanes	6,331	2,400	pcph	2.64
On Ramp	1,214	2,100	pcph	0.58
Off Ramp	154	2,100	pcph	0.07



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,492	1,027	1,210	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,870	1,113	1,312	0	pcph
Weaving Flow Rate, $vW$	2,425	Total Flow Rate, v			7,296
Non-Weaving Flow Rate, $v_{NW}$	4,870	Volume Ratio, VR			0.332

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,935	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	1,954	pcph
Demand Flow-Based Capacity, $C_{IW}$	7,009	pch
Weaving Segment Capacity, $C_W$	7,009	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,009	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.01</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,227	lc/h
Weaving Lane Change Rate, $LC_W$	2,050	lc/h
Non-weaving Vehicle Index, $I_{NW}$	49	
Non-weaving Lane Change Rate, $LC_{NW}$	94	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,144	lc/h
Weaving Intensity Factor, $W$	2.538	
Average Weaving Speed, $S_W$	32.0	mph
Average Non-Weaving Speed, $S_{NW}$	52.0	mph
Average Speed, $S$	43.0	mph
Density, $D$	-	pcmpl
Level of Service, LOS	F	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,362	12,000	pcph	0.53
Exiting General Purpose Lanes	6,164	2,400	pcph	<b>2.57</b>
On Ramp	1,113	2,100	pcph	0.53
Off Ramp	1,312	2,100	pcph	0.62

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,558	1,290	332	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,494	1,385	356	0	pcph
Weaving Flow Rate, vW	1,742	Total Flow Rate, v		7,235	
Non-Weaving Flow Rate, vNW	5,494	Volume Ratio, VR		0.241	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to University Off Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,957	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,986	pchpl
Demand Flow-Based Capacity, $C_{IW}$	8,965	pch
Weaving Segment Capacity, $C_W$	7,143	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,143	vph
Volume-to-Capacity Ratio, $v/c$	0.91	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,742	lc/h
Weaving Lane Change Rate, $LC_W$	1,598	lc/h
Non-weaving Vehicle Index, $I_{NW}$	220	
Non-weaving Lane Change Rate, $LC_{NW}$	470	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,068	lc/h
Weaving Intensity Factor, $W$	1.427	
Average Weaving Speed, $S_W$	35.6	mph
Average Non-Weaving Speed, $S_{NW}$	43.8	mph
Average Speed, $S$	41.5	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,158	583	690	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	5,592	632	748	0	pcph
Weaving Flow Rate, vW	1,380	Total Flow Rate, v		6,973	
Non-Weaving Flow Rate, vNW	5,592	Volume Ratio, VR		0.198	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,515	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	2,037	pchpl
Demand Flow-Based Capacity, $C_{IW}$	11,771	pch
Weaving Segment Capacity, $C_W$	9,887	vph
Adjusted Weaving Area Capacity, $C_{wa}$	9,887	vph
Volume-to-Capacity Ratio, $v/c$	0.68	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,380	lc/h
Weaving Lane Change Rate, $LC_W$	1,137	lc/h
Non-weaving Vehicle Index, $I_{NW}$	470	
Non-weaving Lane Change Rate, $LC_{NW}$	417	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,554	lc/h
Weaving Intensity Factor, $W$	0.634	
Average Weaving Speed, $S_W$	45.6	mph
Average Non-Weaving Speed, $S_{NW}$	48.4	mph
Average Speed, $S$	47.8	mph
Density, $D$	29.2	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	1	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	1	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,351	1,223	1,390	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,717	1,326	1,507	0	pcph
Weaving Flow Rate, vW	2,833	Total Flow Rate, v			7,550
Non-Weaving Flow Rate, vNW	4,717	Volume Ratio, VR			0.375

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,405	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,901	pchpl
Demand Flow-Based Capacity, $C_{IW}$	6,210	pch
Weaving Segment Capacity, $C_W$	6,210	vph
Adjusted Weaving Area Capacity, $C_{WA}$	6,210	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.18</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,833	lc/h
Weaving Lane Change Rate, $LC_W$	2,633	lc/h
Non-weaving Vehicle Index, $I_{NW}$	500	
Non-weaving Lane Change Rate, $LC_{NW}$	296	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,929	lc/h
Weaving Intensity Factor, $W$	0.871	
Average Weaving Speed, $S_W$	41.7	mph
Average Non-Weaving Speed, $S_{NW}$	37.4	mph
Average Speed, $S$	38.9	mph
Density, $D$	-	pcmpl
Level of Service, LOS	F	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to Unviersity Off Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	4	In
Weaving Segment Length, L <sub>s</sub>	200	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,323	810	367	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	14.5%	2.0%	2.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.873	0.980	0.980	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,005	870	394	0	pcph
Weaving Flow Rate, vW	1,264	Total Flow Rate, v			5,269
Non-Weaving Flow Rate, vNW	4,005	Volume Ratio, VR			0.240

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	MLK On Ramp to University Off Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,948	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,987	pchpl
Demand Flow-Based Capacity, $C_{IW}$	8,996	pch
Weaving Segment Capacity, $C_W$	7,145	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,145	vph
Volume-to-Capacity Ratio, $v/c$	0.66	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,264	lc/h
Weaving Lane Change Rate, $LC_W$	1,120	lc/h
Non-weaving Vehicle Index, $I_{NW}$	160	
Non-weaving Lane Change Rate, $LC_{NW}$	163	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,283	lc/h
Weaving Intensity Factor, $W$	0.980	
Average Weaving Speed, $S_W$	40.3	mph
Average Non-Weaving Speed, $S_{NW}$	49.6	mph
Average Speed, $S$	47.0	mph
Density, $D$	28.0	pcmpl
Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	420	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,533	636	600	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	3,831	690	651	0	pcph
Weaving Flow Rate, vW	1,340	Total Flow Rate, v			5,171
Non-Weaving Flow Rate, vNW	3,831	Volume Ratio, VR			0.259

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	530	ft
Interchange Density, ID	2.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	1	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	1	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,059	1,096	1,110	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	3,317	1,188	1,203	0	pcph
Weaving Flow Rate, vW	2,392	Total Flow Rate, v			5,708
Non-Weaving Flow Rate, vNW	3,317	Volume Ratio, VR			0.419

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	3rd Street On-Ramp to 91 On Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,895	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,863	pchpl
Demand Flow-Based Capacity, $C_{IW}$	5,561	pch
Weaving Segment Capacity, $C_W$	5,561	vph
Adjusted Weaving Area Capacity, $C_{wa}$	5,561	vph
Volume-to-Capacity Ratio, $v/c$	1.00	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,392	lc/h
Weaving Lane Change Rate, $LC_W$	2,192	lc/h
Non-weaving Vehicle Index, $I_{NW}$	352	
Non-weaving Lane Change Rate, $LC_{NW}$	7	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,199	lc/h
Weaving Intensity Factor, $W$	0.695	
Average Weaving Speed, $S_W$	44.5	mph
Average Non-Weaving Speed, $S_{NW}$	42.3	mph
Average Speed, $S$	43.2	mph
Density, $D$	26.4	pcpmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	URC North District Development TIA
Freeway	NB I-215
Segment	University On to 3rd Street Off
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,150	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,350	pchpl
Density-Based Capacity, $C_{IWL}$	1,988	pchpl
Demand Flow-Based Capacity, $C_{IW}$	8,990	pch
Weaving Segment Capacity, $C_W$	8,990	vph
Adjusted Weaving Area Capacity, $C_{wa}$	8,990	vph
Volume-to-Capacity Ratio, $v/c$	0.56	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	1,340	lc/h
Weaving Lane Change Rate, $LC_W$	1,097	lc/h
Non-weaving Vehicle Index, $I_{NW}$	322	
Non-weaving Lane Change Rate, $LC_{NW}$	54	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,151	lc/h
Weaving Intensity Factor, $W$	0.501	
Average Weaving Speed, $S_W$	48.3	mph
Average Non-Weaving Speed, $S_{NW}$	50.4	mph
Average Speed, $S$	49.8	mph
Density, $D$	20.8	pcmpl
Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,150	1,290	1,040	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	3,415	1,399	1,128	0	pcph
Weaving Flow Rate, vW	2,526	Total Flow Rate, v		5,941	
Non-Weaving Flow Rate, vNW	3,415	Volume Ratio, VR		0.425	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	6,965	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,913	pchpl
Demand Flow-Based Capacity, $C_{IW}$	5,480	pch
Weaving Segment Capacity, $C_W$	5,480	vph
Adjusted Weaving Area Capacity, $C_{wa}$	5,480	vph
Volume-to-Capacity Ratio, $v/c$	<b>1.05</b>	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,797	lc/h
Weaving Lane Change Rate, $LC_W$	2,737	lc/h
Non-weaving Vehicle Index, $I_{NW}$	205	
Non-weaving Lane Change Rate, $LC_{NW}$	66	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,803	lc/h
Weaving Intensity Factor, $W$	0.763	
Average Weaving Speed, $S_W$	49.0	mph
Average Non-Weaving Speed, $S_{NW}$	49.2	mph
Average Speed, $S$	49.1	mph
Density, $D$	-	pcpmpl
Level of Service, LOS	F	



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,853	410	587	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,177	445	636	0	pcph
Weaving Flow Rate, vW	1,081	Total Flow Rate, v			5,258
Non-Weaving Flow Rate, vNW	4,177	Volume Ratio, VR			0.206

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,593	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,095	pchpl
Demand Flow-Based Capacity, $C_{IW}$	11,335	pch
Weaving Segment Capacity, $C_W$	10,168	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,168	vph
Volume-to-Capacity Ratio, $v/c$	0.50	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	889	lc/h
Weaving Lane Change Rate, $LC_W$	829	lc/h
Non-weaving Vehicle Index, $I_{NW}$	251	
Non-weaving Lane Change Rate, $LC_{NW}$	223	lc/h
Total Lane Change Rate, $LC_{ALL}$	1,052	lc/h
Weaving Intensity Factor, $W$	0.352	
Average Weaving Speed, $S_W$	59.4	mph
Average Non-Weaving Speed, $S_{NW}$	63.6	mph
Average Speed, $S$	62.6	mph
Density, $D$	16.8	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, L <sub>s</sub>	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N <sub>WL</sub>	2.0	In
On Ramp to Freeway Lane Changes, LC <sub>RF</sub>	2	
Freeway to Off Ramp Lane Changes, LC <sub>FR</sub>	0	
On Ramp to Off Ramp Lane Changes, LC <sub>RR</sub>	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,993	359	270	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E <sub>T</sub>	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f <sub>HV</sub>	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v <sub>p</sub>	4,329	389	293	0	pcph
Weaving Flow Rate, vW	682	Total Flow Rate, v			5,011
Non-Weaving Flow Rate, vNW	4,329	Volume Ratio, VR			0.136

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	3,893	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	2,110	pchpl
Demand Flow-Based Capacity, $C_{IW}$	17,122	pch
Weaving Segment Capacity, $C_W$	10,242	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,242	vph
Volume-to-Capacity Ratio, $v/c$	0.48	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	778	lc/h
Weaving Lane Change Rate, $LC_W$	601	lc/h
Non-weaving Vehicle Index, $I_{NW}$	43	
Non-weaving Lane Change Rate, $LC_{NW}$	0	lc/h
Total Lane Change Rate, $LC_{ALL}$	601	lc/h
Weaving Intensity Factor, $W$	0.931	
Average Weaving Speed, $S_W$	46.1	mph
Average Non-Weaving Speed, $S_{NW}$	64.6	mph
Average Speed, $S$	61.2	mph
Density, $D$	16.4	pcmpl
Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,734	990	736	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,048	1,073	798	0	pcph
Weaving Flow Rate, vW	1,871	Total Flow Rate, v			5,920
Non-Weaving Flow Rate, vNW	4,048	Volume Ratio, VR			0.316

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	SR-60 On Ramp to 3rd Street Off-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,757	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,005	pcph
Demand Flow-Based Capacity, $C_{IW}$	7,371	pch
Weaving Segment Capacity, $C_W$	7,371	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,371	vph
Volume-to-Capacity Ratio, $v/c$	0.78	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,147	lc/h
Weaving Lane Change Rate, $LC_W$	2,087	lc/h
Non-weaving Vehicle Index, $I_{NW}$	243	
Non-weaving Lane Change Rate, $LC_{NW}$	196	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,283	lc/h
Weaving Intensity Factor, $W$	0.649	
Average Weaving Speed, $S_W$	51.4	mph
Average Non-Weaving Speed, $S_{NW}$	53.9	mph
Average Speed, $S$	53.1	mph
Density, $D$	22.3	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,988	9,600	pcph	0.52
Exiting General Purpose Lanes	5,263	2,400	pcph	2.19
On Ramp	1,073	2,100	pcph	0.51
Off Ramp	798	2,100	pcph	0.38

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	600	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,582	1,120	142	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	4,968	1,214	154	0	pcph
Weaving Flow Rate, vW	1,368	Total Flow Rate, v			6,336
Non-Weaving Flow Rate, vNW	4,968	Volume Ratio, VR			0.216

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University Weave
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	4,700	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pcph
Density-Based Capacity, $C_{IWL}$	2,086	pcph
Demand Flow-Based Capacity, $C_{IW}$	10,790	pch
Weaving Segment Capacity, $C_W$	10,128	vph
Adjusted Weaving Area Capacity, $C_{wa}$	10,128	vph
Volume-to-Capacity Ratio, $v/c$	0.61	

Speed and Density

Minimum Lane Change Rate, $LC_{MIN}$	2,429	lc/h
Weaving Lane Change Rate, $LC_W$	2,369	lc/h
Non-weaving Vehicle Index, $I_{NW}$	298	
Non-weaving Lane Change Rate, $LC_{NW}$	386	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,754	lc/h
Weaving Intensity Factor, $W$	0.752	
Average Weaving Speed, $S_W$	49.2	mph
Average Non-Weaving Speed, $S_{NW}$	51.4	mph
Average Speed, $S$	50.9	mph
Density, $D$	24.9	pcmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,271	9,600	pcph	0.55
Exiting General Purpose Lanes	6,331	2,400	pcph	2.64
On Ramp	1,214	2,100	pcph	0.58
Off Ramp	154	2,100	pcph	0.07



HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	In
Weaving Segment Length, $L_s$	100	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, $N_{WL}$	2.0	In
On Ramp to Freeway Lane Changes, $LC_{RF}$	2	
Freeway to Off Ramp Lane Changes, $LC_{FR}$	0	
On Ramp to Off Ramp Lane Changes, $LC_{RR}$	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	1.00
Demand Adjustment Factor, DAF	1.00

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,702	1,027	1,000	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, $E_T$	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, $f_{HV}$	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, $v_p$	5,098	1,113	1,084	0	pcph
Weaving Flow Rate, vW	2,198	Total Flow Rate, v			7,296
Non-Weaving Flow Rate, vNW	5,098	Volume Ratio, VR			0.301

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	UCR North District Development TIA
Freeway	SB I-215
Segment	University On-Ramp
Alternative	Future + Buildout
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, $L_{MAX}$	5,597	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, $C_{IFL}$	2,400	pchpl
Density-Based Capacity, $C_{IWL}$	1,979	pchpl
Demand Flow-Based Capacity, $C_{IW}$	7,735	pch
Weaving Segment Capacity, $C_W$	7,735	vph
Adjusted Weaving Area Capacity, $C_{wa}$	7,735	vph
Volume-to-Capacity Ratio, $v/c$	0.92	

Speed and Density

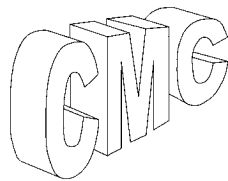
Minimum Lane Change Rate, $LC_{MIN}$	2,227	lc/h
Weaving Lane Change Rate, $LC_W$	2,050	lc/h
Non-weaving Vehicle Index, $I_{NW}$	51	
Non-weaving Lane Change Rate, $LC_{NW}$	141	lc/h
Total Lane Change Rate, $LC_{ALL}$	2,191	lc/h
Weaving Intensity Factor, $W$	2.582	
Average Weaving Speed, $S_W$	31.8	mph
Average Non-Weaving Speed, $S_{NW}$	52.0	mph
Average Speed, $S$	43.6	mph
Density, $D$	33.5	pcpmppl
Level of Service, LOS	D	

**California Senate Bill 610**

**Water Supply Assessment**  
for  
**UCR North District**  
**Development Project**

Prepared for  
The City of Riverside  
Public Utilities Department

by:



*Charles Marr Consulting*

Contact:  
Charlie Marr, P.E.

**November 27, 2018**

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Riverside Public Utilities  
Water Supply Assessment  
UCR North District Development Project

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## ACRONYMS and ABBREVIATIONS

AB	Assembly Bill
ACT	Urban Water Management Planning Act of 1983
AF	Acre Feet
AFY	Acre Feet per Year
AWPF	Advanced Water Purification Facilities
BMP	Best Management Practices
BTAC	Basin Technical Advisory Committee
CA	California
CALFED	California and Federal Bay-Delta Program
CALSIM	California Water Allocation and Reservoir Operations Model
WSBBW	Western-San Bernardino Basin Watermaster
SBVWCD	San Bernardino Valley Water Conservation District
CCF	Hundred Cubic Feet
CEQA	California Environmental Quality Act
CII	Commercial, Industrial and Institutional
CIMIS	California Irrigation Management Information System
CIP	Capital Improvement Program
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
CDPH	California Department of Public Health
CVP	Central Valley Project
DBP	Disinfection Byproducts
DDW	Division of Drinking Water
DMM	Demand Management Measure
DWR	Department of Water Resources
EMWD	Eastern Municipal Water District
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ETo	Evapotranspiration
gpd	Gallons Per Day
gpm	Gallons Per Minute
IAWP	Interim Agricultural Water Program
IRP	Integrated Resources Plan
IRWMP	Integrated Regional Water Management Plan
JPA	Joint Powers Agreement
LRP	Local Resources Program
MAF	Million Acre Feet
Max	Maximum
MCL	Maximum Contaminant Level
MGD	Million Gallons per Day
mg/L	Milligrams Per Liter
Min	Minimum
MOU	Memorandum of Understanding
MWD	Metropolitan Water District of Southern California
MZ	Management Zone
OWOW	One Water One Watershed
QSA	Quantification Settlement Agreement
RP	Regional Plant
RWIP	Recycled Water Implementation Plan



RWQCB	Regional Water Quality Control Board
RPU	Riverside Public Utilities
RWQCP	Riverside Regional Water Quality Control Plant
SB	Senate Bill
RCFC&WCD	Riverside County Flood Control and Water Conservation District
SAWPA	Santa Ana Watershed Project Authority
SARWQCB	Santa Ana Regional Water Quality Control Board
SBBA	San Bernardino Basin Area
SBCFCD	San Bernardino County Flood Control District
SBVMWD	San Bernardino Valley Municipal Water District (or Valley District)
SBVWCD	San Bernardino Valley Water Conservation District
SCADA	Supervisory Control and Data Acquisition
SCIWP	Southern California Integrated Watershed Program
SWP	State Water Project
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TIN	Total Inorganic Nitrogen
TMDL	Total Maximum Daily Load
USAWRA	Upper Santa Ana Water Resources Association
USBR	U.S. Bureau of Reclamation
UWMP	Urban Water Management Plan
VOC	Volatile Organic Compounds
WMWD	Western Municipal Water District
WMP	Water Master Plan
WSA	Water Supply Assessment
WSDM	Water Surplus and Drought Management
WSMP	Water System Master Plan
WTP	Water Treatment Plant

## **EXECUTIVE SUMMARY**

A California Environmental Quality Act (CEQA) report is being prepared on behalf of the City of Riverside's water utility Riverside Public Utilities (RPU) in support of the North District Development Project (NDDP or Project). The EIR includes an assessment of utilities, including water supply. Recent legislation, Senate Bill 610, requires that a water supply assessment (WSA), based on specific criteria, be prepared to document the sufficiency of available water supply for the RPU and the Project. The WSA identifies water supply and reliability to the City and the Project both now and in the future.

The WSA is considered at a point in time when known future projects are considered. It is also understood that new and innovative programs and projects in concept are yet to be designed. Therefore, WSAs are a part of the ongoing planning efforts of the RPU and the City to optimize its water resource program.

The WSA includes a discussion of the relevant legislation which requires the WSA; an overview of the proposed Project; analysis of water demands for RPU's existing service area and the Project over a 20-plus year planning period; and an analysis of reliability of RPU's water supplies. This WSA includes discussion of the potential impacts supplying agencies have on RPU's water system, and concludes with a sufficiency analysis of water supply during normal, single-dry, and multiple dry years over a 20-plus year planning period.

### **North District Development Project (NDDP)**

The NDDP is a proposed development component of the University of California at Riverside (UCR) campus. The NDDP project site is located in the northern portion of campus and generally bounded by Linden Street to the south, Canyon Crest Drive to the west, Blaine Street to the north, and Watkins Drive to the east. The 51-acre site is currently occupied by low density housing and other UCR uses which will either remain or be relocated. The proposed Project includes an Events Center, 7,300 beds for student housing, and college mixed use districts.

### **Water Supply**

As described in RPU's 2015 Urban Water Management Plan (UWMP), the RPU relies primarily on RPU-produced groundwater sources. Other sources include imported water and recycled water.

- The majority of the groundwater supply is from the Bunker Hill Basin, with supplemental groundwater sources from the Rialto-Colton Basin, and North and South Riverside subbasins. Under the Western-San Bernardino Judgment, RPU has a base extraction right from the Bunker Hill Basin of 53,426 AFY. Active recharge of the Bunker Hill Basin has increased RPU's extraction rights to 55,263 AFY.
- Under the Western-San Bernardino Judgment, RPU has a total extraction right from the Rialto-Colton Basin of 2,728 AFY.
- Under the Western-San Bernardino Judgment, RPU has a base extraction right from the Riverside North subbasin of 10,902 AFY.
- Under the Western-San Bernardino Judgment, RPU has a base extraction right from the Riverside South subbasin of 16,880 AFY
- RPU has the right to purchase up to 30 cfs of SWP imported water from WMWD (21,700 AFY), pursuant to a 1986 agreement.

- The proposed WMWD/RPU recycled water project would provide conveyance capacity to deliver recycled water from the RWQCP to additional users in the RPU service area. It is anticipated that up to 6,170 AFY could be made available for RPU users in the future, after the Plant's commitment to Santa Ana River discharge flows for Orange County.

### **Water Demand**

The City's total water demand in Year 2015 was approximately 75,128 acre-feet per year (AFY). The Project water demand was accounted for in the future demand estimate of the 2015 UWMP by way of an additional future demand for the UCR of 3,300 AFY. The NDDP project net water demand is estimated to be 700 AFY, including 46 AFY for outdoor irrigation. The Project can use recycled water for all outdoor landscape irrigation depending on the feasibility of expanding recycled water conveyance facilities to UCR. Combined with the other UCR LRDP projects completed since the adoption of the 2015 UWMP, and currently-proposed UCR projects that were also included in the UWMP projections, the total additional water demand for UCR is anticipated to increase to 925 AFY, which is within the projected demand growth for UCR in the 2015 UWMP.

### **Demand and Supply Projections**

Development of the proposed NDDP is expected to begin in 2019. The NDDP and current Long Range Development projects planned for the UCR campus will not exceed RPU's projected water demands for the UCR campus in the 2015 UWMP. Continued water use reduction habits and increased well production from RPU's proposed local water capacity enhancement projects are anticipated to satisfy the RPU's overall water demand increase through Year 2040.

Analyses of normal, single-dry, and multiple-dry year scenarios also demonstrate RPU's ability to supply water to meet demand until year 2040 in all hydrologic conditions based on the Watermaster's current Basin Safe Yield capacity.

### **Water Supply Reliability**

Continued reliability of existing RPU water supplies for its customers, including UCR, is based on maintaining current groundwater management programs. Prevailing drought conditions throughout southern California will continue to challenge local water agencies. But these challenges are much greater for those relying on imported water supplies. RPU relies very little on imported water supplies. And, future conjunctive use of the local groundwater basins serving RPU will utilize surface and imported water supplies during off-peak seasons.

### **Conclusion**

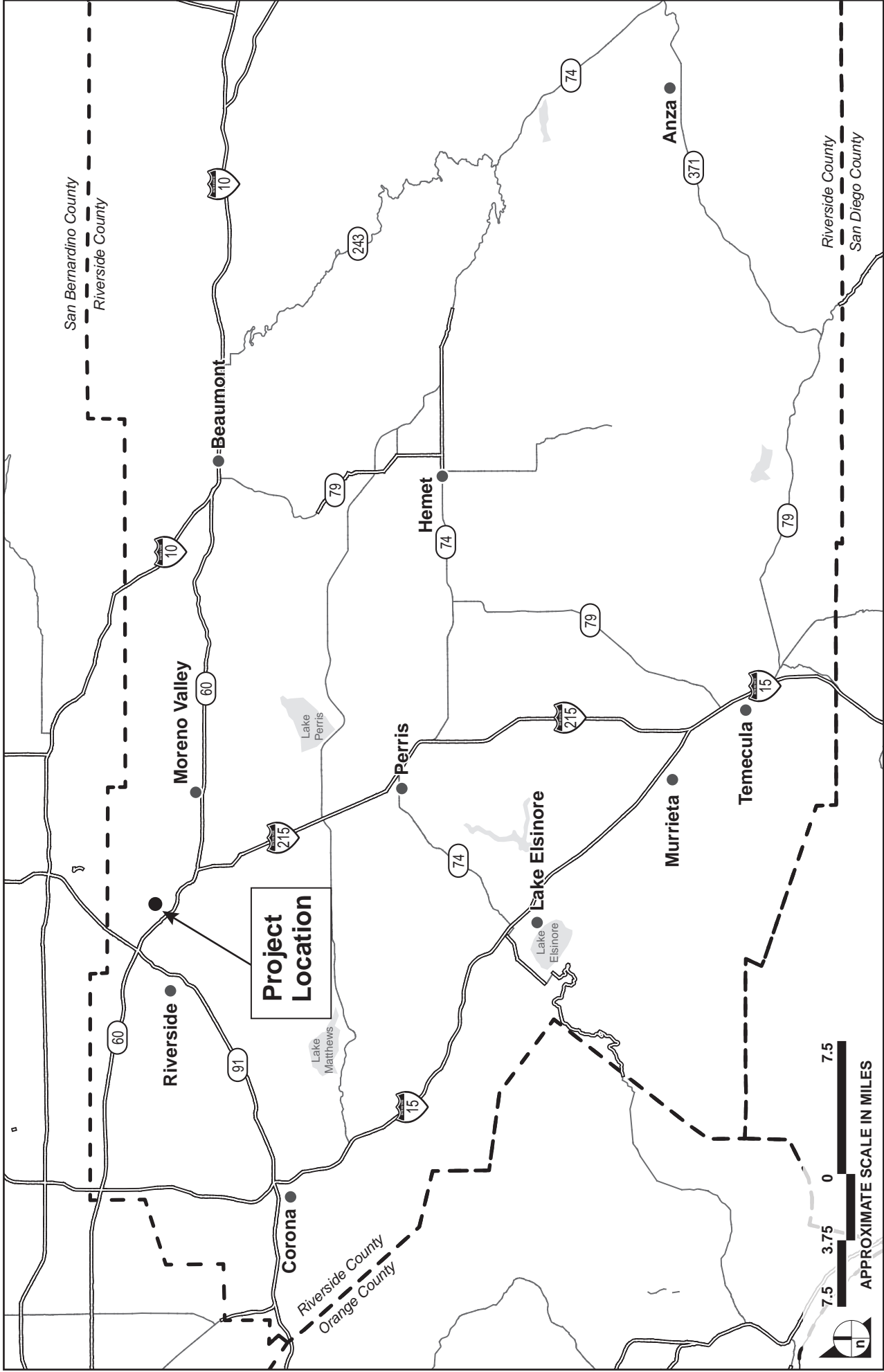
The information included in this Water Supply Assessment is based on the Riverside Public Utilities 2015 UWMP, which describes groundwater production and local water supply that will satisfy the RPU's ability to serve the additional water demands of UCR's Long Range Development Plan, including the North District Development Project, both now and through Year 2040.

## 1.0 INTRODUCTION

A California Environmental Quality Act (CEQA) report is being prepared for the North District Development Project (NDDP or Project). The EIR includes an assessment of utilities, including water supply. Legislation implemented in 2002 (Senate Bill 610), requires that a water supply assessment (WSA), based on specific criteria, be prepared to document the sufficiency of available water supply for the City of Riverside's Public Utilities department (Riverside Public Utilities, RPU) and the Project. The WSA identifies water supply and reliability for the RPU department, now and into the future, and makes a determination regarding water supply sufficiency for the Project. The regional location of the Project is shown in **Exhibit 1**.

The Project is a proposed development component of the University of California at Riverside (UCR) campus. The NDDP is located at the north end of campus adjacent to Linden Street and Canyon Crest Drive. The 51.15-acre site currently consists of low density housing. The proposed Project includes an Events Center, 7,300 beds for student housing, and college mixed use districts.

The WSA is part of the ongoing planning efforts of the City of Riverside to optimize its water resource program. The WSA includes a discussion of the Senate Bill 610 legislation, an overview of the proposed Project, and analysis of water supply and demand for the City's service area with the Project and other concurrent City development projects over a 20-year planning period. The WSA also includes an analysis of reliability of the City's water supplies and water quality, and concludes with an analysis describing water supply during normal, single-dry, and multiple dry years over a 20-plus year planning period.



SOURCE: Impact Sciences, 2018

EXHIBIT 1-1

NDDP Regional Location



## 2.0 LEGISLATION

Due to the potential impact by the North District Development Project on current and future water supplies, the State of California, through SB 610, requires that a WSA be completed for the proposed development. The Project is proposed to student housing capacity for up to 7,300 beds, which exceeds the residential threshold for SB 610 of 500 dwelling units; therefore, preparation of a WSA is required to determine the sufficiency of water supply for the Project and the City's water customers, now and for a 20-year planning period. The following information outlines the requirements of SB 610.

### 2.1 SB 610 Water Supply Planning

Senate Bill (SB) 610 was implemented January 2002. SB 610 requires a development that qualifies as a "Project" under Water Code 10912 to be supported in CEQA documentation with a Water Supply Assessment report drafted to specifically identify the public water system that shall supply water to the project and analyze the availability and reliability of water supply to the development. The Water Supply Assessment is to include the following if applicable to the supply conditions:

1. Discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses.
2. Identification of existing water supply entitlements, water rights, or water service contracts secured by the purveying agency and water received in prior years pursuant to those entitlements, rights, and contracts.
3. Description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights or water service contracts.
4. Water supply entitlements, water rights or water service contracts shall be demonstrated by supporting documentation such as the following:
  - a. Written contracts or other proof of entitlement to an identified water supply.
  - b. Copies of capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
  - c. Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.
  - d. Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.
5. Identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.
6. If groundwater is included for the supply for a proposed project, the following additional information is required:
  - a. Description of groundwater basin(s) from which the proposed project will be supplied. Adjudicated basins must have a copy of the court order or decree adopted and a description of the amount of groundwater the public water system has the legal right to pump. For non-adjudicated basins, information on whether the DWR has identified the basin as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of DWR that

- characterizes the condition of the basin, and a detailed description of the efforts being undertaken in the basin to eliminate the long-term overdraft condition.
- b. Description and analysis of the amount and location of groundwater pumped by the public water system for the past five (5) years from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
  - c. Description and analysis of the amount and location of groundwater projected to be pumped by the public water system from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
  - d. Analysis of sufficiency of the groundwater from the basin(s) from which the proposed project will be supplied.
7. The water supply assessment shall be included in any environmental document prepared for the project.
  8. The assessment may include an evaluation of any information included in that environmental document. A determination shall be made whether the projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

## **2.2 SBx7-7 and EO B-29-15**

The Water Conservation Act of 2009 (SBx7-7) requires all California urban water agencies to set and meet certain demand reduction targets in order to assist the State in reducing urban water use by 20 percent by 2020. The Act also requires each agency to monitor its progress toward its targets. This was implemented for the purpose of meeting the mandate to reduce per capita urban water consumption by 20 percent statewide. SBx7-7 describes the overall process by which the City of Riverside is to comply with the requirements. It specifically identifies methods for establishing urban water use targets. These requirements and the City of Riverside specific Compliance Plan are outlined in the 2010 UWMP.

The Governor issued a State of Emergency and Continued State of Emergency in 2014 in response to the persistent state-wide drought. Most recently, Executive Order B-29-15 was issued by the Governor in April 2015 which essentially increases the water use reduction goal to 25 percent as compared to 2013 usage throughout the State. The EO outlines specific water use reduction orders designed to heighten the urgency to reduce water consumption and facilitate the ability of local agencies to implement and enforce water conservation requirements. It addresses funding for projects designed to increase local water supplies and improve water supply reliability. It also orders more frequent reporting and modifications to the State's Model Water Efficient Landscape Ordinance; mandates Agricultural water suppliers to prepare their Agricultural Water Management Plans by specific dates; and orders the State to coordinate their water conservation related goals with other State departments like Fish and Wildlife, Forestry and Fire Protection, and the Energy Commission.

Additionally, the State Water Resources Control Board on May 5, 2015, adopted regulations implementing Executive Order B-29-15. Under this SWRCB regulation the City of Riverside is required to reduce its total potable water production by 36 percent for each month as compared to the amount used in the same month in 2013.

### 3.0 NORTH DISTRICT DEVELOPMENT PROJECT (NDDP) PROJECT

#### 3.1 Project Description

The North District Development Project (NDDP or Project) is a proposed development component of the University of California at Riverside (UCR) campus. The NDDP project site is generally bounded by Linden Street to the south, Canyon Crest Drive to the west, Blaine Street to the north, and Watkins Drive to the east, as shown in the aerial image of **Exhibit 3-1**. The 51.15-acre site currently consists of low-density housing. For the purposes of the WSA, the aerial image was used to determine unit count for an estimation of existing site water demands. **Exhibit 3-2** is a zoomed-in view of the image.

The NDDP site plan and proposed concept development is shown in **Exhibit 3-3**. The proposed Project includes an events center, up to 7,300 beds, 157,000 square feet of Mixed Use District, and open space, and parking, as outlined in **Table 1**.

**Table 3-1 - North District Development Project (MAXIMUM)**

Segment	Land Use	Acres <sup>[2]</sup>	Quantity <sup>[1]</sup>	
			quantity	Building Area
1	Student Residential 1	2.125	1,000 beds	
	Mixed Use District 1	2.125		15,000 sf
2	Student Residential 2	3.075	1,300 beds	
	Mixed Use District 2	3.075		22,000 sf
	Dining Commons	-		
3	Student Residential 3	2.725	1,400 beds	
	Mixed Use District 3	2.725		50,000 sf
4	Student Residential 4	4.2	2,600 beds	
	Mixed Use District 4	4.2		70,000 sf
5	Student Residential 5	1.7	1,000 beds	
	Mixed Use District 5	1.7		-
6	Events Center	5.7	7,000 seats	-
7	Open Space	11.6	-	-
8	Parking 1	2.15	-	-
9	Parking 2	4.05	-	-
<b>Total</b>		<b>51.15</b>	<b>7,300 DU</b> <b>7,000 seats</b>	<b>157,000 sf</b>

[1] Taken from NDDP Initial Study, June 2018.

[2] Assumes 'residential' and 'mixed-use' split the total segment acreage equally.

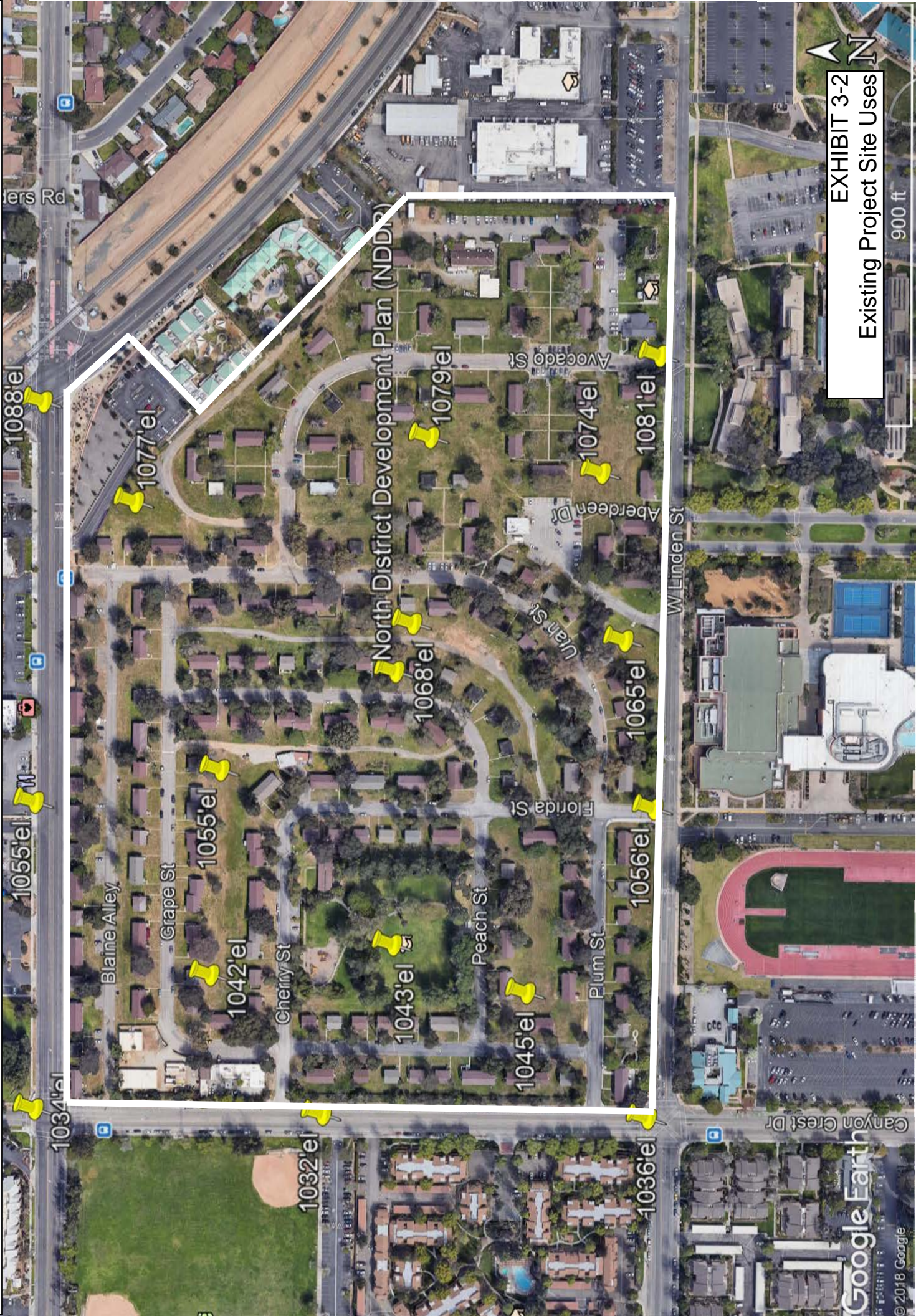




SOURCE: Google Maps, 2018

EXHIBIT 3-1

NDDP Site Vicinity



North District Development Plan (NDDR)

EXHIBIT 3-2  
Existing Project Site Uses

900 ft



SOURCE: Solomon Cordwell Buenz, 2018

EXHIBIT 3-3

NDDP Proposed Land Use

### 3.2 North District Development Project Water Demands

Table 3-2 calculates the total and net water demand of the Project.

**Table 3-2 - NDDP Water Demand Estimate**

**Existing<sup>[1]</sup>**

Segment	Existing Land Use	Acres <sup>[2]</sup>	Quantity <sup>[1]</sup>		Unit Factor <sup>[5]</sup>	Average
			units	Building Area		
-	Low Density housing	51.15	262 DUs	-	200 gpd/DU	52,400 gpd

**Proposed**

Segment	Proposed Land Use	Acres <sup>[3]</sup>	Quantity <sup>[2]</sup>		Unit Factor <sup>[5]</sup>	Average
			quantity	Building Area		
1	Student Residential 1	2.125	1,000 beds		80 gpcd	80,000 gpd
	Mixed Use District 1	2.125		15,000 sf	3,000 gpd/Ac	6,375 gpd
2	Student Residential 2	3.075	1,300 beds		80 gpcd	104,000 gpd
	Mixed Use District 2 Dining Commons	3.075 <sup>[4]</sup>		22,000 sf	3,000 gpd/Ac -	9,225 gpd -
3	Student Residential 3	2.725	1,400 beds		80 gpcd	112,000 gpd
	Mixed Use District 3	2.725		50,000 sf	3,000 gpd/Ac	8,175 gpd
4	Student Residential 4	4.2	2,600 beds		80 gpcd	208,000 gpd
	Mixed Use District 4	4.2		70,000 sf	3,000 gpd/Ac	12,600 gpd
5	Student Residential 5	1.7	1,000 beds		80 gpcd	80,000 gpd
	Mixed Use District 5	1.7		-	3,000 gpd/Ac	5,100 gpd
6	Events Center	5.7	7,000 seats	-	5 gal/seat <sup>[6]</sup>	9,973 gpd
7	Open Space	11.6	-	-	4 AF/Ac-Yr	41,426 gpd
8	Parking 1	2.15	-	-	-	-
9	Parking 2	4.05	-	-	-	-
<b>Total Proposed</b>		<b>51.15</b>	<b>7,300 beds</b>	<b>157,000 sf</b>		<b>676,874 gpd</b>
<b>Net Average Domestic Water Demand</b>						<b>624,474 gpd</b>
<b>Net Average Domestic Water Demand</b>						<b>700 AFY</b>

- [1] Based on manual count of structures using Google Earth.
- [2] Taken from NDDP Initial Study, June 2018. Based on maximum proposed buildout density.
- [3] Assumes 'residential' and 'mixed-use' split the total segment acreage equally.
- [4] Water demand for dining commons is included in the unit factor per student.
- [5] Unit factors are based on typical water usage in southern California for residential, college dormitories and mixed use land uses.
- [6] Water Demand for Events Center is based on average of two sold-out events per week.

Total average NDDP Project water demand is estimated at approximately, 676,474 gallons per day (gpd), which will replace existing uses estimated to have a domestic water demand of 52,400 gpd, based on dwelling unit count from Google Earth and assumed 2 persons per dwelling unit. Therefore, total net demand for the site is estimated at 624,474 gpd (434 gpm or 700 AFY).

RPU has adopted an ordinance titled *Mandatory Use of Recycled Water* that is designed to encourage recycled water use. As identified in the land uses of the Project, 11.6 acres is proposed as open space potentially for irrigation. This represents an opportunity to serve approximately 41,426 gpd from the City's recycled water sources.

## 4.0 RPU WATER DEMAND AND SUPPLIES

The City of Riverside Public Utilities department service area is located within the Santa Ana River Valley approximately 60 miles east of Los Angeles, and serves water to an area of approximately 75 square miles within the City of Riverside and unincorporated area within Riverside County. The RPU service area encompasses the University of California at Riverside campus and the NDDP site. The RPU is a municipally-owned utility that provides potable, non-potable, and recycled water to retail customers primarily within the City of Riverside. Its service area overlies portions of several groundwater basins, including the Riverside, Arlington, and Chino Groundwater Basins. The RPU water service area is shown in **Exhibit 4-1**.

### 4.1 Overview of Supply and Demand

RPU has the ability to purchase State Water Project water from Western Municipal Water District (WMWD) through a connection at the Metropolitan Water District of Southern California (MWD) Henry J. Mills Water Treatment Plant (WTP). Up to 30 cubic feet per second (cfs) or 19.4 million gallons per day (mgd) of imported water can be purchased from MWD (via WMWD) through an existing agreement and conveyed through existing infrastructure. Historically, imported water has only been purchased during the peak demand months, when needed.

RPU has facilities to extract groundwater from five groundwater basins: Bunker Hill, Rialto-Colton, Riverside North, Riverside South, and Arlington Basins. The Riverside Basin is divided into Riverside North and Riverside South by the San Bernardino County/Riverside County boundary. These basins are hydrogeologically connected but separated for administrative purposes.

Groundwater extracted from the Bunker Hill Basin, Rialto-Colton Basin, Riverside North, and Riverside South sub-basins is conveyed to RPU's potable or non-potable distribution system depending on the well location and local water quality. Raw groundwater from many of RPU's wells receives treatment prior to entering the potable distribution system.

RPU has a total of 201 wells, of which 50 are potable wells; 14 are non-potable wells; 85 are monitoring wells; and 50 are not active (i.e., standby, out of service, abandoned, destroyed or unknown).

#### 4.1.1 Growth Rate

RPU prepared projections of future demand by using the year 2015 as a starting point and escalating retail demands by an annual growth percentage. The annual growth percentage incorporated two factors: the expected increase in service area population, and the expected change in per-capita consumption. The estimated RPU service area population is shown in **Table 4-1**.

**Table 4-1 – Riverside Public Utilities Service Area Population (UWMP Table 4-1)**

	2015	2020	2025	2030	2035	2040
Population Served	294,500	310,700	322,500	334,700	347,300	360,500

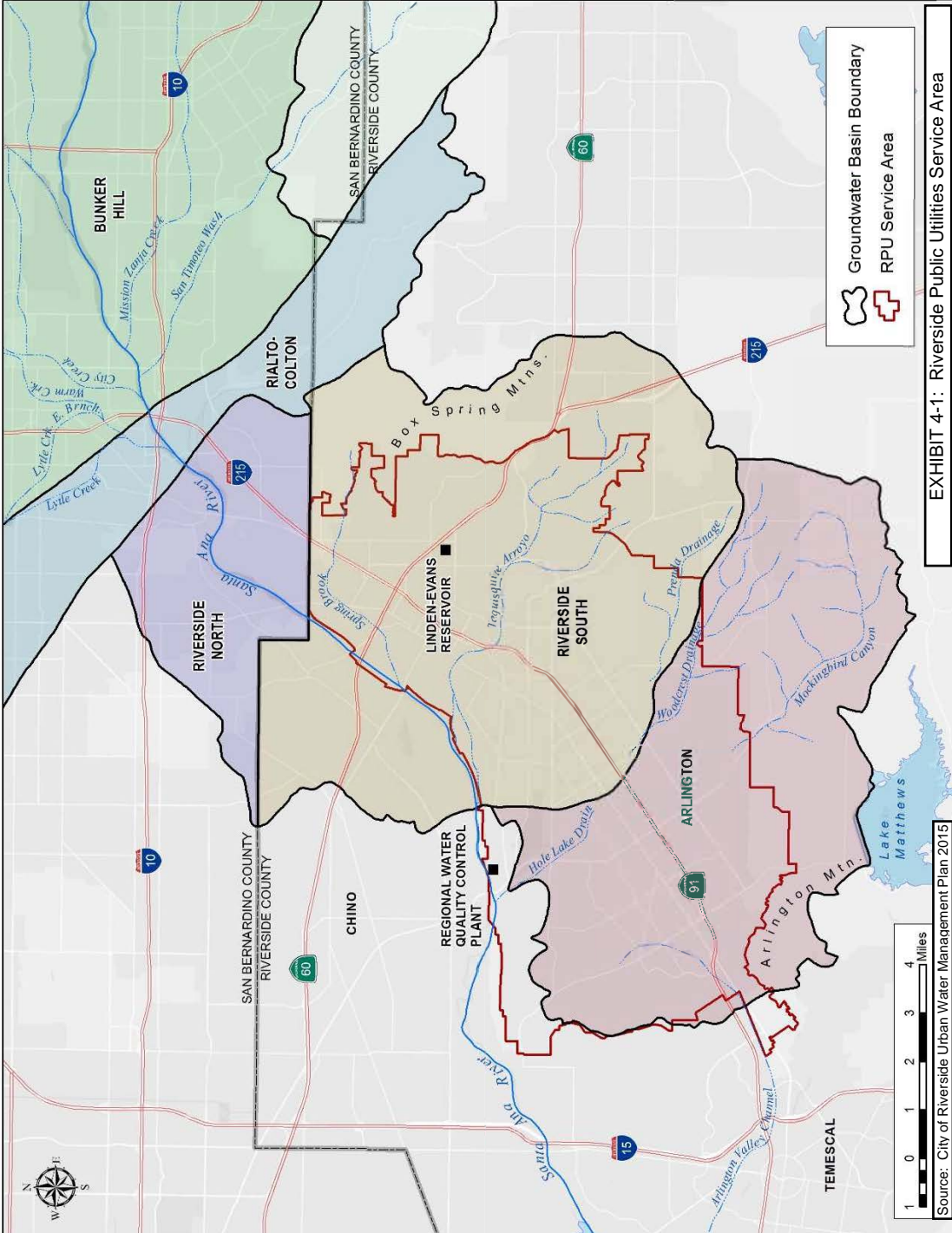
The RPU identified water demand associated with growth and expansion at UCR as one of its three categories of growth. **Table 4-2** (UWMP Table 5-2) estimates total Riverside Public Utilities water demands.

**Table 4-2 - Total Projected RPU Potable Water Demands, AFY (UWMP Table 5-2)**

Use Type	Level of Treatment	2020	2025	2030	2035	2040
Single Family	Drinking Water	29,931	31,064	32,241	33,462	34,730
Multi-Family	Drinking Water	5,365	5,568	5,779	5,998	6,225
Commercial/Institutional	Drinking Water	9,959	10,337	10,728	11,135	11,556
Industrial	Drinking Water	9,845	10,218	10,605	11,006	11,423
Landscape	Drinking Water	1,050	100	150	200	250
Agricultural irrigation	Drinking Water	1,707	1,772	1,839	1,908	1,981
Other	Drinking Water	371	385	399	414	430
Deliveries to WMWD	Drinking Water	4,300	4,300	4,300	4,300	4,300
Wholesale to HGCWD	Drinking Water	0	0	0	0	0
Additional UCR Demand	Drinking Water	3,300	3,300	3,300	3,300	3,300
California Baptist University Added Demand	Drinking Water	150	150	150	150	150
GCC (Upper)	Drinking Water	6,000	6,000	6,000	6,000	6,000
GCC (Lower)	Raw Water <sup>[1]</sup>	7,000	7,000	7,000	7,000	7,000
Overlying Uses	Raw Water <sup>[1]</sup>	1,200	1,200	1,200	1,200	1,200
WMWD	Raw Water <sup>[1]</sup>	2,500	2,500	2,500	2,500	2,500
Potable Water Loss	Drinking Water	5,278	5,375	5,559	5,750	5,948
Irrigation Water Loss	Raw Water <sup>[1][2]</sup>	835	835	835	835	835
<b>Total</b>		<b>88,791</b>	<b>90,104</b>	<b>92,585</b>	<b>95,159</b>	<b>97,827</b>

[1] Treated to potable (drinking) water standards

[2] Irrigation water loss is considered part of 'potable' water demands because it is initially supplied from wells used for drinking water supply.



Groundwater Basin Boundary

RPU Service Area

EXHIBIT 4-1: Riverside Public Utilities Service Area

Source: City of Riverside Urban Water Management Plan 2015



#### 4.1.2 Water Demand

The City's total water demand (including recycled water) in Year 2015 was approximately 75,128 AFY. The NDDP project water demand was accounted for in the future demand estimate for additional UCR demand (3,300 AFY) as identified in the 2015 UWMP, and is estimated to be a total of 676,874 gpd, or 758 AFY. Current water demands of existing residents on-site are estimated at approximately 52,400 gpd, or 58 AFY. Therefore, the Project site's net total water demand due to the NDDP project is approximately 624,474 gpd, or 700 AFY. The Project includes candidate recycled water uses for irrigation of approximately 11 acres of open space.

Other development projects completed, or currently underway, as part of the University's Long Range Development Plan are listed in Table 4-3.

**Table 4-3 – Concurrent or Completed LRDP Projects for UCR**

Description <sup>[1]</sup>	Bldg Area	Completion Year	Est. Usage Factor	Estimated Average Water Demand
<i>Construction</i>				
Lathhouse	1,200 sf	2015	200 gpd/ksf	240 gpd
FMRI	1,740 sf	2016	200 gpd/ksf	348 gpd
Environmental Health & Safety	29,125 sf	2016	200 gpd/ksf	5,825 gpd
Solar Greenhouse	1,120 sf	2017	200 gpd/ksf	112 gpd
Medicine Trailer	5,760 sf	2017	200 gpd/ksf	1,152 gpd
MRB1 (research)	190,000 sf	2019	300 gpd/ksf	57,000 gpd
Barn Expansion	8,350 sf	2020	100 gpd/ksf	835 gpd
Dundee Residential Hall (1000 beds)	176,400 sf	2020	750 gpd/ksf	132,300 gpd
Glasgow Dining	50,600 sf	2020	1000 gpd/ksf	50,600 gpd
<b>Total</b>	<b>464,295 sf</b>			<b>248,412 gpd</b>
<i>Demolition</i>				
Highlander Hall	61,251 sf	2017-18	750 gpd/ksf	45,938 gpd
Human Resources	8,242 sf	2017-18	200 gpd/ksf	1,648 gpd
<b>Total</b>	<b>69,493 sf</b>	-		<b>47,586 gpd</b>
<b>Net "Other" NCR development</b>				<b>200,826 gpd</b>

[1] Provided by UCR staff in e-mail correspondence 11/21/18.

Combined with other completed and current UCR LRDP projects UCR's total increased water demand since the 2015 UWMP is anticipated at 200,826 gallons per day (225 AFY) plus 624,474 gpd (700 AFY), or 925 AF which is within the 3,300 AFY projected for the UWMP.

#### 4.1.3 Demand and Supply Comparison

Table 4.1-2 shows the demand and supply data for current (2015) and projected water demand and supply for the Riverside Public Utilities, including additional demand the Project will require through 2040. This represents a 20-year minimum planning period as required by Senate Bill 610.

Demand and supply projections consider land use, in addition to water development programs



and projects. A supply surplus is indicated demonstrating a sufficient water supply for the RPU for the next 20+ years.

**Table 4-4 - Projected Water Demand and Supply for RPU Service Area**

	(AFY)	Projected (AFY)				
	2015	2020	2025	2030	2035	2040
<b>DEMAND [1]</b>						
Raw and Potable	74,928	88,791	90,104	92,585	95,159	97,827
Recycled	200	6,430	6,430	6,430	6,430	6,430
<b>TOTAL WATER DEMAND</b>	<b>75,128</b>	<b>95,221</b>	<b>96,534</b>	<b>99,015</b>	<b>101,589</b>	<b>104,257</b>
<b>SUPPLY [2]</b>						
Local Groundwater Production	74,926	88,773	93,773	96,573	96,573	96,573
Import - WMWD	21,700	21,700	21,700	21,700	21,700	21,700
Total Raw and Potable Supply	96,626	110,473	115,473	118,273	118,273	118,273
Recycled Supply	200	6,430	6,430	6,430	6,430	6,430
<b>TOTAL WATER SUPPLY</b>	<b>96,826</b>	<b>116,903</b>	<b>121,903</b>	<b>124,703</b>	<b>124,703</b>	<b>124,703</b>
<b>POTABLE WATER SUPPLY SURPLUS</b>	<b>21,498</b>	<b>15,252</b>	<b>18,939</b>	<b>19,258</b>	<b>16,684</b>	<b>14,016</b>
<b>TOTAL WATER SUPPLY SURPLUS</b>	<b>21,698</b>	<b>21,682</b>	<b>25,369</b>	<b>25,688</b>	<b>23,114</b>	<b>20,446</b>

[1] Riverside Public Utilities 2015 UWMP, Table 7-2.

[2] Riverside Public Utilities 2015 UWMP, Tables 7-9 and 7-10.

## 4.2 Groundwater

An important management consideration that affects RPU's groundwater production in several basins is the Western-San Bernardino Judgment (Western Municipal Water District of Riverside County v. East San Bernardino County Water District, Case No. 78426). The Western-San Bernardino Judgment addresses groundwater management within the Rialto-Colton Basin, Riverside-Arlington basin, and the San Bernardino Basin Area (SBBA), which contains the Lytle Basin and the Bunker Hill Basin. The Western-San Bernardino Judgment was established at the same time as the Orange County Judgment (Orange County Water District v. City of Chino, et al., Case No. 117 628) to settle rights within the upper Santa Ana River watershed to ensure resources would be sufficient to meet flow obligations in the lower Santa Ana River set by the Orange County Judgment. The Western-San Bernardino Judgment established the entitlements and groundwater replenishment obligations of the two major water agencies, San Bernardino Valley Municipal Water District (Valley District) and WMWD. The Western-San Bernardino Judgment provides for:

- A determination of the safe yield of the SBBA;
- Establishment of specific amounts of water that can be extracted from the SBBA by plaintiff parties (parties in Riverside County);
- Valley District must provide replenishment for extractions from the SBBA by non-plaintiffs (entities in the Valley District service area) in aggregate exceeding 72.05% of the safe yield, which is 167,228 AFY;
- WMWD must replenish the Rialto-Colton and Riverside-Arlington basins if extractions for use in Riverside County in aggregate exceed certain specific amounts; and

- Valley District must replenish the Rialto-Colton and Riverside-Arlington basins if water levels are lower than certain specific water level elevations in specified wells.

These areas are defined by DWR as the Bunker Hill Groundwater Basin, Rialto-Colton Groundwater Basin, and the northern portion of the Riverside-Arlington Groundwater Basin. The Riverside Basin is split by the Western-San Bernardino Judgment based on county boundaries into Riverside North (San Bernardino County) and Riverside South (Riverside County).

The adjudication resulted in the naming of the Western-San Bernardino Watermaster (Watermaster) consisting of two persons, one nominated by Valley District and the other by WMWD, appointed by the presiding judge. The Watermaster prepares an annual report documenting the previous year's pumping and export activities. In addition, groundwater elevation, streamflow, and water quality are documented.

The Western-San Bernardino Judgment also required the Watermaster to establish base extraction rights and export rights based on the average annual extractions and exports over the 5-year period from 1959 through 1963.

#### 4.2.1 Groundwater Basin Description

RPU has facilities to extract water from five groundwater basins. Each of these basins are discussed below.

##### 4.2.1.1 Bunker Hill Basin

The Bunker Hill Basin is a valley-fill aquifer comprised of six confining and water-bearing hydrogeologic units. The Bunker Hill Basin lies between the San Andreas and San Jacinto Faults. The primary source of recharge for the Bunker Hill Basin is runoff from precipitation in the San Bernardino Mountains to the north and San Gabriel Mountains to the northwest. Wastewater discharge and imported water contribute to smaller amounts of groundwater recharge.

Valley District, WMWD, and the San Bernardino Valley Water Conservation District (SBVWCD) are active in recharging the Bunker Hill Basin. RPU's extraction rights from the San Bernardino Basin Area, which includes the Bunker Hill Basin, have been revised to reflect new water conservation associated with the operation of the Seven Oaks Dam. The adjusted rights are summarized in Table 4-5.

**Table 4-5 - RPU Extraction Rights from SBBA Reflecting New Conservation (UWMP Table 7-1)**

Entity	Extraction Right	New Conservation (195 cfs)	Adjusted Right (subtotal)
City of Riverside (RW Co and Gage Canal Co)	49,542	1,719	51,261
Agua Mansa and Meeks & Daley Water Co -	2,908	100	3,008
Riverside Highland Water Co - RPU Share	440	0	440
Regents of the University of California -	536	18	554
<b>Total</b>	<b>53,426</b>	<b>1,837</b>	<b>55,263</b>

##### 4.2.1.2 Rialto-Colton Basin

The Rialto-Colton Basin is bounded by the San Jacinto fault to the northeast, Rialto-Colton fault to the southwest, the San Gabriel Mountains to the northwest, and Badlands to the southeast. The Rialto-Colton Basin consists of four hydrostratigraphic units with the water-bearing units

expressing unconfined to partly confined properties.

The basis for establishment of extraction rights stipulated within the Western-San Bernardino Judgment was groundwater production over the 5-year period from 1959 through 1963 (Base Period). For the Rialto-Colton Basin, the base period extraction is set only for that which is used within Riverside County. Provided that the minimum groundwater elevations within the Rialto-Colton Basin are maintained by Valley District, extractions from the Rialto-Colton Basin for use within San Bernardino Valley are not limited. The Western-San Bernardino Judgment established 3,381 acre-feet as the base period extraction for use of Rialto-Colton Basin groundwater in Riverside County. Should extractions exceed the base period extraction over a 5-year period, or by more than 20 percent in a single year, WMWD is responsible for replenishment in the following year equal to the excess extractions over a 20-percent peaking allowance, unless credits are available from previous years due to production below the base period extraction or due to importing water.

RPU's extraction rights from the Rialto-Colton Basin include 2,418 AFY for the City of Riverside and 310 AFY for RPU's shares of Agua Mansa and Meeks & Daley Water Company, for a total of 2,728 AFY.

As of the 2015 Watermaster Annual Report, WMWD has total credits of 466,040 acre-feet for the Rialto-Colton and Riverside Basins.

#### **4.2.1.3 Riverside North Basin**

The Riverside Basin is bounded by the Rialto-Colton fault to the north, Arlington Basin to the south, Box Spring Mountains to the east, and Chino Basin to the west. The Riverside basin is an alluvial fill, unconfined basin.

The basis for establishment of extraction rights stipulated within the Western-San Bernardino Judgment was groundwater production in the Riverside Basin over the 5-year period from 1959 through 1963. The Western-San Bernardino Judgment divides the Riverside Basin into two areas, based on jurisdictional boundaries: the portion of the Riverside Basin in San Bernardino County (Riverside North) and the portion of the Riverside Basin in Riverside County (Riverside South).

For Riverside North, the base period extraction is set only for that which is used within Riverside County. Provided that the minimum groundwater elevations within Riverside North are maintained by Valley District, extractions from Riverside North for use within San Bernardino Valley are not limited. The Judgment established 21,085 acre-feet as the base period extraction for use of Riverside North groundwater in Riverside County.

In Riverside North for use in Riverside County, should extractions exceed the base period extraction over a 5-year period, or by more than 20 percent in a single year, WMWD is responsible for replenishment in the following year equal to the excess extractions over a 20-percent peaking allowance. WMWD's replenishment obligation can be reduced through credits that are available from previous years due to importing water into the basin or production below the base period extraction.

RPU's extraction rights from Riverside North are 10,902 AFY.

#### **4.2.1.4 Riverside South Basin**

For Riverside South, the Western-San Bernardino Judgment set a 5-year base period extraction

of 29,663 acre-feet for use in Riverside County. In Riverside South, should extractions exceed the base period extraction over a 5-year period, or by more than 20 percent in a single year, WMWD is responsible for replenishment in the following year equal to the excess extractions over a 20 percent peaking allowance, unless credits are available from previous years due to productions below the base period extraction or to importing water.

RPU's extraction rights from Riverside South are 16,880 AFY.

#### **4.2.1.5 Arlington Basin**

The Arlington Basin consists of alluvial deposits and is located between the Riverside South and the Temescal Basin. The Arlington Basin is not currently used by RPU due to the high levels of total dissolved solids and nitrates. The City may use the Arlington Basin as a source of water supply in the future if the costs for alternative new supplies make treatment of water from this source cost-effective. The Arlington Basin is not adjudicated.

#### **4.2.2 Groundwater Management**

Groundwater management activities are undertaken in cooperation with local agencies including WMWD, Valley District, Santa Ana Watershed Project Authority (SAWPA), and the San Bernardino Valley Water Conservation District (SBVWCD). The court appointed the Western-San Bernardino Watermaster to manage and report on the conditions of the local groundwater basins. Annually, Valley District publishes an engineering report to determine the replenishment requirements for the Bunker Hill Basin in the ensuing water year.

In 2005, the Upper Santa Ana Water Resources Association (USAWRA) formed the Basin Technical Advisory Committee (BTAC) with Valley District as the lead agency to develop an Integrated Regional Water Management Plan (IRWMP) for the Upper Santa Ana River Watershed. The IRWMP was completed in 2007 and was updated in 2015. It focuses on long-term management of water resources in the Bunker Hill and Rialto-Colton basins and the reduction of reliance on imported water. Currently, BTAC meets monthly with the primary purpose of managing resources to optimize groundwater recharge and extraction activities.

The Valley District has established target ranges for groundwater level management within Bunker Hill Basin, and is obligated under the Western-San Bernardino Judgment to maintain water levels in the Rialto-Colton Basin and Riverside North.

In 2010, SAWPA adopted its One Water One Watershed (OWOW) Integrated Regional Water Management Plan for the entire Santa Ana River watershed. RPU participated in development of the OWOW plan and in the development of the revised plan, OWOW 2.0, in 2014.

RPU assists in regional groundwater management as a member of both USAWRA and BTAC. RPU, in collaboration with WMWD, the Valley District, and other water retailers that produce water from the Riverside Basin, developed a Groundwater Management Plan (GWMP) for Riverside North and Riverside South. The purpose of the plan is to improve sustainability by managing the quantity and quality of groundwater resources. In addition, WMWD has developed a GWMP for the Arlington Basin.

#### **4.2.3 Historical Groundwater Pumping**

RPU's historical production from each groundwater basin for the past five years is shown in Table 4-6.

**Table 4-6 - Groundwater Volume Pumped (UWMP Table 7-2)**

Groundwater Type	Location or Basin Name	Water Quality	2010	2011	2012	2013	2014	2015
Alluvial Basin	Bunker Hill	Drinking Water	45,360	46,148	50,515	46,702	47,862	48,086
Alluvial Basin	Riverside North	Drinking Water	8,993	7,397	10,862	9,237	6,735	5,095
Alluvial Basin	Riverside South	Drinking Water	11,942	13,773	10,926	14,859	15,221	7,966
Alluvial Basin	Bunker Hill	Raw Water	4,229	4,191	5,859	7,329	5,399	5,707
Alluvial Basin	Riverside North	Raw Water	3,127	5,339	4,319	2,943	2,013	1,262
Alluvial Basin	Riverside South	Raw Water	8,695	7,739	7,921	5,976	6,595	5,605
Alluvial Basin	Rialto-Colton	Raw Water	0	0	0	0	0	1,205
<b>Total</b>			<b>82,346</b>	<b>84,587</b>	<b>90,402</b>	<b>87,046</b>	<b>83,825</b>	<b>74,926</b>

### 4.3 Imported Water

Imported water is treated at the Mills WTP in Riverside prior to delivery to RPU by WMWD. SWP water quality is maintained and governed by the standards established by DWR. The salinity as measured by Total Dissolved Solids (TDS) of SWP water delivered to WMWD is usually less than 300 mg/L, but was as high as 430 mg/L during the 1977 drought. DWR and/or MWD regularly conduct sanitary surveys and monitor the quality of the water according to the applicable standards and regulations.

DWR's estimates of SWP deliveries, and thus WMWD's capacity to its Table A amounts, are based on a computer model that simulates monthly operations of the SWP and Central Valley Project systems. Key assumptions and inputs to the model include the facilities included in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and projected contractor demands for SWP water. RPU has the right to purchase up to 30 cfs of SWP imported water from WMWD (21,700 AFY), pursuant to a 1986 agreement.

### 4.4 Surface Water and Stormwater

RPU intends to augment natural recharge in the Bunker Hill and Riverside basins through conjunctive use projects. These projects will enhance groundwater recharge when excess water is available, with the goal of making that water available for groundwater production during dry periods.

In addition to the supply sources currently utilized by RPU to meet demands in its service area, local stormwater is another potential supply that could be used. While the Riverside County Flood Control and Water Conservation District (RCFC&WCD) and the San Bernardino County Flood Control District (SBCFCD) own and operate the existing regional flood control systems in and around RPU's service area, opportunities are available for RPU to capture and recharge additional stormwater.

The IWMP included an assessment of stormwater capture opportunities. The findings of this analysis translated in the definition of a number of potential water supply projects, which were further developed and described in the IWMP. RPU is continuing to investigate and develop these potential projects, as summarized below:

#### **4.4.1 The Seven Oaks Dam Conservation Project**

Seven Oaks Dam Conservation Project is a cooperative, interagency project among WMWD, Valley District, RPU, and others that allows the agencies to capture up to 200,000 AFY of previously unallocated stormwater from the Santa Ana River. This surface supply is obtained from Seven Oaks Dam, a flood control facility owned by the Army Corps of Engineers, and recharged at new, jointly owned spreading basins immediately downstream from the dam. The cooperative project does not involve extraction of stored groundwater. Participants, including RPU, would have to use their existing facilities or build new groundwater extraction wells within the Bunker Hill Basin to be able to utilize the allocated water.

#### **4.4.2 The Riverside North ASR**

The Riverside North ASR project is located on the east side of the SAR, approximately 1.5 miles southwest of the I-15 and I-10 interchange. The site is located on a tract of land referred to as the “Flume Well Tract.” Implementation of this project would benefit RPU by recharging the Riverside North Basin with stormwater through in- channel and off-channel recharge facilities. The off-channel facilities are located to the west of the SAR on RPU-owned land.

#### **4.4.3 Jackson-Arlington Project**

The Project involves construction of approximately 27,650 linear feet (LF) of 8- inch and 24-inch diameter recycled water pipelines. The Project’s ultimate alignment is from the intersection of Jackson St. and Van Buren Blvd., heading southeast along Jackson St. and Monroe St. to Cleveland Ave. where it will tie into the existing 24-inch Western Municipal Water District (WMWD) non-potable water pipeline, continuing southeasterly and ending at Mockingbird Reservoir. The proposed Regional Concept pipeline (UWMP Table 7-7) would be supplied by the Jackson-Arlington project and provide conveyance capacity to deliver recycled water to additional users in the RPU service area. It is anticipated that up to 6,170 AFY could be made available for RPU users in the future.

### **4.5 Wastewater and Recycled Water**

The City of Riverside Public Works Department operates and maintains the Riverside Regional Water Quality Control Plant (RWQCP). The plant capacity has recently been expanded to 46 million gallons per day (mgd). The service area of the RWQCP extends beyond the RPU service area to include the areas served by Jurupa, Rubidoux, and Edgemont Community Services Districts.

Tertiary-treated effluent from the RWQCP is discharged into the Santa Ana River (SAR). The RWQCP is required to discharge 15,250 acre-feet per year, adjusted for quality, to meet downstream obligations to Orange County Water District (OCWD) established in the Orange County Judgment. A separate requirement, to discharge a total of 25,000 AFY, is included in the RWQCP ORDER WR 2008 – 0024 Conditionally Approving Wastewater Change Petition WW- 0045.

#### **4.6 Recycled Water**

RPU and the City’s Public Works Department conjointly manage and plan wastewater and recycled water operations and programs. The Public Works Department operates and maintains the RWQCP. The RWQCP is the only wastewater treatment plant that receives wastewater generated within the RPU service area.

##### **4.6.1 Wastewater Collection, Treatment, and Disposal**

All wastewater from the RPU water service area is treated at the RWQCP, a tertiary treatment

facility.

#### 4.6.2 Recycled Water System

The City currently operates a recycled water distribution system with a combined pipeline length of approximately 4 miles. This system serves six existing customers with a combined demand of approximately 260 acre-feet per year.

Establishing standards for the use of recycled water is one of the policies included in the City's General Plan 2025. In addition, RPU has adopted an ordinance titled Mandatory Use of Recycled Water that is designed to encourage recycled water use.

### 1.7 Summary of Existing and Planned Sources of Water

RPU intends to fully utilize its water rights from the Bunker Hill Basin plus the quantity of water available through conjunctive use. RPU plans to increase the use of recycled water as described above. The balance of RPU's water supply will come from the Rialto-Colton Basin, Riverside North, and Riverside South. RPU's conjunctive use projects in the Riverside Basin will augment the yield of the basin and allow RPU to increase production over historical levels.

Production and recharge associated with RPU's conjunctive use projects will be coordinated with Valley District and WMWD to prevent adverse effects on groundwater levels and quality. RPU anticipates being able to mitigate any unforeseen incremental contamination issues stemming from increased production through existing or future wellhead treatment facilities and/or through blending.

The current and projected supplies available to RPU are shown in Tables 4-7 and 4-8.

**Table 4-7 - Water Supplies – Actual (UWMP Table 7-9)**

Water Supply	Additional Detail on Water Supply	2015 Actual Volume	2015 Water Quality
Groundwater	Bunker Hill	48,086	Drinking Water
Groundwater	Riverside North	5,095	Drinking Water
Groundwater	Riverside South	7,966	Drinking Water
Groundwater	Bunker Hill	5,707	Raw Water
Groundwater	Riverside North	1,262	Raw Water
Groundwater	Riverside South	5,605	Raw Water
Groundwater	Rialto-Colton	1,205	Raw Water
Recycled water	RWQCP	200	Recycled Water
Purchased or Imported Water	From WMWD	0	Drinking Water
	Total	75,126	

**Table 4-8 - Water Supplies – Projected (UWMP Table 7-10)**

Water Supply	Additional Detail on Water Supply	2020	2025	2030	2035	2040
Groundwater	Bunker Hill	55,263	55,263	55,263	55,263	55,263
Groundwater	Banking BH Conjunctive Use	0	2,000	2,000	2,000	2,000
Groundwater	Seven Oaks Enhanced Phase II	1,000	1,000	1,000	1,000	1,000
Groundwater	BH Active Recharge 2025	0	1,500	1,500	1,500	1,500
Groundwater	Riverside North	10,902	10,902	10,902	10,902	10,902
Groundwater	RNASR	2,000	2,000	2,000	2,000	2,000
Groundwater	Riverside South	16,880	16,880	16,880	16,880	16,880
Groundwater	Box Springs	0	0	2,800	2,800	2,800
Groundwater	Columbia, Etc. Stormwater	0	1,500	1,500	1,500	1,500
Groundwater	Rialto-Colton	2,728	2,728	2,728	2,728	2,728
Recycled water	RWQCP	6,430	6,430	6,430	6,430	6,430
Purchased or Imported Water	From WMWD	21,700	21,700	21,700	21,700	21,700
	<b>Total</b>	<b>116,903</b>	<b>121,903</b>	<b>124,703</b>	<b>124,703</b>	<b>124,703</b>



## **5.0 RELIABILITY OF WATER SUPPLIES**

### **5.1 Constraints on Water Sources**

Historically, RPU's source waters have proven reliable, even during the multi-year droughts from 1984 to 1990, 1999 to 2002, 2006 to 2009, and the current drought. To date, RPU has not experienced any major deficiencies in water supply. RPU, water management agencies, and other local water retailers are cooperating to further increase the reliability of groundwater from the Bunker Hill Basin, Rialto-Colton Basin, Riverside North Sub-basin, and Riverside South Sub-basin.

In order to increase groundwater production beyond historical levels and improve water supply reliability of the local groundwater basins, RPU has collaborated with other local water retailers through SAWPA, the USAWRA, and BTAC to address the various groundwater management issues. Typical collaborative efforts include developing groundwater models, sharing groundwater quantity/quality data, partnering on regional projects, and conducting source water assessments.

RPU produces groundwater from wells spatially distributed across the Bunker Hill Basin, Riverside North, and Riverside South. Some treatment occurs at wellhead or regional facilities prior to delivery to the major transmission mains. Production from wells and/or treatment facilities is blended and chlorinated within the major transmission mains prior to distribution from the Linden Evans Reservoir. The blending makes the system water less vulnerable to contamination at individual wells.

RPU regularly monitors the quality of its water supply. Annually, RPU distributes summary reports on water quality to its customers.

#### **5.1.1 Groundwater**

Local groundwater supplies account for most of RPU's water supplies, with approximately 60 percent originating from the Bunker Hill Basin, which is adjudicated. RPU's water rights are based on the long-term safe yield from the Bunker Hill Basin, which includes wet, dry, and normal periods. RPU's wells are generally located in the section of the basin with the greatest thickness of water bearing layers. Thus, RPU's water supply from the Bunker Hill Basin is considered reliable during single and multi-year dry periods. The Western-San Bernardino Judgment also permits producers to increase groundwater production by up to 20 percent in any single year for peaking purposes.

As part of the 2011 Riverside Basin Groundwater Management Plan, the safe yield for the Riverside and Arlington Basins were established based on 43 years of historical production and hydrologic conditions (1965 to 2007). This period includes wet, dry, and normal periods and is considered to be representative of long-term mean climatological conditions. The calibrated numerical groundwater model of the Riverside and Arlington basins determined the safe yield to be 27,200 acre-feet in Riverside North and 35,100 acre-feet in Riverside South. Recharge associated with RPU's planned conjunctive use projects will allow RPU to increase groundwater production from the Riverside Basin without adversely impacting the sustainability of this water resource.

In general, the natural quality of water in local groundwater basins is acceptable and reliable. Potential hazards that could impact the quality of groundwater from local basins include migrating contaminant plumes, chemical spills, agricultural return flows, leaky underground storage tanks, and septic systems. Chemical spills and leaking underground storage tanks

initially tend to affect a small number of wells, whereas contaminant plumes, agricultural return drainage, and septic systems may impact regional aquifers.

Previous improper waste disposal practices created several groundwater plumes that have the potential to impact a number of RPU wells. RPU implemented several measures to address groundwater contamination that affected its source water. Some of the implemented measures include well replacement, wellhead treatment pilot studies, and preparation of a water treatment feasibility study. RPU has also developed a Water Supply Contingency Plan and a water quality blending optimization model.

RPU was able to improve the quality of its domestic water by successfully implementing a comprehensive strategy that emphasized pollution prevention and source water protection.

### **5.1.2 Surface Water**

The quantity of surface water recharge from RPU's existing and planned conjunctive use projects depends on the hydrologic conditions in the Santa Ana River Watershed. Through the use of the groundwater basins for storage, RPU is not reliant on surface water flows to directly meet demands during a dry period. Therefore, RPU's supply reliability is not impacted by short-term fluctuations in local surface water flow.

### **5.1.3 Recycled Water**

The primary source of recycled water is local groundwater that has been used as potable water then reclaimed at the RWQCP. RPU plans to reuse available recycled water from the RWQCP and considers this supply to be 100 percent reliable during single or multi-year dry periods.

The RWQCP treats effluent to tertiary standards and monitors the quality to ensure compliance with the discharge permit from Santa Ana Regional Water Quality Control Board (SARWQCB) and the regulations set by the Division of Drinking Water (DDW).

### **5.1.4 Imported Supplies**

RPU is contracted to receive State Water Project (SWP) water from MWD through WMWD. MWD is the largest State Water Contractor, with an annual maximum entitlement of 1,911,500 acre-feet through 2035. However, actual deliveries of State Water Project water to MWD vary each year based on the amount of precipitation and projected water use within MWD's service area.

Imported water is treated at the Mills WTP in Riverside prior to delivery to RPU by WMWD. SWP water quality is maintained and governed by the standards established by DWR. The salinity as measured by Total Dissolved Solids (TDS) of SWP water delivered to WMWD is usually less than 300 mg/L, but was as high as 430 mg/L during the 1977 drought. DWR and/or MWD regularly conduct sanitary surveys and monitor the quality of the water according to the applicable standards and regulations.

DWR prepares a biennial report to assist SWP contractors and local planners in assessing the near and long-term availability of supplies from the SWP. DWR issued its most recent update, the 2017 DWR State Water Project Delivery Capability Report (DCR), in March 2018. In the 2017 update, DWR provides SWP supply estimates for SWP contractors to use in their planning efforts. The 2017 DCR includes DWR's estimates of SWP water supply availability under both current and future conditions.

DWR’s estimates of SWP deliveries are based on a computer model that simulates monthly operations of the SWP and Central Valley Project systems. Key assumptions and inputs to the model include the facilities included in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and projected contractor demands for SWP water.

## 5.2 Reliability by Type of Year

In general, groundwater and recycled water supplies are less vulnerable to seasonal and climatic changes than surface water (i.e. local and imported) supplies. RPU has been able to increase production from local groundwater basins during previous droughts pursuant to the Western-San Bernardino Judgment. The Western-San Bernardino Watermaster independently reviews groundwater conditions annually to assess the change in groundwater levels. Historically, the Watermaster permitted additional extraction beyond the specified water rights from the Bunker Hill Basin to decrease higher than optimal groundwater levels in the basin.

DWR defines a multiple-dry year period as “three or more consecutive years with the lowest average annual runoff.” In recent years RPU has obtained the majority of its water supply from the Bunker Hill Basin. The UWMP selected 1999 through 2002 as the basis for multiple-dry years for the Bunker Hill Basin. The year 2014 was selected to represent the single dry year.

The reliability of SWP imported water for MWD impacts MWD member agencies’ abilities to plan for future growth and supply. In January 2010, the DWR Bay-Delta Office published a report specifically addressing the reliability of the SWP. Subsequent updates of this report are known as the Delivery Capability Reports (DCR), and provide information on the reliability of the SWP to deliver water to its contractors assuming historical precipitation patterns. The 2017 DCR uses the following assumptions to model current conditions: existing facilities; hydrologic inflows to the model based on 82 years of historical inflows (1922 through 2003); current regulatory and operational constraints; and contractor demands at maximum Table A amounts.

The report has been updated three times – in 2013, 2015 and 2017. The 2017 report also considers factors for climate change. The updated report projects deliveries of SWP imported water to have a 77 percent likelihood that more than 2,000 TAF of Table A water will be delivered annually. This compares to 74 percent likelihood in the 2015 Report.

## 5.3 Supply and Demand Assessment under Normal and Dry Years

RPU has assumed that 100 percent of its groundwater and recycled water supplies would remain available during a single dry year and multiple dry years. The availability of imported water has been adjusted based on the scenarios identified for the State Water Project.

Comparisons of expected supply and demand during a normal year, single dry year, and multiple dry years are shown in the tables below.

**Table 5-1 - Normal Year Supply and Demand Comparison (UWMP Table 8-2)**

Totals	2020	2025	2030	2035	2040
Supply Totals	116,903	121,903	124,703	124,703	124,703
Demand Totals	95,221	96,534	99,015	101,589	104,257
Difference	21,682	25,369	25,688	23,114	20,446

**Table 5-2 - Single Dry Year Supply and Demand Comparison (UWMP Table 8-3)**

Totals	2020	2025	2030	2035	2040
Supply Totals	96,288	101,288	104,088	104,088	104,088
Demand Totals	95,221	96,534	99,015	101,589	104,257
Difference	1,067	4,754	5,073	2,499	(169)

During a period of multiple dry years, the expected supplies are slightly higher because of the higher average availability of water from the State Water Project.

**Table 5-3 - Multiple Dry Years Supply and Demand Comparison (UWMP Table 8-4)**

Year	Totals	2020	2025	2030	2035	2040
First Year	Supply Totals	102,364	107,364	110,164	110,164	110,164
	Demand Totals	95,221	96,534	99,015	101,589	104,257
	Difference	7,143	10,830	11,149	8,575	5,907
Second Year	Supply Totals	102,364	107,364	110,164	110,164	110,164
	Demand Totals	95,221	96,534	99,015	101,589	104,257
	Difference	7,143	10,830	11,149	8,575	5,907
Third Year	Supply Totals	102,364	107,364	110,164	110,164	110,164
	Demand Totals	95,221	96,534	99,015	101,589	104,257
	Difference	7,143	10,830	11,149	8,575	5,907

#### 5.4 Regional Supply Reliability

RPU is committed to minimizing the need to import water from other regions. RPU participates in regional supply planning projects to optimize and enhance the use of local groundwater resources. RPU operates a number of conservation programs to implement various Demand Management Measures. RPU is also evaluating the future use of additional recycled water from the RWQCP, either through direct use or through groundwater recharge.

RPU's available water sources include groundwater, recycled water, and imported water. RPU plans to augment groundwater production through conjunctive use projects that recharge surface water, recycled water, and/or imported water.

RPU has been able to meet all of its demands with its existing water supply portfolio, even through periods of single and multiple-dry years. Virtually all of its demands are supplied with groundwater from the Bunker Hill Basin, the Riverside North and South Basins, and the Rialto-Colton Basin. The Bunker Hill Basin is adjudicated, and governed by the Western-San Bernardino Judgment. Therefore, the appointed management agency, the Western-San Bernardino Watermaster, closely monitors the capacity of the basin and establishes pumping criteria. Therefore, based on historical performance during all types of years, the Basin is considered to be a reliable supply source during extended periods of drought.

#### 5.5 Water Shortage Plans

RPU's 2010 UWMP included a Water Shortage Contingency Plan (WSCP) and three supporting appendices: RPU Water Rule #9 (Shortage of Water Supply and Interruption of Delivery, also known as the Water Shortage Ordinance); RPU Water Rule #15 (Water Waste); and a draft Water Conservation Ordinance that expanded on the Water Shortage Ordinance and was

adopted by RPU's Board after the preparation of the 2010 UWMP. The Water Conservation Ordinance amended the Riverside Municipal Code Title 14 and included a detailed description of unreasonable uses of water, RPU's Water Conservation Program, responses to water shortage emergencies, and enforcement and severability.

In July of 2014, the City Council adopted revisions to the City's Water Conservation Ordinance, as set forth in RMC Chapter 14.22, and adopted a resolution implementing Stages 1 and 2 of the City's Water Conservation Ordinance. The revisions to Chapter 14.22 changed Stage 2 restrictions from voluntary to mandatory. They also limited non-agricultural landscape watering to four days in Stage 2 and decreased the non-agricultural landscape watering to three days in Stage 3.

In June of 2015, the City Council adopted additional changes to the Water Conservation Ordinance. The changes included additional restrictions on irrigation water use and an updated enforcement policy. The City also adopted a resolution implementing Stages 1, 2, and 3 of the Water Conservation Ordinance.

### **5.5.1 Stages of Action**

The Water Conservation Ordinance establishes a Water Conservation Program which uses four stages to address conditions and needs. The Water Conservation Stage shall be set by City Council action. All normal water efficiency programs and water conservation regulations shall remain in force during any stage, unless the City Council directs otherwise.

#### **5.5.1.1 Stage One (Normal Water Supply)**

Applies when the City can meet all of its water demands, but has determined that certain conservation methods are warranted to preserve existing water supplies in the event the City will be unable to meet future water demands. Any other normal water efficiency programs and water conservation regulations remain in force during Stage One.

#### **5.5.1.2 Stage Two (Minimum Water Shortage)**

Applies when a reasonable probability exists that the City will not be able to meet all of its water demands or other regional or statewide conditions warrant implementation.

#### **5.5.1.3 Stage Three (Moderate Water Shortage)**

Applies when the City will not be able to meet all of the water demands of its Customers or other regional or statewide conditions warrant implementation.

#### **5.5.1.4 Stage Four (Severe Water Shortage)**

Applies when the City's ability to meet its water demands is seriously impaired.

#### **5.5.1.5 Stage Definitions**

Stage One represents normal conditions. Stage One conservation measures are voluntary, and will be enforced through public outreach, education, and awareness measures by the City. Stages Two, Three and Four represent potential and actual shortages. Stages Two, Three and Four may be triggered by a local or regional water supply shortage; production, treatment, transmission, or delivery infrastructure problems; limited or unavailable alternative water supplies; or other circumstances. Stages Two, Three, and Four conservation measures are mandatory, and violations may be subject to criminal, civil, and administrative action. Stage One conservation measures become mandatory when Stage Two, Three, or Four are declared.

### 5.5.1.6 City Council Declaration

If the City Council has declared either Stage Three or Stage Four conservation, it may also, by resolution, declare a Water Shortage Emergency. A Water Shortage Emergency may be an immediate emergency, or a threatened future water shortage, or both.

Upon declaration of a Water Shortage Emergency:

1. No new construction meters will be issued.
2. No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.
3. No new building permit(s) shall be issued, except:
  - a) Projects found by the City Council to be necessary for public health, safety.
  - b) Projects using recycled water for construction.
  - c) Projects which will not result in a net increase in non-recycled water use.
  - d) Projects with adequate Conservation Offsets, if available. The City, in its sole discretion, may choose to make Conservation Offsets available. Conservation Offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's Water Use Efficiency Master Plan. Conservation Offset fees will be set forth in the Water Rules and Rate Schedules.

During a mandated reduction, RPU will intensify its water conservation programs, especially public education. RPU promotes efficient water use including non-potable uses such as landscaping and irrigation (Chapter 19.67 of the Riverside Municipal Code). Recycled water from the RWQCP may be used for street cleaning.

The stages are summarized in Table 5-4.

**Table 5-4 – Stages of Water Shortage Contingency Planning (UWMP Table 9-1)**

Stage	Percent Supply Reduction	Water Supply Condition
1	0	Normal Water Supply
2	15	Minimum Water Shortage
3	15 - 20	Moderate Water Shortage
4	20 - 50	Severe Water Shortage

## **6.0 CONCLUSION**

The City of Riverside and its water utility, Riverside Public Utilities, optimizes water resource supply through an integrated resource approach, utilizing available water programs and projects. The RPU receives its water supplies from groundwater, imported water, and recycled water. Complexities and continuing refinement in groundwater management and rights, evolving development of the regional recycled water system and supplies, and challenges of imported water reliability are continually evaluated for analysis of water demand and supply.

A CEQA report is being prepared for the North District Development Project (NDDP or Project) project, which includes an assessment of utility services and includes this Water Supply Assessment (WSA) pursuant to Senate Bill 610. The WSA will also be used by the RPU as part of its ongoing planning efforts to optimize its water resource program.

The WSA includes a discussion of the Senate Bill 610 legislation, an overview of the proposed Project, and analysis of water demands for RPU's existing service area and the Project and other City development projects within the RPU service area and over the UWMP planning horizon. The WSA also includes an analysis of reliability of the City's water supplies and water quality, and concludes with a sufficiency analysis of water supply during normal, single-dry, and multiple dry years for the next 20-plus years.

The Project is a proposed development component of the University of California at Riverside (UCR) campus. The NDDP is located at the north end of campus adjacent to Linden Street and Canyon Crest Drive. The 51.15-acre site currently consists of low density housing. The proposed Project includes an Events Center, 7,300 beds, and college mixed use districts.

### ***Source of Water***

In Year 2015 RPU produced 75,126 AF of water from its groundwater sources, as well as 200 AF recycled water from the RWQCP, for its residential, commercial, industrial, landscape irrigation and agricultural customers.

### ***Water Demand and Supply Projections***

The RPU will meet its future water demands, including the demands for the Project, from existing supply sources. Future projects are in various planning or design phases, including enhanced stormwater recharge of the local groundwater basins from the Seven Oaks Dam, Bunker Hill conjunctive use project, Riverside North Basin Aquifer Storage and Recovery, and the Jackson-Arlington Project which will tie into WMWD recycled water pipeline and deliver irrigation water to an increased area of its service area.

The Project is estimated to increase demand on RPU's potable water system by 700 AFY. Candidate recycled water uses include over 11 acres of open space potentially for irrigation.

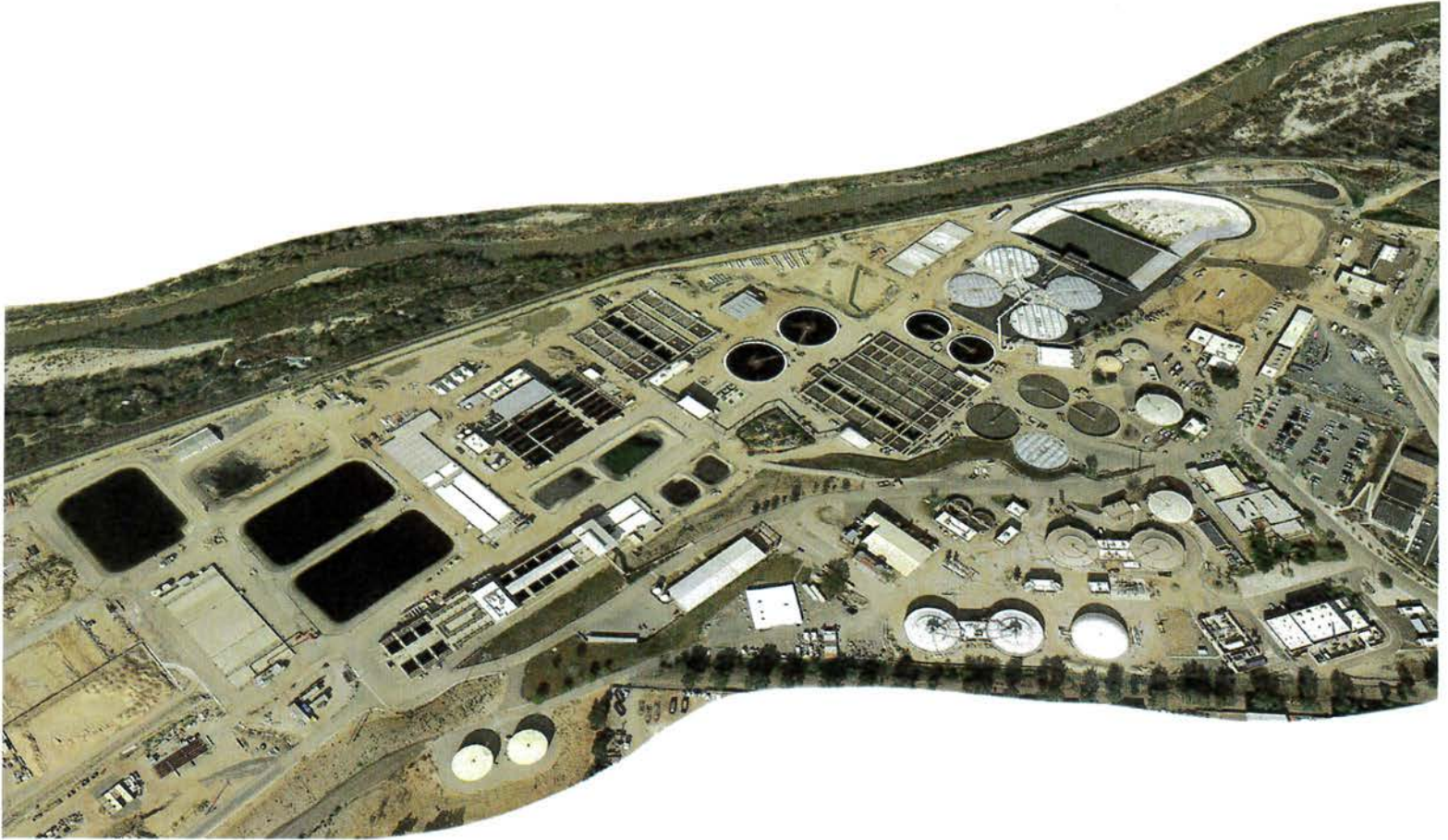
Analysis of water demand and supply projections for RPU's service area, including the NDDP, demonstrates that estimates of projected supplies are sufficient to satisfy RPU demand through Year 2040. The capacity of the SBBA, managed in accordance with the Western-San Bernardino Watermaster, may be used to buffer episodes of drought and help address impacts that may result from extended droughts, and temporary reductions in basin safe yields. The analysis relies on the groundwater supplies from the SBBA. Recycled water is proposed to be a major future water source that will minimize the need for imported water purchases.

Analysis of water supply projections for RPU, including the NDDP and future UCR Long Range Development Plan projects, demonstrates that estimates of anticipated projected supply entitlements are sufficient to satisfy RPU demand both now and through the Year 2040 during normal and dry years.



## **7.0 REFERENCES**

1. City of Riverside, *2015 Urban Water Management Plan for Riverside Public Utilities Water Division*, June 2016.
2. Western Municipal Water District, *2015 Urban Water Management Plan Update Final Report*, June, 2016.
3. University of California, Riverside, *North District Development Plan Initial Study*, June 2018.
4. Department of Water Resources (DWR), *2017 State Water Project Delivery Capability Report*, March 2018.
5. University of California, Riverside, *UCR Long Range Development Plan Status*, e-mail correspondence, Ms. Tricia Thrasher, November 2018.



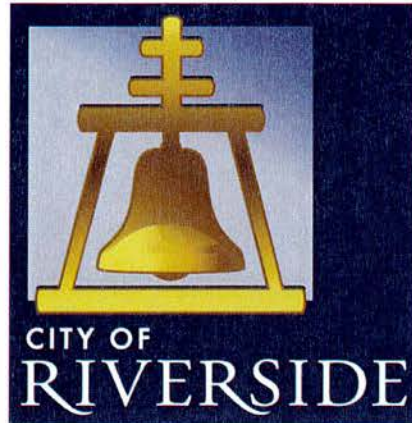
City of Riverside Public Works Department

Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities

# NORTH DISTRICT STUDENT HOUSING - SEWER CAPACITY EVALUATION

FINAL | October 2018





City of Riverside Public Works Department  
Update of the Integrated Master Plan for the Wastewater Collection  
and Treatment Facilities

NORTH DISTRICT STUDENT HOUSING - SEWER  
CAPACITY EVALUATION

FINAL | OCTOBER 2018



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# NORTH DISTRICT STUDENT HOUSING - SEWER CAPACITY EVALUATION

## 1.1 Purpose

The University of California Riverside (UCR) plans to demolish and replace existing student housing. The planned project is the North District student housing project Phase 1 (North District project) located at Linden Street and Aberdeen Drive. There will be a net increase in the number of students housed when North District is completed, thus increasing the water demands and wastewater consumption. The purpose of this study is to understand the impact that North District could have on the City of Riverside's (City's) wastewater collection system. The City's existing wastewater collection system is shown on Figure 1. A hydraulic evaluation was completed by updating the hydraulic model recently developed as part of the City's 2018 Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities (Master Plan Update). This report describes the model update, evaluation criteria, and hydraulic evaluation to determine the impact of the proposed North District project.

## 1.2 Model Update

The hydraulic model developed by Carollo Engineers, Inc. (Carollo) included pipelines that are 10 inches in diameter and larger. Some smaller diameter sewers (8 inches in diameter and smaller) are also included in the hydraulic model, where needed, for connectivity. The North District project will tie into an existing 8-inch diameter sewer at Linden Street and Aberdeen Drive (Canyon Crest Sewer). The hydraulic model did not include the Canyon Crest Sewer. The Canyon Crest Sewer connects to the modeled system at University Avenue and Canyon Crest Drive. For the hydraulic analysis, the North District's dry weather flows (DWF) were loaded where the Canyon Crest Sewer discharges to the modeled sewer system. Figure 2 shows the North District connection to the existing sewer system and the point where the loads were allocated to the model.

North District's estimated DWF was developed by American Campus Communities SC Development (Californian) LP (ACC), and is summarized in Table 1. For the purpose of the hydraulic evaluation, the net additional loads associated with the project were allocated to the modeled manhole as DWF. UCR's North District site plan and sewer load calculations are included in Appendix A.

Table 1 Dry Weather Flow - North District

	DWF (gpd)
Demolition of Existing Student Housing	-32,450
New North District Student Housing	127,500
Net Additional Loads	95,050

Notes:

(1) Source: ACC SC Development (California) LP (April 11, 2018)

### 1.3 Evaluation Criteria

The evaluation criteria used in this study are consistent with the evaluation criteria used in Volume 3, Chapter 5: Planning Criteria and Design Flows (Chapter 5) of the Master Plan Update. This section provides a brief description of the evaluation criteria used in this study.

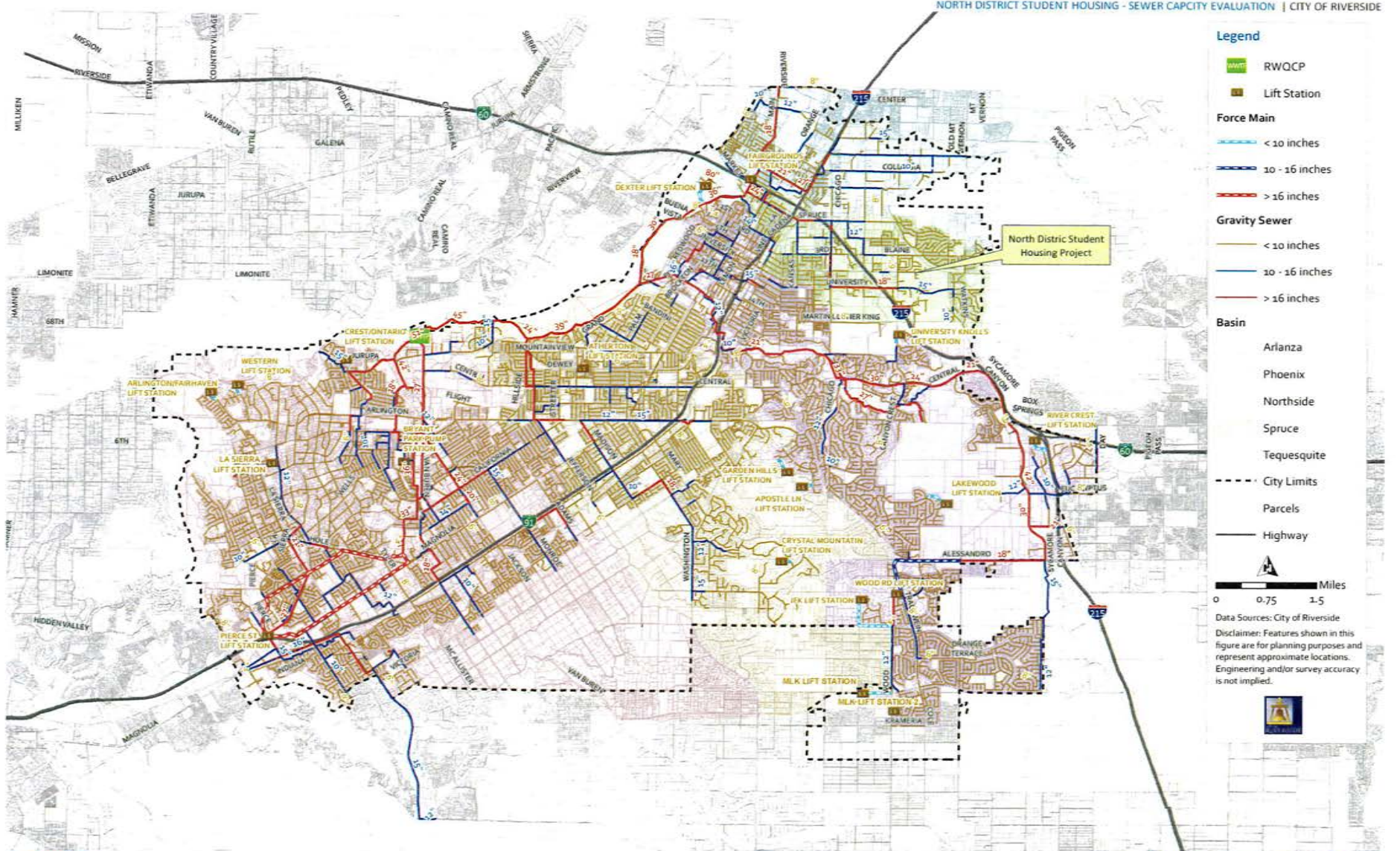
The primary criterion used to identify capacity-deficient sewers or to size new sewer improvements is the maximum  $d/D$ . The  $d/D$  value is defined as the depth of flow ( $d$ ) in a pipe during peak (design) flow conditions divided by the pipe's diameter ( $D$ ). The maximum depth criteria were evaluated under peak wet weather flow (PWWF) conditions. The PWWF design storm is a 10-year 24-hour storm event. Based on the flow monitoring program that was used for model calibrate the R-factor for this part of the sewer system in question. We have assumed for this analysis that the North District Project would not change the R-factor in such a way to impact the analysis

Existing rain derived inflow and infiltration (RDII) developed during the Master Plan Update's wet weather calibration. The wet weather calibration enables the hydraulic model to accurately simulate RDII entering the collection system during a large storm event. The hydrograph utilizes the R-values (percent of rainfall that enters the collection system) calculated for each basin to simulate RDII. Future RDII assumed maximum depth criteria are summarized in Table 2. The following explains these criteria in more detail:

- **Flow Depth for Existing Sewers.** Maximum flow depth criteria for existing sanitary sewers are established based on a number of factors, including the acceptable risk tolerance of the utility, local standards and codes, and other factors. Using a conservative  $d/D$  ratio when evaluating existing sewers may lead to unnecessary replacement of existing pipelines. Conversely, lenient flow depth criteria could increase the risk of sanitary sewer overflows (SSOs). Ultimately, the maximum allowable flow depth criteria should be established to be as cost-effective as possible while at the same time reducing the risk of SSOs to the greatest extent possible. For the City, existing pipelines were flagged if the  $d/D$  exceeded 0.90.

A capacity-deficient sewer (i.e., system bottleneck) raises the hydraulic grade line of upstream sewers, leading to backwater conditions. The greater the capacity deficiency, the higher water levels will surcharge upstream of the bottleneck pipeline (or pipelines). The hydraulic model is used to determine "backwater" pipelines in order to specify which specific pipelines are the actual root causes of the capacity deficiency. Capital projects are proposed to provide greater flow capacity for the deficient sewers, which eliminates the backwater conditions that cause surcharging.

- **Flow Depth for New Sewers.** When sizing new sewer pipelines, it is common practice to adopt different flow depth criteria for various pipe sizes. Design  $d/D$  ratios typically range from 0.5 to 0.92, with the lower values typically used for smaller pipes, which may experience flow peaks greater than design flow or blockages from debris, paper, or rags. The recommended  $d/D$  criteria for sizing new trunk lines are summarized in Table 2. For pipelines 10 inches and smaller in diameter, the maximum  $d/D$  value is 0.5 or 50 percent of the pipeline depth. For pipelines that are 12 inches to 18 inches in diameter, the recommended maximum  $d/D$  is 0.67. For pipelines larger than 18 inches in diameter, the maximum  $d/D$  is 0.75.



**Legend**

- RWQCP
- Lift Station

**Force Main**

- < 10 inches
- 10 - 16 inches
- > 16 inches

**Gravity Sewer**

- < 10 inches
- 10 - 16 inches
- > 16 inches

**Basin**

- Arlanza
- Phoenix
- Northside
- Spruce
- Tequesquite

- City Limits
- Parcels
- Highway

0 0.75 1.5 Miles

Data Sources: City of Riverside  
 Disclaimer: Features shown in this figure are for planning purposes and represent approximate locations. Engineering and/or survey accuracy is not implied.

Figure 1 Existing Wastewater Collection System



Figure 2 North District Student Housing Sewer Infrastructure Vicinity Map



Table 2 Maximum Flow Depth Criteria

Pipe Diameter (inches)	Maximum d/D Ratio (during Peak Wet Weather Flows)
<b>Maximum d/D for Existing Sewer</b>	
All Pipes	0.90
<b>Maximum d/D for New Sewers</b>	
10 inches and Smaller	0.50
12 inches to 18 inches	0.67
Larger than 18 inches	0.75

## 1.4 Hydraulic Evaluation

A capacity analysis entails identifying areas in the sewer system where flow restrictions occur or where pipe capacity is insufficient to convey peak wet weather flows (PWWFs). Sewers that lack sufficient capacity to convey PWWFs create bottlenecks in the collection system that can potentially cause SSOs. This section discusses new hydraulic deficiencies as a result of the proposed North District project, and confirms the recommended improvement project sizing developed in the Master Plan Update.

### 1.4.1 Existing Hydraulic Evaluation

For the existing sewer collection system, the PWWF was routed through the hydraulic model along with the additional DWF from North District. The City's collection system has sufficient capacity to convey current PWWFs downstream of North District without exceeding the established flow depth criterion.

### 1.4.2 Future Hydraulic Evaluation

The analysis of the future system was performed in a manner similar to the existing system analysis. The purpose of the future system evaluation is to verify that the existing system improvements were appropriately sized to convey future PWWFs, and to identify the locations of sewers that are adequately sized to convey existing PWWFs, but cannot convey future PWWFs.

The timing of growth under build out conditions is expected to occur within the planning horizon of the Master Plan Update, which is the year 2037. As flows continue to increase in the future, there will be some areas of the existing collection system that cannot convey the build out PWWF without flows exceeding capacity. The Master Plan Update identified three sections downstream of North District as being capacity deficient under future PWWF conditions. No new deficiencies were identified downstream of North District. Figure 3 shows the locations of the future deficiencies under build out PWWF conditions as well as new trunk sewers to reach future service areas.

All future improvements are development driven and should be completed based on the timing of new development within the service area unless it reaches the end of its useful life, whichever comes first. This philosophy helps to provide pipelines that have sufficient capacity to convey flow under build out PWWF conditions. The Master Plan Update recommended three future capacity improvement projects to mitigate these deficiencies. The Master Plan Update's recommended future capacity improvements are described below.

- **Spruce Highway Crossing (Project GM-28).** This project includes the replacement of approximately 1,030 feet of 15-inch diameter pipeline along Spruce Street, from 230 feet West of Chicago Avenue to 500 feet East of Kansas Avenue. The flow levels within the gravity sewer are expected to exceed the maximum d/D criteria under build out PWWF conditions. To meet the d/D design criteria during build out PWWF conditions, it is recommended that the existing pipeline be replaced with an 18-inch/30-inch diameter pipeline.
- **Santa Anna River and Buena Vista Avenue (Project GM-31).** This project includes the replacement of an 18-inch diameter trunk at Santa Anna River Trail and Buena Vista Avenue. The flow levels within the pipeline are expected to surcharge under build out PWWF conditions. To mitigate surcharge during build out PWWF it is recommended that the existing pipeline invert be raised to divert flow through a parallel 30-inch diameter trunk sewer.
- **Parallel Santa Ana Trunk (Project GM-34).** This project includes installing approximately 9,160 feet of 39-inch diameter trunk sewer parallel to the Phoenix Trunk Sewer between the Santa Ana Trail and Jurupa/Rubidoux Junction Structure. The flow levels within the upstream Phoenix Trunk sewer are expected to surcharge, exceed maximum d/D criteria, and experience backwater effects under build out PWWF conditions. To mitigate the capacity deficiencies during build out PWWF conditions, a parallel trunk sewer is recommended.

A hydraulic evaluation was completed to confirm that the recommended capacity improvements are in accordance with the established planning criteria, new sewer pipelines were sized such that the maximum d/D does not exceed the new pipe design criteria summarized in Table 2. The hydraulic evaluation confirmed that the recommended capacity improvements are adequately sized to handle future PWWFs along with the additional flows from the proposed North District project.

However, the future capacity evaluation flagged an additional reach of pipe not previously identified in the Master Plan Update. This deficiency occurs along a 350-foot stretch of the Santa Ana Trunk Sewer upstream of project GM-34. But, this deficiency exceeds the maximum allowable d/D by only 0.23 percent and is therefore considered minor. For that reason no improvement is recommended to mitigate this deficiency.

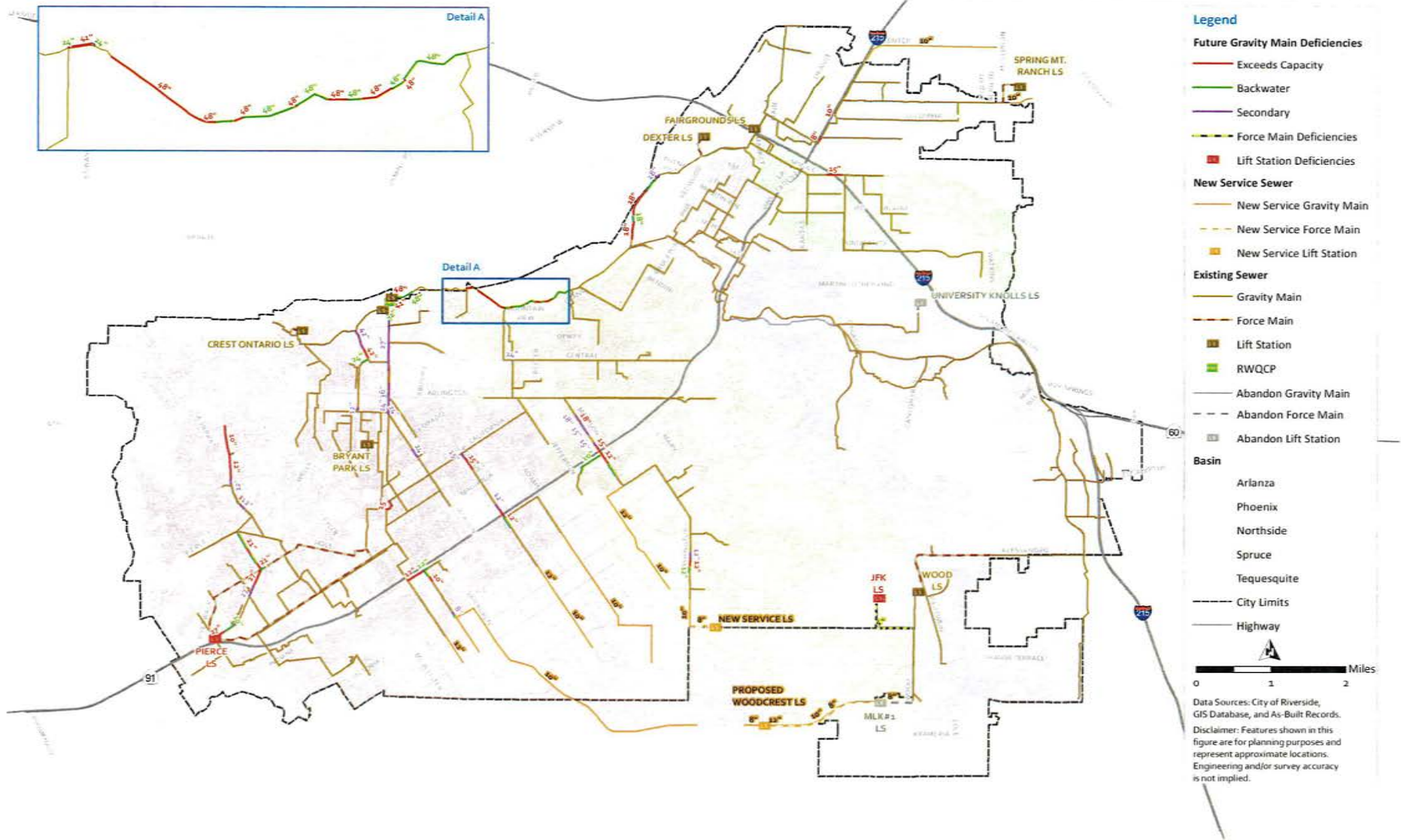


Figure 3 Future Wastewater Collection System Capacity Analysis

## 1.5 Conclusion

Based on the hydraulic evaluation presented above, the following conclusions can be made:

1. The proposed North District project will tie into an existing 8-inch diameter sewer at Linden Street and Aberdeen Drive (Canyon Crest Sewer). This sewer was added to the City's existing sewer hydraulic model as part of this analysis.
2. The proposed North District project is expected to result in a net increase of 95,050 gallons per day to the City's sewer system during dry weather conditions.
3. Peak wet weather flows (PWWF) were modeled using factors based on measured wet weather flows during storm events.
4. The model showed that the City's collection system has sufficient capacity to convey current PWWFs downstream of the North District connection point without causing impacts to the sewer system.
5. For future build out conditions in 2037, the model indicated that the proposed North District project would cause a flow deficiency in one sewer. However, the deficiency is considered minor and no improvement of the sewer in question is recommended.
6. Overall, the proposed North District project is not expected to result in any negative hydraulic impacts to the City's sewer system that will trigger an improvement project.

Appendix A  
NORTH DISTRICT, PHASE 1 SITE PLAN

\*ASSUME MANHOLE EVERY 300-FEET AND AT DIRECTIONAL CHANGES



February 26, 2019

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Impact Sciences  
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Los Angeles, CA 90017

JN 001IS1

**Subject: Supplemental Sewer System Study for NDDP Phase 1**

### **BACKGROUND**

The North District Development Project (NDDP or Project) is a proposed development component of the University of California at Riverside (UCR) campus. The NDDP project site is generally bounded by Linden Street to the south, Canyon Crest Drive to the west, Blaine Street to the north, and Watkins Drive to the east. Phase 1 of the Project is proposed to develop new student housing buildings with up to 1,500 beds. Additional development beyond Phase 1 is not scheduled at this time.

A Sewer Capacity Evaluation was prepared by Carollo Engineers (October 2018) for the Phase 1 Project. The Evaluation used the City of Riverside's updated computer model to analyze City sewers from University Avenue and Canyon Crest Drive to the Regional Water Quality Control Plant at the west end of the City, and determined the existing sewers were sufficiently sized for City Year 2037 buildout conditions plus NDDP Phase 1 flows.

CMC has completed this supplemental Sewer System Study (SSS) which examines the smaller upstream sewers in Linden Street and Canyon Crest Drive. These sewers serve the current uses of the Project site and surrounding areas, and are proposed to serve the new NDDP Project. The regional vicinity of the NDDP and its site plan are shown in **Exhibits 1 and 2**. The NDDP site plan and proposed concept development is shown in **Exhibit 3**. NDDP Phase 1 is within Districts 1 and 2 at the south end fronting Linden Street.

### **SUMMARY**

The purpose of the supplemental SSS is to determine the impacts to three off-site sewer reaches of the existing sewer system, based on field flow testing, proposed to serve the NDDP. The off-site sewers are located in Linden Street, Canyon Crest Drive and University Avenue, as shown in **Exhibit 4**. The proposed land uses for the ultimate 51.15-acre Project site range from maximum density of 7,300 beds and 157,000 square-feet of building area to a minimum of 4,300 beds and 103,000 sf of building area, as shown in **Table 1**:

Table 1 - North District Development Project					
Segment	Land Use	Acres <sup>[2]</sup>	Quantity <sup>[1]</sup>		
			quantity	Building Area	
Phase 1 - MAXIMUM Density					
1	Student Residential 1	2.125	1,000	beds	
	Mixed Use District 1	2.125			15,000 sf
2a	Student Residential 2a	1.183	500	beds	
	Dining Commons	-			
<b>Phase 1 MAXIMUM Total</b>		<b>5.433</b>	<b>1,500</b>	<b>beds</b>	<b>15,000 sf</b>
Future - MAXIMUM Density					
2b	Student Residential 2b	1.892	800	beds	
	Mixed Use District 2	3.075			22,000 sf
	Dining Commons	-			
3	Student Residential 3	2.725	1,400	beds	
	Mixed Use District 3	2.725			50,000 sf
4	Student Residential 4	4.2	2,600	beds	
	Mixed Use District 4	4.2			70,000 sf
5	Student Residential 5	1.7	1,000	beds	
	Mixed Use District 5	1.7			-
6	Events Center	5.7	7,000	seats	-
7	Open Space	11.6	-		-
8	Parking 1	2.15	-		-
9	Parking 2	4.05	-		-
<b>Future MAXIMUM Total</b>		<b>51.15</b>	<b>7,300</b>	<b>beds</b>	<b>172,000 sf</b>
			<b>7,000</b>	<b>seats</b>	
Phase 1 - MINIMUM Density					
1	Student Residential 1	2.125	700	beds	
	Mixed Use District 1	2.125			10,000 sf
2a	Student Residential 2a	1.183	308	beds	
	Dining Commons	-			
<b>Phase 1 MINIMUM Total</b>		<b>5.433</b>	<b>1,008</b>	<b>beds</b>	<b>10,000 sf</b>
Future - MINIMUM Density					
2b	Student Residential 2b	1.892	492	beds	
	Mixed Use District 2	3.075			13,000 sf
	Dining Commons	-			
3	Student Residential 3	2.725	700	beds	
	Mixed Use District 3	2.725			30,000 sf
4	Student Residential 4	4.2	1,400	beds	
	Mixed Use District 4	4.2			50,000 sf
5	Student Residential 5	1.7	700	beds	
	Mixed Use District 5	1.7			-
6	Events Center	5.7	5,000	seats	-
7	Open Space	11.6	-		-
8	Parking 1	2.15	-		-
9	Parking 2	4.05	-		-
<b>Future MINIMUM Total</b>		<b>51.15</b>	<b>4,300</b>	<b>beds</b>	<b>113,000 sf</b>
			<b>5,000</b>	<b>seats</b>	
[1] Taken from NDDP Initial Study, June 2018.					
[2] Assumes 'residential' and 'mixed-use' split the total segment acreage equally, and Segment 2 is split proportionately between 2a and 2b.					



Based on field flow monitoring, the Sewer System Study concluded that each sewer currently flows at the maximum flow characteristics under dry-weather conditions shown in **Table 2**:

**Table 2 – Sewer Flow Monitoring Results**

Sewer	Diameter	Max Flow	Max Velocity	Level	d/D ratio
Linden Street	8 in	63 gpm	2.48 fps	1.89 in	0.236
Canyon Crest Dr	8 in	96 gpm	4.24 fps	1.96 in	0.245
University Ave	18 in	661 gpm	4.23 fps	5.11 in	0.284

The peak wastewater flow contribution from the Project is estimated at 277 gpm for Phase 1, and 1,365 gpm including future NDDP development under maximum proposed density. The peak wastewater flow contribution from the Project under minimum proposed density is estimated at 190 gpm for Phase 1, and 833 gpm including future NDDP development. The Study estimates current operating peak depth ratios in the three sewers at approximately 23.6 to 28.4 percent (Table 2). It is estimated that adequate capacity is available within the 18-inch University Drive sewer for Phase 1 and buildout of the NDDP plus current dry weather flow, which confirms the findings of the October 2018 Carollo report. Estimated ultimate dry-weather flows could generate depth-to-diameter ratios within the 18-inch University Avenue sewer up to 51 percent at buildout of maximum Project density, and 43 percent at buildout of minimum Project density. Very conservative rain-dependent inflow and infiltration (RDII) assumptions at 150 percent of peak flow would increase these ratios to 65 percent and 55 percent. Depth ratios for Phase 1 would be significantly lower. These estimated depth ratios are within recommended operating standards for existing 18-inch gravity sewers.

Existing Linden Street and Canyon Crest Drive sewer capacities should be sufficient for Phase 1 NDDP flows. Under ultimate Project buildout, and depending on on-site sewer collection design, the Linden Street 8-inch sewer may require upsizing beyond Phase 1. In like manner, the 8-inch sewer in Canyon Crest Drive north of Linden Street may also require upsizing beyond Phase 1. The Canyon Crest Drive sewer south of Linden Street will require upsizing or paralleling prior to ultimate buildout of the NDDP.

CMC recommends that this study be submitted to the City of Riverside and UCR Facilities staff for their review and concurrence.

### **ANALYSIS**

The off-site trunk sewer system proposed to serve the North District Development Project (NDDP or Project) includes existing sewers in Linden Street, Canyon Crest Drive and University Avenue, as shown in Exhibit 4. The City of Riverside and UCR own separate sewer systems that are proposed to serve the NDDP project land uses. The City sanctioned a separate sewer study (Carollo, October 2018) analyzing their trunk sewer system to the Regional Water Quality Control Plant (RWQCP) approximately ten miles

downstream of the NDDP project. The Carollo study determined the existing sewers are sufficient to serve Phase 1 at the City's Year 2037 buildout.

Upstream of the system analyzed by Carollo, UCR operates an 8-inch gravity sewer in Linden Street east of Canyon Crest Drive, and the City operates the 8-inch gravity sewer in Canyon Crest Drive which conveys the Linden Street sewer flows south to University Avenue. The City also operates the 18-inch gravity sewer in University Drive. These three sewer systems were deemed potentially critical for NDDP flows. This supplemental Sewer System Study (SSS) determined available capacity in each of these existing sewer systems for the NDDP.

As part of the SSS, off-site sewer flow monitoring was performed on the sewers described above. CMC coordinated with Utilities Systems, Science and Software, Inc. (US<sup>3</sup>) to install meters at manholes in each sewer for a two-week monitoring period. The specific manholes are shown in **Exhibit 4**.

#### ***Estimated wastewater flow from the Project***

The estimated wastewater flow from the Project is based on the site plan and maximum and minimum development densities identified in the June 2018 Initial Study for the NDDP. The estimates use the Carollo sewerage flow factors and industry-standard sewerage flow factors for college dormitories and mixed-use land uses, as summarized in **Table 3** under maximum and minimum densities. It should be noted that point source flow that could be generated from the Events Center with 5,000 to 7,000 seats at sold-out events could be a critical sizing condition for the sewer system. However, the Events Center is part of 'future' planned improvements that are not scheduled at this time. The recommendations at the end of the Study include evaluating the fixture units for the proposed Events Center as soon as the design information is available.

Table 3 - Wastewater Flow Estimate							
Segment	Land Use	Acres <sup>[2]</sup>	Quantity <sup>[1]</sup>		Unit Factor <sup>[4]</sup>	Average	Peak <sup>[5]</sup>
			quantity	Building			
Phase 1 - MAXIMUM Density							
1	Student Residential 1	2.125	1,000 beds		85 gpcd	59 gpm	
	Mixed Use District 1	2.125		15,000 sf	2,500 gpd/Ac	4 gpm	
2a	Student Residential 2a	1.183	500 beds		85 gpcd	30 gpm	
	Dining Commons	<sub>[3]</sub>			<sub>[3]</sub>	-	
<b>Phase 1 MAXIMUM Total</b>		<b>5.433</b>	<b>1,500 beds</b>			<b>92 gpm</b>	<b>277 gpm</b>
Future - MAXIMUM Density							
2b	Student Residential 2b	1.892	800 beds		85 gpcd	47 gpm	
	Mixed Use District 2	3.075		22,000 sf	2,500 gpd/Ac	5 gpm	
	Dining Commons	<sub>[3]</sub>			-	-	
3	Student Residential 3	2.725	1,400 beds		85 gpcd	83 gpm	
	Mixed Use District 3	2.725		50,000 sf	2,500 gpd/Ac	5 gpm	
4	Student Residential 4	4.2	2,600 beds		85 gpcd	153 gpm	
	Mixed Use District 4	4.2		70,000 sf	2,500 gpd/Ac	7 gpm	
5	Student Residential 5	1.7	1,000 beds		85 gpcd	59 gpm	
	Mixed Use District 5	1.7		-	2,500 gpd/Ac	3 gpm	
6	Events Center	5.7	7,000 seats	-	10 gpd/seat	49 gpm	
7	Open Space	11.6	-	-	-	-	-
8	Parking 1	2.15	-	-	-	-	-
9	Parking 2	4.05	-	-	-	-	-
<b>Future MAXIMUM Total</b>		<b>51.15</b>	<b>7,300 beds</b>	<b>157,000 sf</b>		<b>455 gpm</b>	<b>1,365 gpm</b>
			<b>7,000 seats</b>			<b>49 gpm</b>	<b>-</b>
Phase 1 - MINIMUM Density							
1	Student Residential 1	2.125	700 beds		85 gpcd	41 gpm	
	Mixed Use District 1	2.125		10,000 sf	2,500 gpd/Ac	4 gpm	
2a	Student Residential 2a	1.183	308 beds		85 gpcd	18 gpm	
	Dining Commons	<sub>[3]</sub>			<sub>[3]</sub>	-	
<b>Phase 1 MINIMUM Total</b>		<b>5.433</b>	<b>1,008 beds</b>			<b>63 gpm</b>	<b>190 gpm</b>
Future - MINIMUM Density							
2b	Student Residential 2b	1.892	492 beds		85 gpcd	29 gpm	
	Mixed Use District 2	3.075		13,000 sf	2,500 gpd/Ac	5 gpm	
	Dining Commons	<sub>[3]</sub>			-	-	
3	Student Residential 3	2.725	700 beds		85 gpcd	41 gpm	
	Mixed Use District 3	2.725		30,000 sf	2,500 gpd/Ac	5 gpm	
4	Student Residential 4	4.2	1,400 beds		85 gpcd	83 gpm	
	Mixed Use District 4	4.2		50,000 sf	2,500 gpd/Ac	7 gpm	
5	Student Residential 5	1.7	700 beds		85 gpcd	41 gpm	
	Mixed Use District 5	1.7		-	2,500 gpd/Ac	3 gpm	
6	Events Center	5.7	5,000 seats	-	10 gpd/seat	35 gpm	
7	Open Space	11.6	-	-	-	-	-
8	Parking 1	2.15	-	-	-	-	-
9	Parking 2	4.05	-	-	-	-	-
<b>Future MINIMUM Total</b>		<b>51.15</b>	<b>4,300 beds</b>	<b>103,000 sf</b>		<b>278 gpm</b>	<b>833 gpm</b>
			<b>5,000 seats</b>			<b>35 gpm</b>	<b>-</b>

[1] Taken from NDDP Initial Study, June 2018.

[2] Assumes 'residential' and 'mixed-use' split the total segment acreage equally.

[3] Wastewater generation for dining commons is included in the unit factor per student.

[4] Unit factors are based on October 2018 Carollo study or typical water usage in southern California for college dormitories and mixed use land uses.

[5] Sewer peaking is typically calculated using sliding scale - the larger the development, the lower the peaking factor. Sliding scale equations adopted by sewer agencies generally result in factors ranging from 1.5 to 2.5 times average flow. The peaking factor for NDDP is conservatively estimated at 3.0.

**Sewer Flow Monitoring**

Utility Systems, Science and Software (US<sup>3</sup>) performed a flow monitoring study at a manhole on each off-site sewer (Linden Street, Canyon Crest Drive, and University Avenue) in order to determine flows in each system and to determine available capacity for future development. US<sup>3</sup> determined the flow characteristics at each location shown in **Tables 4a, 4b and 4c.**

**Table 4a – Sewer Flow Monitoring, Linden Street**

Date	Flow (GPM)			Flow (MGD)			Velocity (FPS)			Level (inches)			Total Gal
	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	
10/16/18	42.89	63.33	32.78	0.06	0.09	0.05	2.11	2.26	1.86	1.50	1.89	1.36	61,761
10/17/18	37.66	55.35	5.07	0.05	0.08	0.01	2.06	2.40	1.56	1.34	1.80	0.43	54,228
10/18/18	39.05	61.94	4.79	0.06	0.09	0.01	2.10	2.48	1.56	1.35	1.79	0.41	56,236
10/19/18	31.87	59.58	5.28	0.05	0.09	0.01	2.04	2.47	1.54	1.19	1.69	0.44	45,888
10/20/18	22.64	48.54	5.69	0.03	0.07	0.01	1.89	2.15	1.52	1.00	1.64	0.46	32,605
10/21/18	24.78	43.26	4.10	0.04	0.06	0.01	1.83	2.18	1.17	1.09	1.58	0.37	35,688
<b>Week:</b>	<b>33.15</b>	<b>63.33</b>	<b>4.10</b>	<b>0.05</b>	<b>0.09</b>	<b>0.01</b>	<b>2.01</b>	<b>2.48</b>	<b>1.17</b>	<b>1.24</b>	<b>1.89</b>	<b>0.37</b>	<b>286,407</b>
10/22/18	34.37	54.44	4.86	0.05	0.08	0.01	1.96	2.23	1.50	1.31	1.73	0.43	49,499
10/23/18	35.97	58.75	5.07	0.05	0.08	0.01	1.99	2.36	1.56	1.33	1.83	0.43	51,795
10/24/18	34.25	59.17	5.00	0.05	0.09	0.01	1.96	2.44	1.49	1.30	1.78	0.43	49,325
10/25/18	33.50	47.85	5.00	0.05	0.07	0.01	1.90	2.13	1.55	1.33	1.68	0.43	48,239
10/26/18	29.59	47.15	5.56	0.04	0.07	0.01	1.91	2.16	1.49	1.21	1.61	0.47	42,606
10/27/18	22.23	38.89	5.14	0.03	0.06	0.01	1.85	2.14	1.46	1.02	1.59	0.43	32,011
10/28/18	23.96	43.19	4.86	0.03	0.06	0.01	1.88	2.28	1.48	1.05	1.47	0.41	34,499
<b>Week:</b>	<b>30.55</b>	<b>59.17</b>	<b>4.86</b>	<b>0.04</b>	<b>0.09</b>	<b>0.01</b>	<b>1.92</b>	<b>2.44</b>	<b>1.46</b>	<b>1.22</b>	<b>1.83</b>	<b>0.41</b>	<b>307,974</b>
10/29/18	31.28	52.78	5.35	0.05	0.08	0.01	1.88	2.24	1.56	1.26	1.82	0.44	45,045
10/30/18	33.27	52.57	5.28	0.05	0.08	0.01	1.95	2.37	1.54	1.28	1.71	0.44	47,905
10/31/18	30.83	56.87	5.97	0.04	0.08	0.01	1.85	2.06	1.53	1.27	1.86	0.48	44,395
11/1/18	40.48	53.19	29.24	0.06	0.08	0.04	1.96	2.24	1.73	1.51	1.72	1.25	58,297
11/2/18	30.39	53.75	5.42	0.04	0.08	0.01	1.87	2.19	1.45	1.22	1.73	0.47	43,764
<b>Week:</b>	<b>33.25</b>	<b>56.87</b>	<b>5.28</b>	<b>0.05</b>	<b>0.08</b>	<b>0.01</b>	<b>1.90</b>	<b>2.37</b>	<b>1.45</b>	<b>1.31</b>	<b>1.86</b>	<b>0.44</b>	<b>239,405</b>
<b>Totals:</b>	<b>32.17</b>	<b>63.33</b>	<b>4.10</b>	<b>0.05</b>	<b>0.09</b>	<b>0.01</b>	<b>1.94</b>	<b>2.48</b>	<b>1.17</b>	<b>1.25</b>	<b>1.89</b>	<b>0.37</b>	<b>833,786</b>

Table 4b – Sewer Flow Monitoring, Canyon Crest Drive

Date	Flow (GPM)			Flow (MGD)			Velocity (FPS)			Level (inches)			Total Gal
	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	
10/16/18	43.23	64.86	30.69	0.06	0.09	0.04	3.59	3.92	3.23	1.04	1.39	0.87	62,249
10/17/18	37.97	51.46	14.79	0.05	0.07	0.02	3.48	4.24	1.85	0.97	1.07	0.75	54,680
10/18/18	40.78	94.31	10.49	0.06	0.14	0.02	2.93	3.64	1.63	1.14	1.90	0.65	58,718
10/19/18	37.55	86.46	20.76	0.05	0.12	0.03	2.91	3.41	1.82	1.09	1.78	0.80	54,065
10/20/18	25.03	40.35	11.46	0.04	0.06	0.02	2.72	3.57	1.86	0.85	1.01	0.66	36,037
10/21/18	25.15	35.97	12.57	0.04	0.05	0.02	2.69	3.33	1.62	0.87	0.98	0.72	36,210
<b>Week:</b>	<b>34.95</b>	<b>94.31</b>	<b>10.49</b>	<b>0.05</b>	<b>0.14</b>	<b>0.02</b>	<b>3.05</b>	<b>4.24</b>	<b>1.62</b>	<b>0.99</b>	<b>1.90</b>	<b>0.65</b>	<b>301,960</b>
10/22/18	37.38	55.97	13.96	0.05	0.08	0.02	3.02	3.51	1.66	1.04	1.29	0.79	53,828
10/23/18	38.92	52.08	12.08	0.06	0.08	0.02	3.13	4.12	1.73	1.05	1.25	0.72	56,050
10/24/18	35.90	50.62	13.26	0.05	0.07	0.02	3.48	4.17	1.94	0.92	1.05	0.71	51,694
10/25/18	35.45	48.89	13.68	0.05	0.07	0.02	3.41	4.03	1.92	0.93	1.05	0.73	51,049
10/26/18	42.67	95.83	12.50	0.06	0.14	0.02	2.81	3.47	1.79	1.18	1.96	0.72	61,446
10/27/18	34.08	81.04	13.61	0.05	0.12	0.02	2.68	3.45	1.73	1.05	1.69	0.78	49,070
10/28/18	25.57	39.31	10.62	0.04	0.06	0.02	2.75	3.43	1.54	0.86	1.01	0.68	36,814
<b>Week:</b>	<b>35.71</b>	<b>95.83</b>	<b>10.62</b>	<b>0.05</b>	<b>0.14</b>	<b>0.02</b>	<b>3.04</b>	<b>4.17</b>	<b>1.54</b>	<b>1.01</b>	<b>1.96</b>	<b>0.68</b>	<b>359,950</b>
10/29/18	37.74	73.47	13.33	0.05	0.11	0.02	3.08	3.96	1.80	1.03	1.55	0.75	54,352
10/30/18	35.54	49.44	10.62	0.05	0.07	0.02	3.32	3.91	1.77	0.94	1.09	0.65	51,175
10/31/18	39.46	66.53	15.21	0.06	0.10	0.02	3.06	3.75	1.94	1.07	1.47	0.78	56,829
11/1/18	67.58	88.89	40.76	0.10	0.13	0.06	2.91	3.51	1.77	1.65	1.84	1.39	97,308
11/2/18	40.85	77.85	14.86	0.06	0.11	0.02	2.80	3.65	1.82	1.18	1.65	0.80	58,828
<b>Week:</b>	<b>44.23</b>	<b>88.89</b>	<b>10.62</b>	<b>0.06</b>	<b>0.13</b>	<b>0.02</b>	<b>3.03</b>	<b>3.96</b>	<b>1.77</b>	<b>1.17</b>	<b>1.84</b>	<b>0.65</b>	<b>318,492</b>
<b>Totals:</b>	<b>37.82</b>	<b>95.83</b>	<b>10.49</b>	<b>0.05</b>	<b>0.14</b>	<b>0.02</b>	<b>3.04</b>	<b>4.24</b>	<b>1.54</b>	<b>1.05</b>	<b>1.96</b>	<b>0.65</b>	<b>980,401</b>

Table 4c – Sewer Flow Monitoring, University Avenue

Date	Flow (GPM)			Flow (MGD)			Velocity (FPS)			Level (inches)			Total Gal
	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	
10/16/18	328.9	455.6	251.2	0.47	0.66	0.36	2.98	3.41	2.48	3.53	4.07	3.23	473,670
10/17/18	282.2	455.8	95.8	0.41	0.66	0.14	2.79	3.43	1.72	3.25	4.09	2.21	406,345
10/18/18	295.6	570.3	70.2	0.43	0.82	0.10	2.98	3.85	1.46	3.17	4.36	2.00	425,698
10/19/18	272.3	614.2	83.3	0.39	0.88	0.12	2.79	4.05	1.53	3.13	4.43	2.18	392,064
10/20/18	215.3	336.2	79.3	0.31	0.48	0.11	2.41	3.33	1.50	2.99	3.59	2.14	310,048
10/21/18	238.2	393.9	77.7	0.34	0.57	0.11	2.37	2.86	1.51	3.21	4.27	2.09	343,029
<b>Week:</b>	<b>272.1</b>	<b>614.2</b>	<b>70.2</b>	<b>0.39</b>	<b>0.88</b>	<b>0.10</b>	<b>2.72</b>	<b>4.05</b>	<b>1.46</b>	<b>3.21</b>	<b>4.43</b>	<b>2.00</b>	<b>2,350,854</b>
10/22/18	301.2	661.1	104.3	0.43	0.95	0.15	2.52	3.68	1.54	3.63	5.11	2.53	433,725
10/23/18	301.6	456.7	73.1	0.43	0.66	0.11	2.76	3.52	1.32	3.42	4.15	2.15	434,298
10/24/18	323.9	508.1	93.9	0.47	0.73	0.14	2.92	3.57	1.66	3.46	4.40	2.23	466,434
10/25/18	285.8	520.9	91.0	0.41	0.75	0.13	2.86	3.74	1.61	3.22	4.32	2.23	411,492
10/26/18	281.9	598.8	97.7	0.41	0.86	0.14	2.98	4.23	1.70	3.09	4.22	2.22	405,936
10/27/18	219.9	360.8	92.2	0.32	0.52	0.13	2.60	3.28	1.72	2.89	3.69	2.15	316,702
10/28/18	252.6	439.9	78.0	0.36	0.63	0.11	2.69	3.46	1.31	3.10	3.91	2.32	363,721
<b>Week:</b>	<b>281.0</b>	<b>661.1</b>	<b>73.1</b>	<b>0.40</b>	<b>0.95</b>	<b>0.11</b>	<b>2.76</b>	<b>4.23</b>	<b>1.31</b>	<b>3.26</b>	<b>5.11</b>	<b>2.15</b>	<b>2,832,308</b>
10/29/18	296.0	475.2	84.9	0.43	0.68	0.12	2.87	3.57	1.42	3.27	4.07	2.29	426,278
10/30/18	295.7	461.7	80.1	0.43	0.67	0.12	2.86	3.52	1.51	3.27	4.04	2.14	425,857
10/31/18	287.2	493.4	67.8	0.41	0.71	0.10	2.78	3.45	1.27	3.27	4.25	2.14	413,629
11/1/18	312.9	469.7	134.0	0.45	0.68	0.19	2.83	3.50	1.90	3.50	4.29	2.51	450,534
11/2/18	280.2	529.3	81.7	0.40	0.76	0.12	2.50	3.52	1.44	3.38	4.48	2.09	403,455
<b>Week:</b>	<b>294.4</b>	<b>529.3</b>	<b>67.8</b>	<b>0.42</b>	<b>0.76</b>	<b>0.10</b>	<b>2.77</b>	<b>3.57</b>	<b>1.27</b>	<b>3.34</b>	<b>4.48</b>	<b>2.09</b>	<b>2,119,752</b>
<b>Totals:</b>	<b>281.7</b>	<b>661.1</b>	<b>67.8</b>	<b>0.41</b>	<b>0.95</b>	<b>0.10</b>	<b>2.75</b>	<b>4.23</b>	<b>1.27</b>	<b>3.27</b>	<b>5.11</b>	<b>2.00</b>	<b>7,302,914</b>

Graphs representing this data are included in the **Appendix**. The off-site sewer collection system proposed to serve the Project is shown in Exhibit 4. The UCR Facilities atlas map (5-1282) was used as the base for Exhibit 4.

The supplemental SSS focused on the peak flows and maximum depths observed at each manhole to determine the most critical reach (least amount of available capacity), and conservatively assumes

existing peak flows will occur at the same time as the proposed NDDP Phase 1 peak flows. **Tables 5a and 5b** summarize the average and peak flows (estimated at maximum and minimum development density) in each manhole and calculates the additional peak flow in each system from NDDP Phase 1.

**Table 5a – Proposed Peak Flow (MAXIMUM)**

Sewer	Existing Peak	Phase 1 Project	Proposed Ph 1 Total
Linden St	63.3 gpm	277 gpm	340 gpm
Canyon Crest Dr	95.8 gpm	277 gpm	373 gpm
University Ave	661.1 gpm	277 gpm	938 gpm

**Table 5b – Proposed Peak Flow (MINIMUM)**

Sewer	Existing Peak	Phase 1 Project	Proposed Ph 1 Total
Linden St	63.3 gpm	190 gpm	253 gpm
Canyon Crest Dr	95.8 gpm	190 gpm	286 gpm
University Ave	661.1 gpm	190 gpm	851 gpm

#### ***Linden Street 8-inch Sewer***

Flow monitoring for the Linden Street sewer showed a peak flow of 63 gpm and peak water level of 1.89 inches, for a depth ratio (d/D) of 0.236 (23.6 percent). The Manning's Equation was used to simulate this condition and determined that an effective pipe slope generating these flow characteristics is 0.01, assuming a typical roughness coefficient of 0.013 (see **Appendix**, Manning's Spreadsheet #1). Adding the estimated Phase 1 flow (at maximum and minimum density) to the existing flow (340 gpm and 253 gpm) is within the capacity of the sewer if allowed to flow at a depth ratio of approximately 58 percent, as shown in the Manning's Spreadsheet. Because this should be considered maximum allowed capacity, it is recommended that the on-site sewer system for all future phases of NDDP be designed to convey flows directly to the Canyon Crest Drive sewer. This should sufficiently account for wet weather conditions that could add 25 to 50 percent to the dry-weather flow.

#### ***Canyon Crest Drive 8-inch Sewer***

Flow monitoring for the Canyon Crest Drive sewer showed a peak flow of 96 gpm and peak water level of 1.96 inches, for a depth ratio (d/D) of 0.245 (24.5 percent). The Manning's Equation was used to simulate this condition and determined that an effective pipe slope generating these flow characteristics is 0.02 (see **Appendix**, Manning's Spreadsheet #1). Adding the estimated Phase 1 Project flow (at maximum and minimum density) to the existing flow (373 gpm and 286 gpm) is within the capacity of the sewer, as shown in the Manning's Spreadsheet. Therefore, this should be considered adequate capacity to serve Phase 1. Prior to buildout of future phases of NDDP development, paralleling or upsizing the Canyon Crest Drive sewer downstream of the confluence with the Linden Street sewer will be required. At 0.02 slope, 8-inch sewers have an approximate capacity of 700 gpm, as shown in the Manning's spreadsheet, if allowed to flow at a depth ratio of 75 percent, including wet weather conditions.

**University Avenue 18-inch Sewer**

Flow monitoring for the University Drive sewer showed a peak flow of 661 gpm and peak water level of 5.11 inches, for a depth ratio (d/D) of 0.284 (28.4 percent). The Manning's Equation was used to simulate this condition and determined that an effective pipe slope generating these flow characteristics is 0.006 (see **Appendix**, Manning's Spreadsheet #2). Adding 100 percent of the estimated ultimate Project flow (at maximum and minimum density) to the existing flow (938 gpm and 851 gpm) is within the capacity of the sewer. At 0.006 slope, 18-inch sewers have an approximate capacity of 3,300 gpm at a depth ratio of 75 percent, as shown in the Manning's spreadsheet. It should be noted that flow attenuation from the Project will reduce Project peaks by the time flow reaches the University Avenue sewer. Therefore, full peak Project flow added to existing observed flow in University Avenue is a conservative assumption.

The following is a summary of conclusions and recommendations as a result of the supplemental SSS:

1. The Linden Street sewer system has adequate capacity to serve Phase 1.
2. The Canyon Crest Drive sewer system downstream of its confluence with the Linden Street sewer system also has adequate capacity to serve Phase 1. Upon ultimate NDDP buildout, the Canyon Crest Drive sewer will require paralleling or upsizing.
3. Adequate capacity exists in the University Avenue 18-inch sewer for Phase 1 and ultimate NDDP wastewater flows.
4. At ultimate planned NDDP buildout, one of the Linden Street and Canyon Crest Drive sewer systems UPSTREAM (north and east) of the Linden Street/Canyon Crest Drive intersection will require paralleling or upsizing.
5. Fixture unit counts for the Events Center should be evaluated for potential peak flows as soon as structural/plumbing design data is available. The Events Center could be a critical wastewater generator during future phases of NDDP development.
6. Sewer flows in Canyon Crest Drive should be monitored as NDDP development proceeds beyond Phase 1.
7. Submit this study to the City of Riverside and UCR Facilities staff for their review and concurrence.

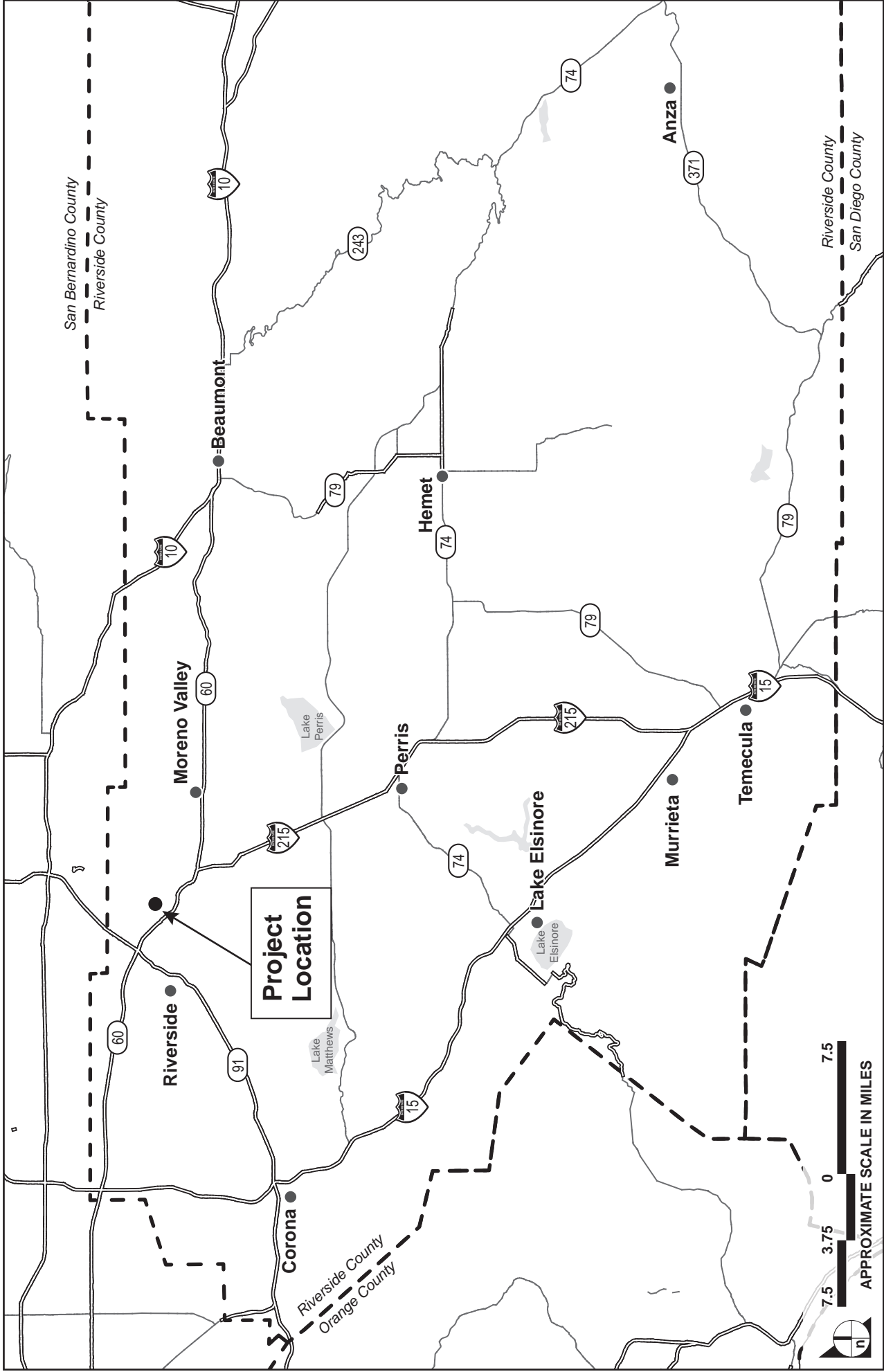
Please let me know if you have any questions regarding this analysis.

Sincerely,

Charlie Marr, P.E.  
Charles Marr Consulting  
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# Appendix



SOURCE: Impact Sciences, 2018



EXHIBIT 1

NDDP Regional Location





SOURCE: Google Maps, 2018

EXHIBIT 2

NDDP Project Location



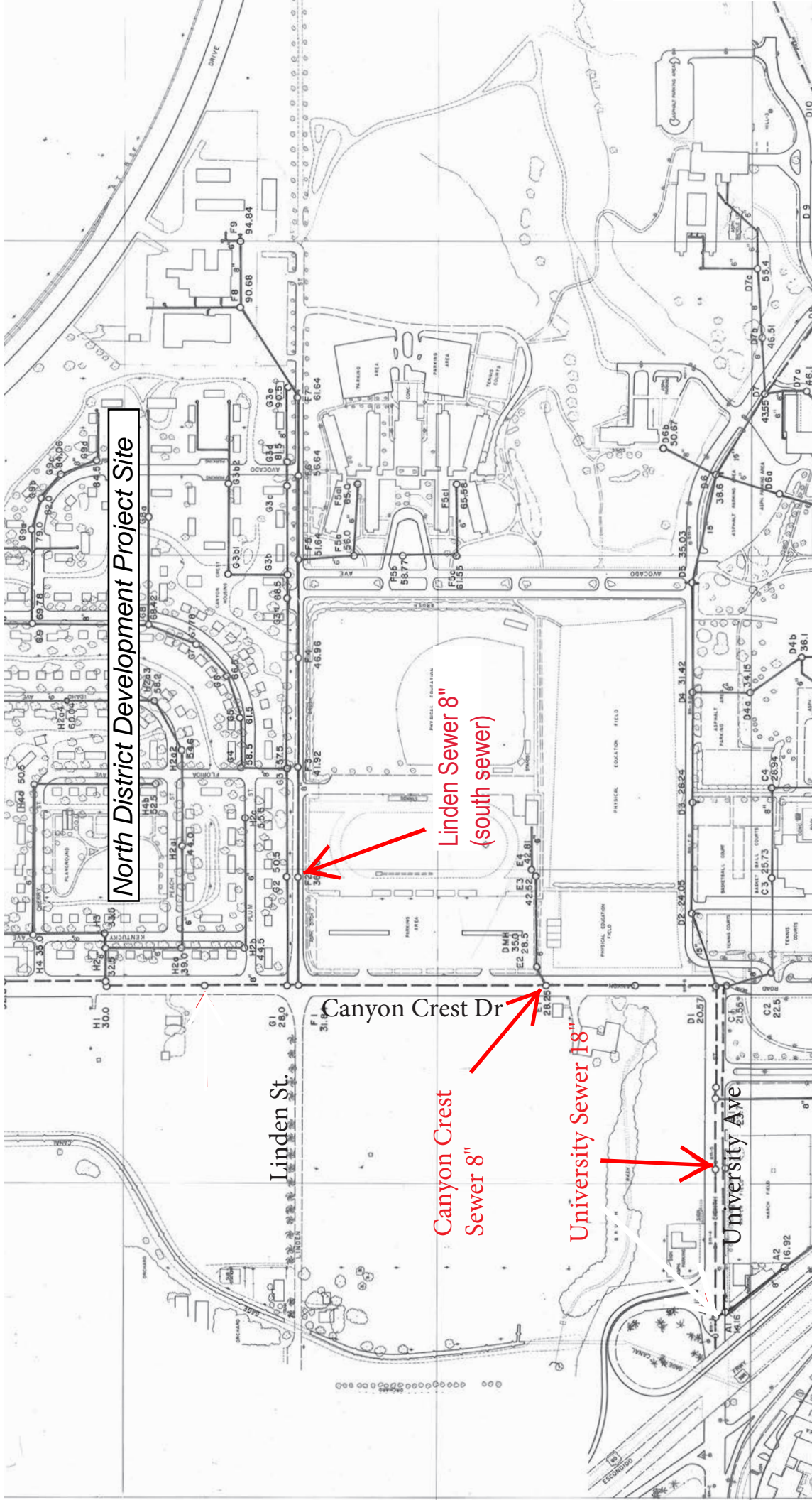
- LEGEND**
- OPEN SPACE
  - HOUSING AND SUPPORT
  - ATHLETICS
  - PARKING

SOURCE: Solomon Cordwell Buenz, 2018

**EXHIBIT 3**

**NDDP Proposed Land Use**





**North District Development Project Site**

Linden St.

Canyon Crest Dr

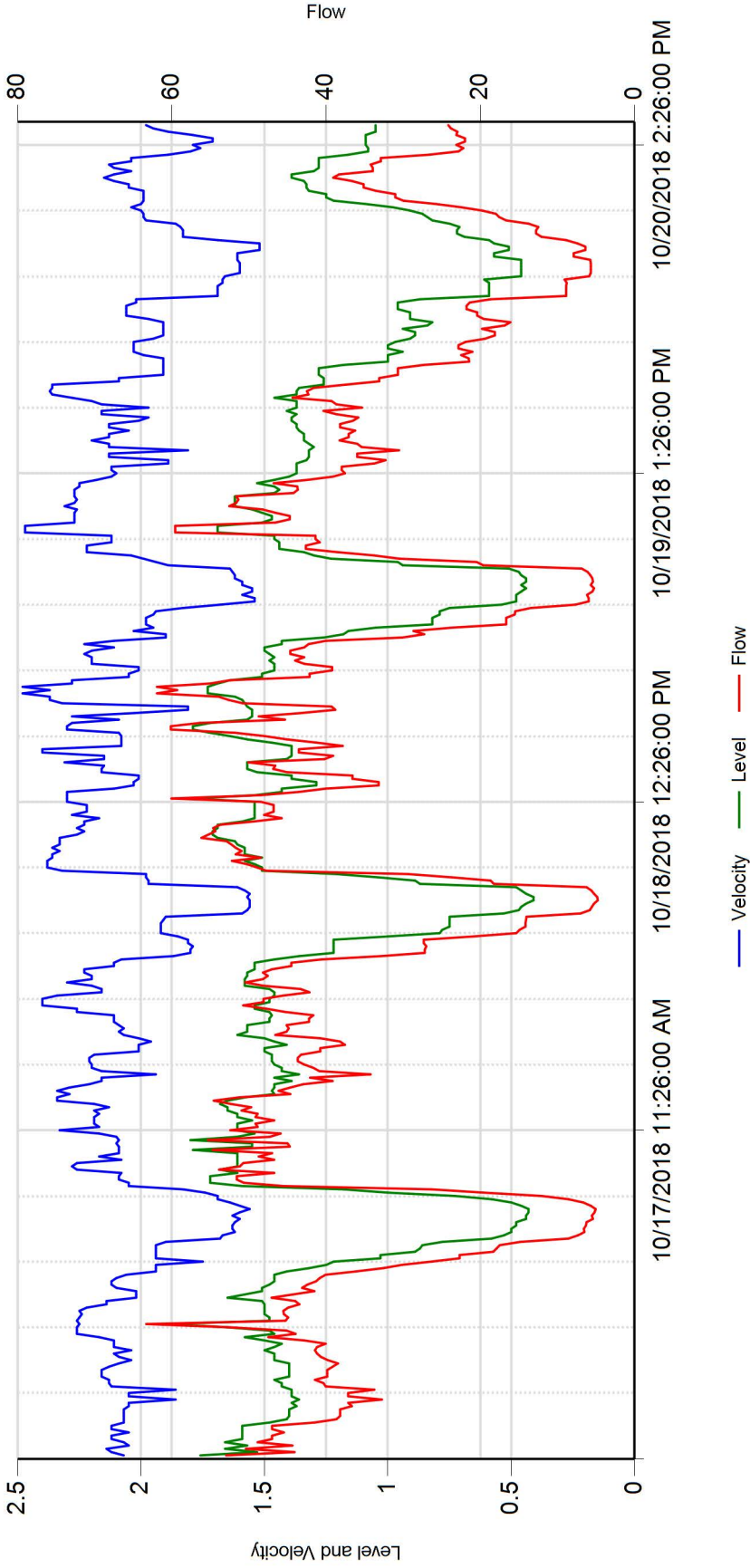
Canyon Crest Sewer 8"

Linden Sewer 8" (south sewer)

University Sewer 18"

University Ave

# 2018.10 Linden MH

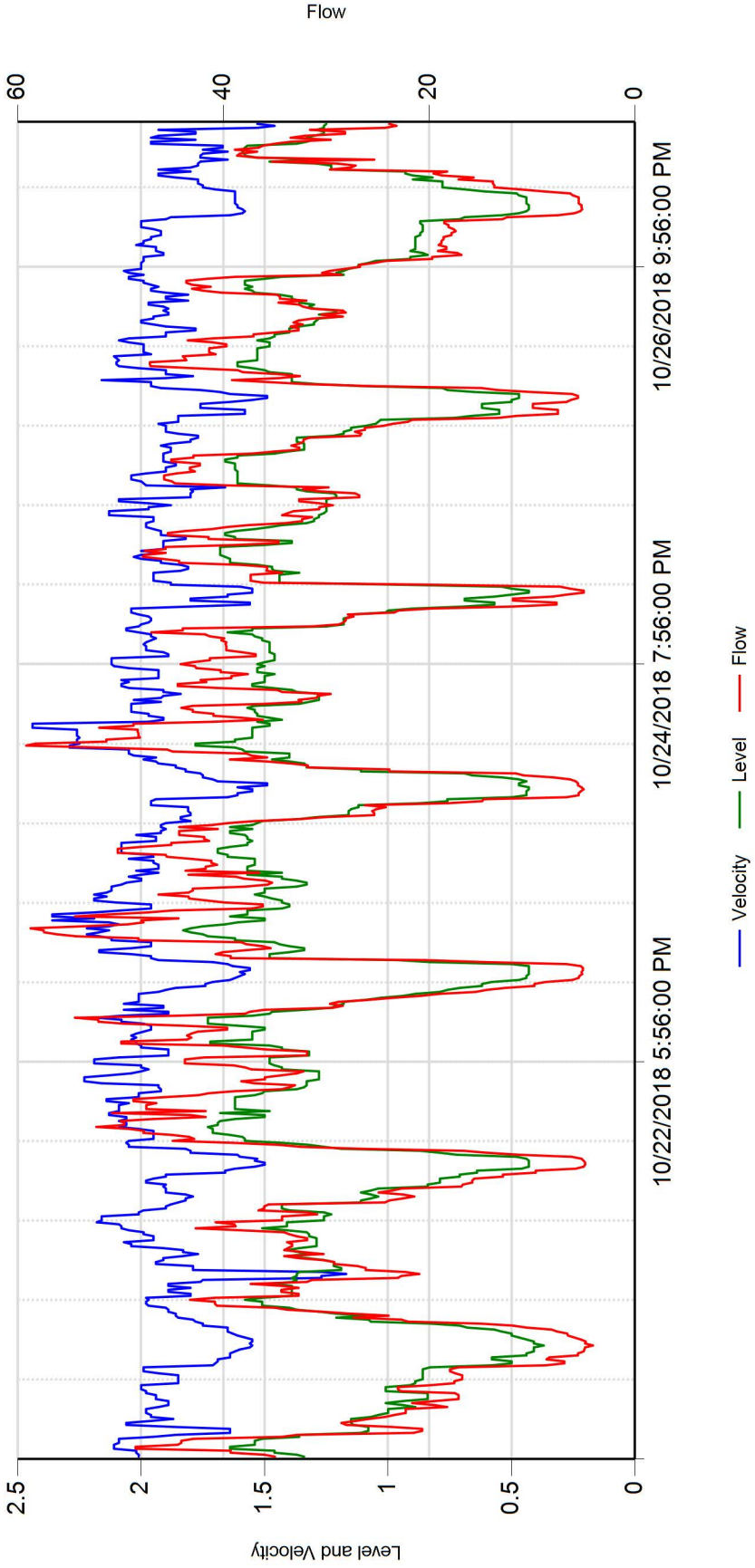


Velocity (fps)	Level (in)	Flow (gpm)	RainFall	
Average	1.260	34.440	Inches	
Maximum	1.890	63.333		
Minimum	0.410	4.792		



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# 2018.10 Linden MH

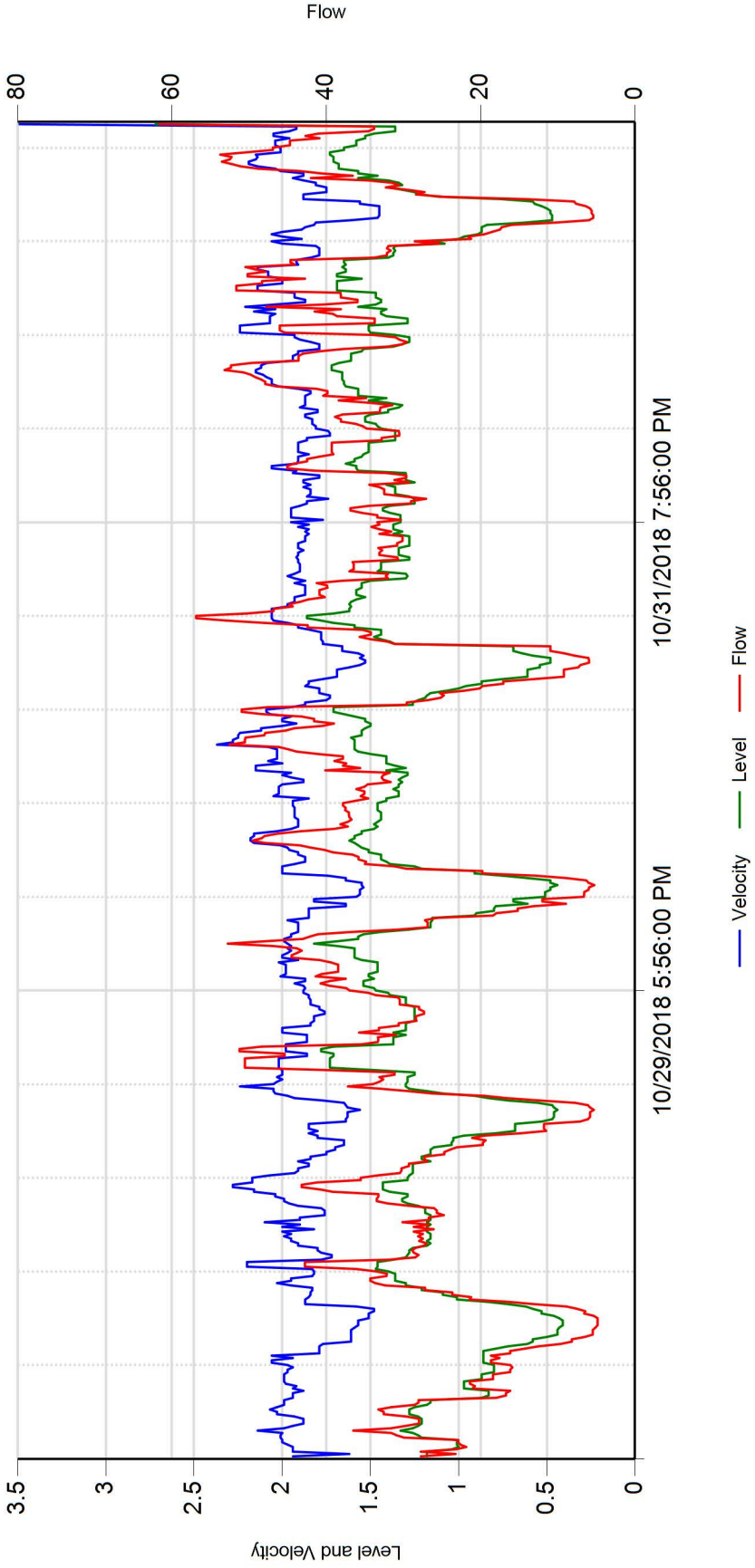


		Velocity (fps)	Level (in)	Flow (gpm)	RainFall	
Average		1.914	1.229	30.803	Inches	
Maximum		2.440	1.830	59.166		
Minimum		1.170	0.370	4.097		



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# 2018.10 Linden MH



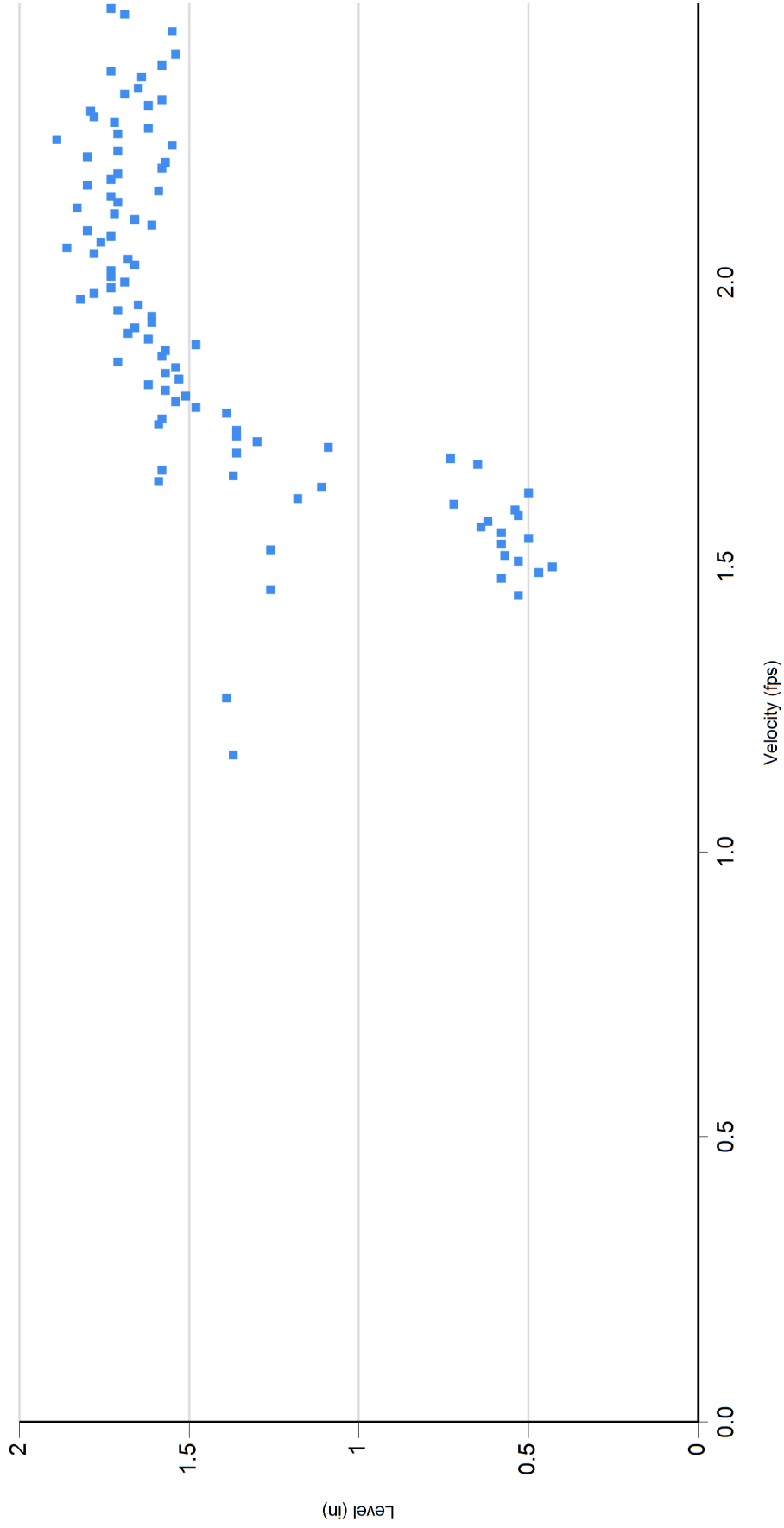
	Velocity (fps)	Level (in)	Flow (gpm)	
Average	1.902	1.261	31.484	RainFall Inches
Maximum	2.370	1.860	56.875	
Minimum	1.450	0.410	4.861	



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# 2018.10 Linden MH

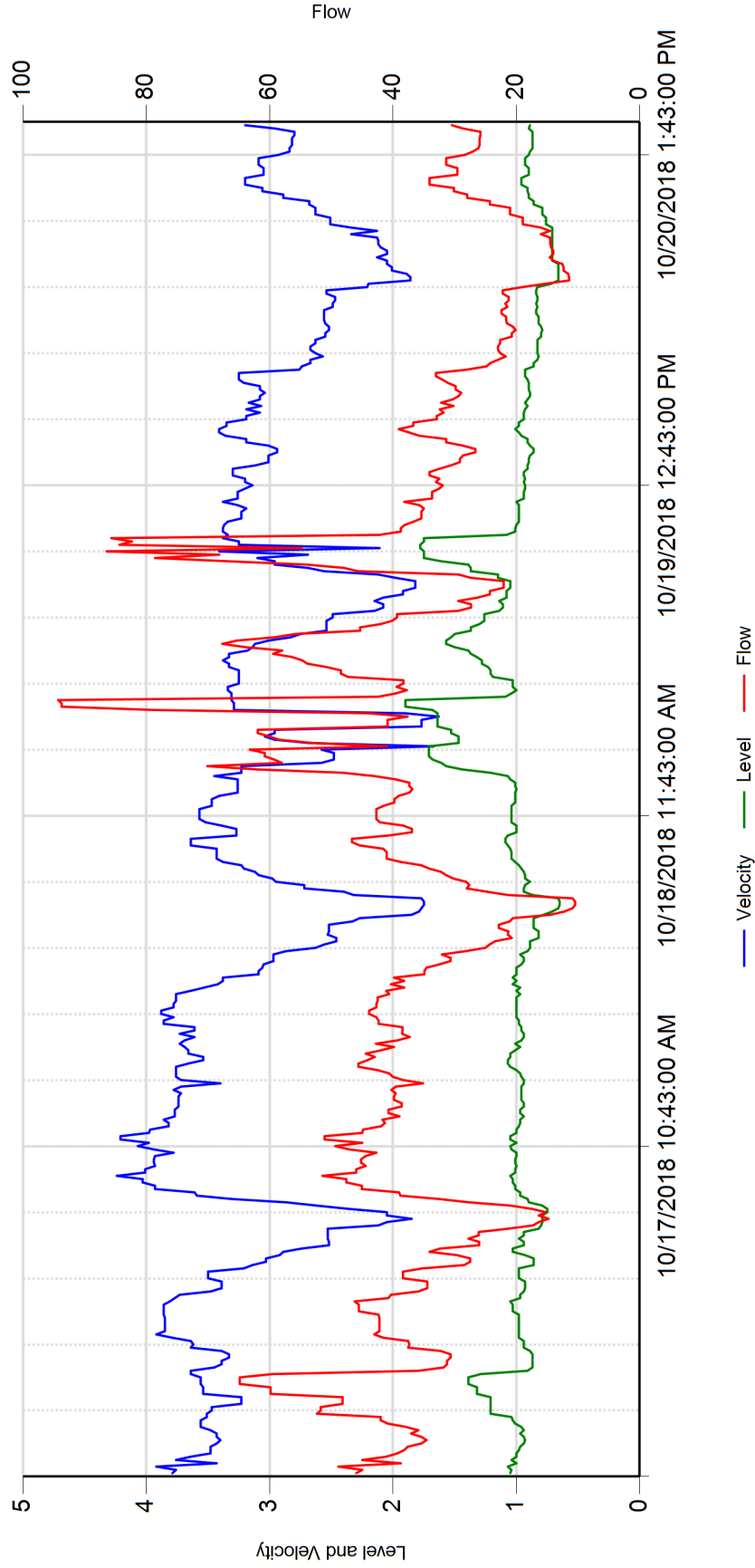


10/16/2018 thru 11/02/2018



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# 2018.10 Canyon Crest MH

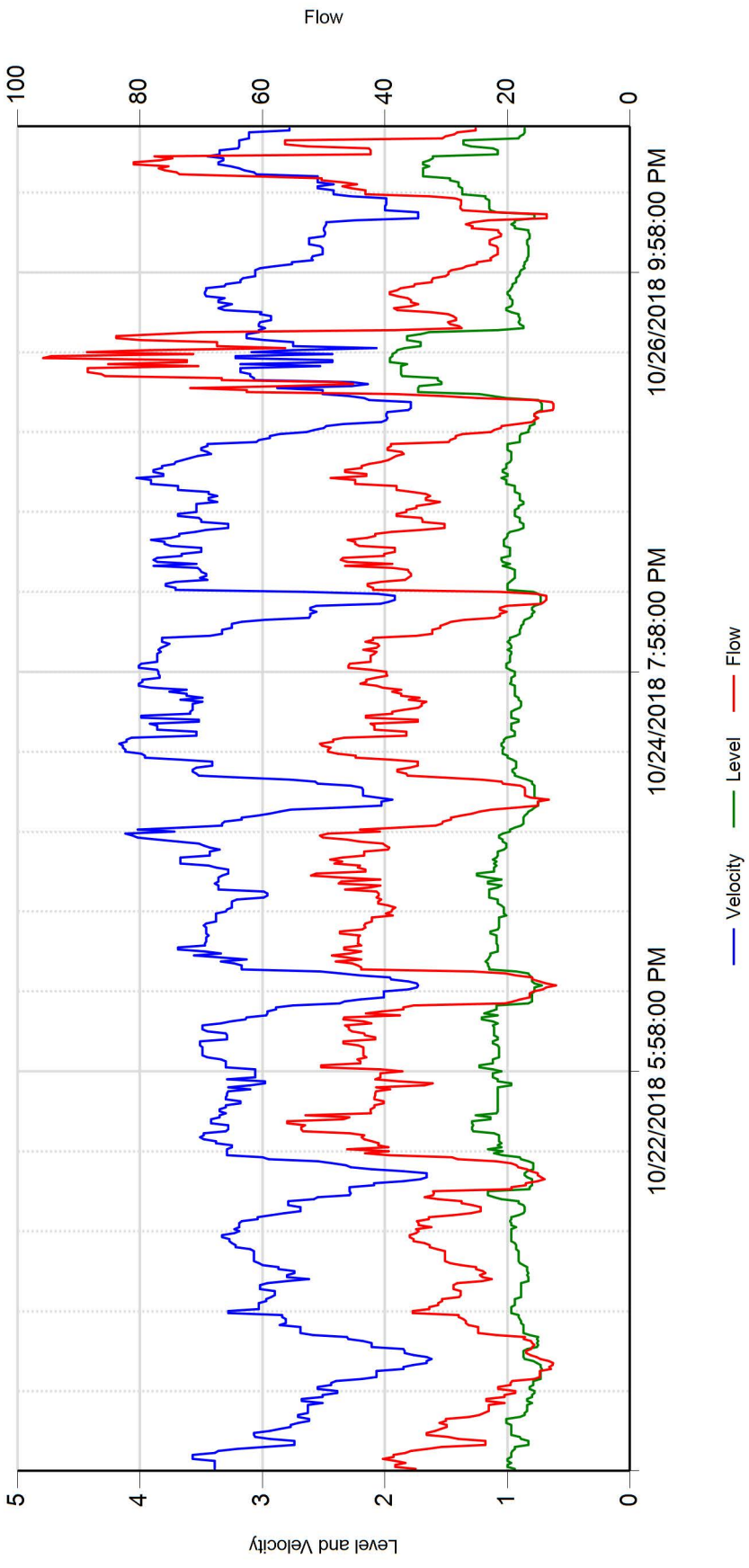


		Velocity (fps)	Level (in)	Flow (gpm)	RainFall		Inches	
Average		3.091	1.022	36.767				
Maximum		4.240	1.900	94.305				
Minimum		1.630	0.650	10.486				



11/5/2018 1:26:14 PM

# 2018.10 Canyon Crest MH

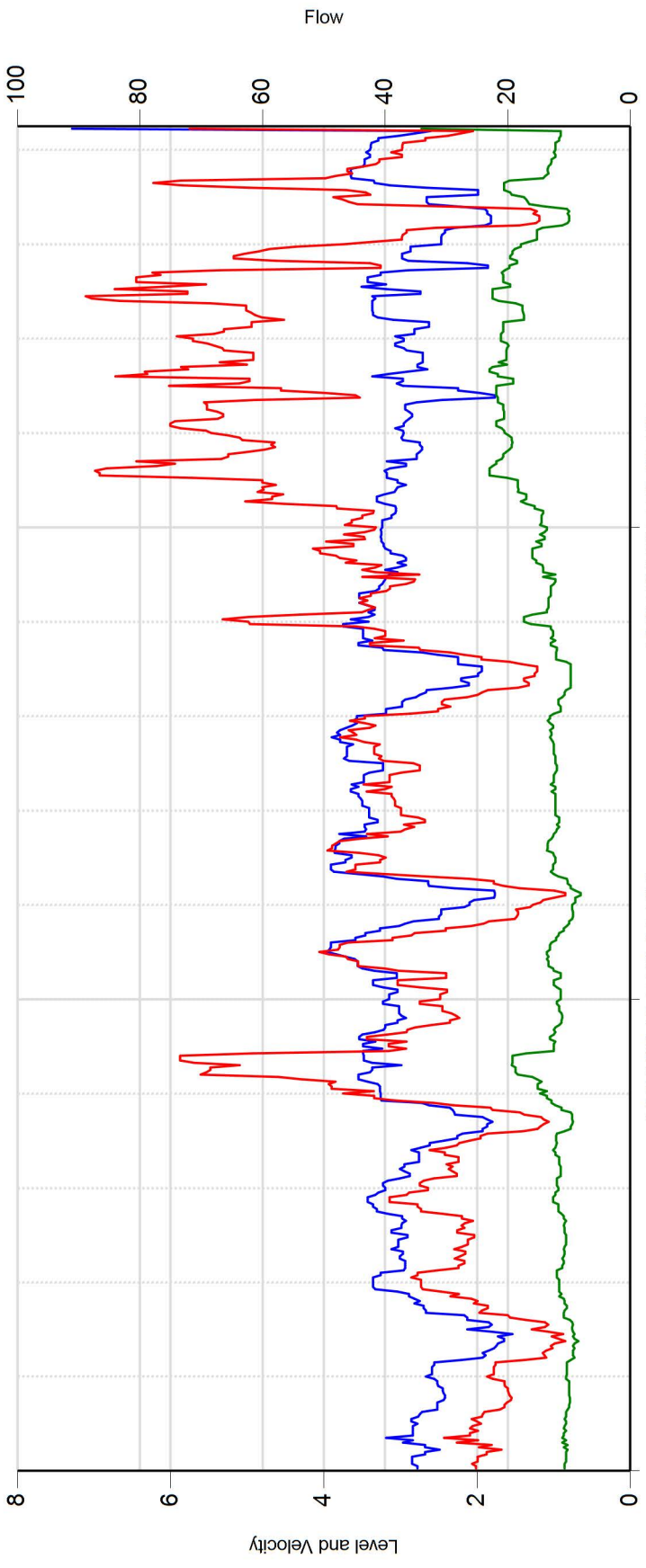


	Velocity (fps)	Level (in)	Flow (gpm)	
Average	3.045	1.012	35.985	RainFall Inches
Maximum	4.170	1.960	95.833	
Minimum	1.620	0.710	12.083	



11/5/2018 1:26:14 PM

# 2018.10 Canyon Crest MH



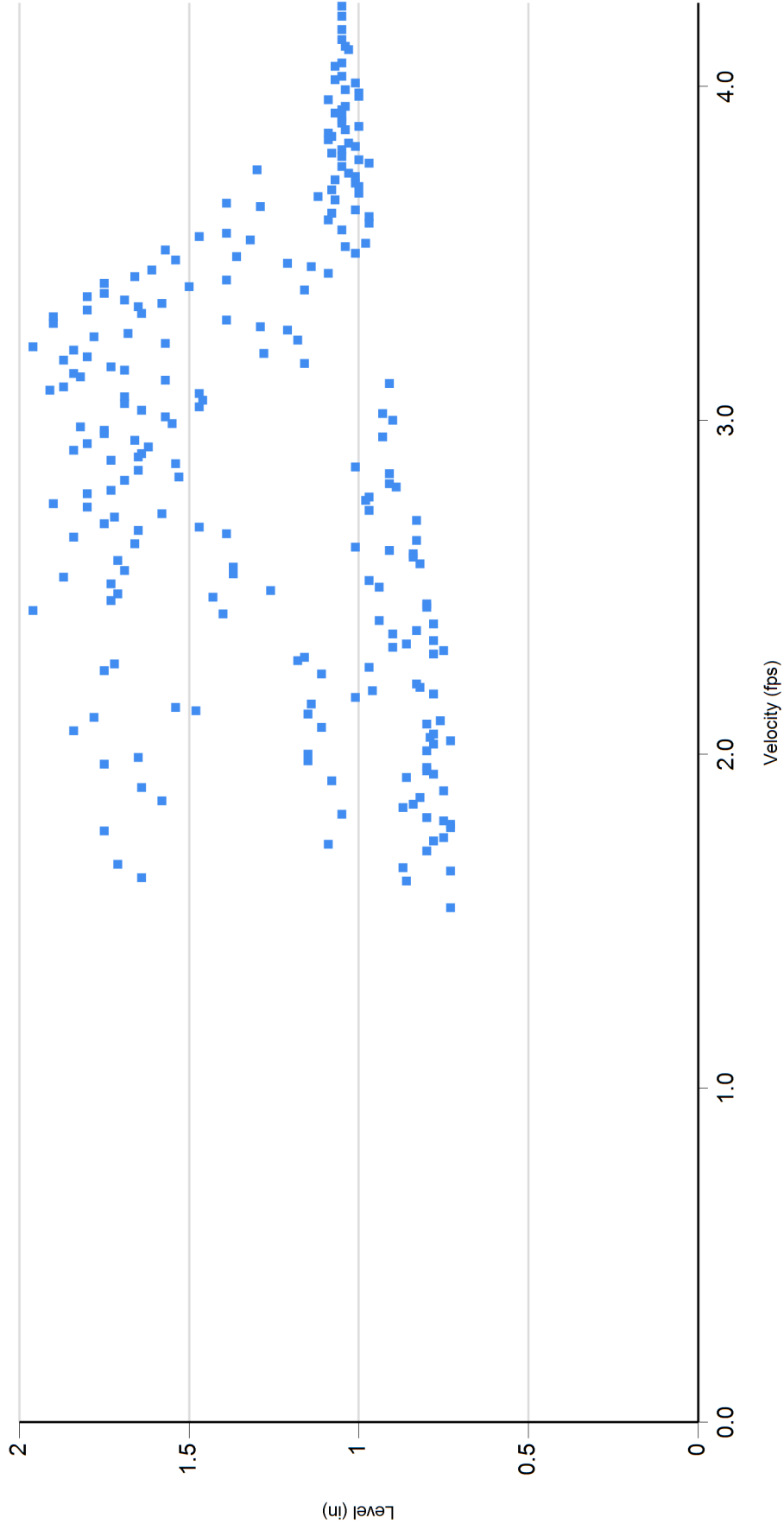
— Velocity — Level — Flow

	Velocity (fps)	Level (in)	Flow (gpm)	
Average	2.983	1.102	40.122	RainFall Inches
Maximum	3.960	1.840	88.889	
Minimum	1.540	0.650	10.625	



11/5/2018 1:26:14 PM

# 2018.10 Canyon Crest MH

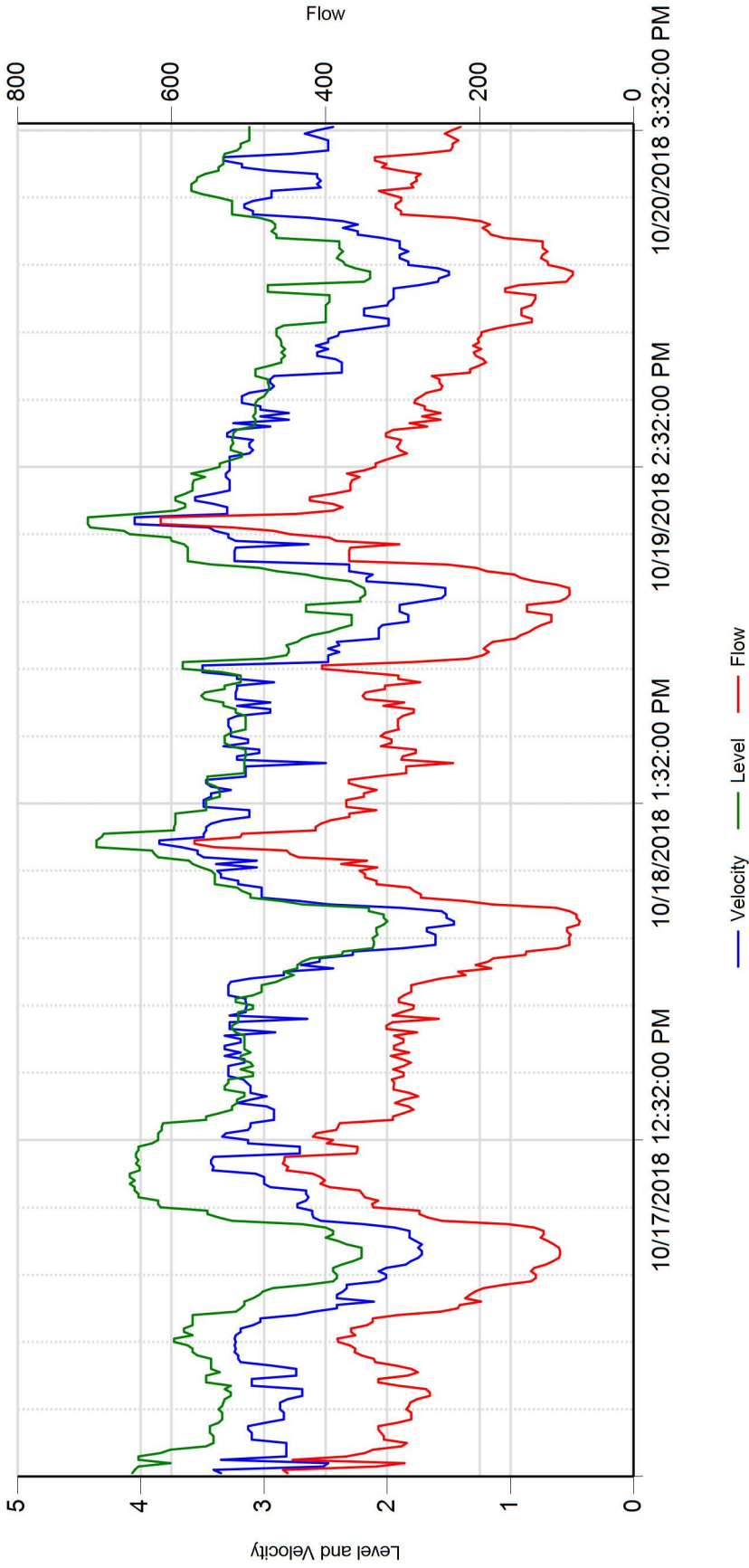


10/16/2018 thru 11/02/2018



11/5/2018 1:26:14 PM

# 2018.10 University MH

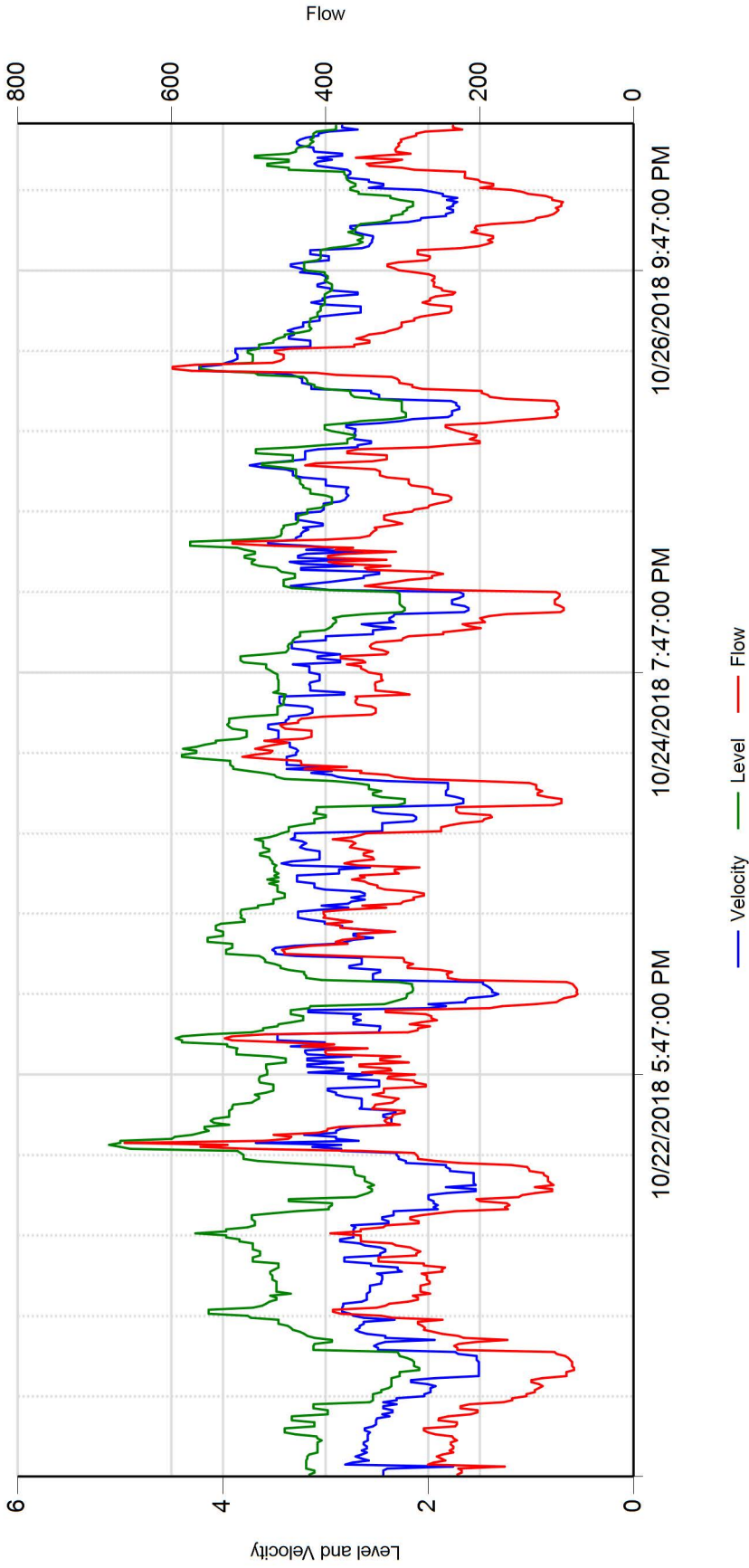


	Velocity (fps)	Level (in)	Flow (gpm)	
Average	2.787	3.182	276.201	RainFall Inches
Maximum	4.050	4.430	614.165	
Minimum	1.460	2.000	70.208	



11/5/2018 12:42:41 PM

# 2018.10 University MH

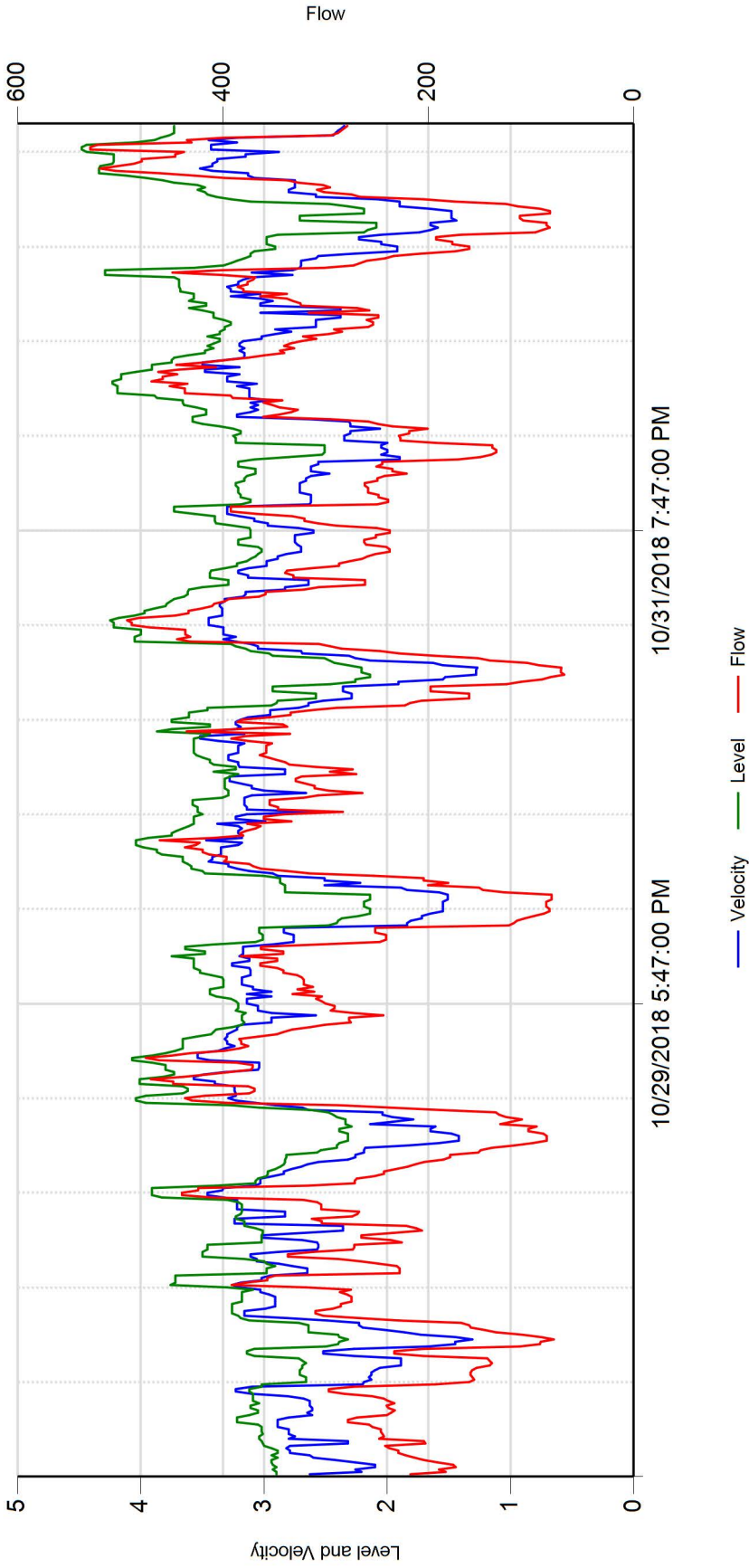


		Velocity (fps)	Level (in)	Flow (gpm)	RainFall	
Average		2.713	3.283	279.365	Inches	
Maximum		4.230	5.110	661.109		
Minimum		1.320	2.090	73.125		



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# 2018.10 University MH



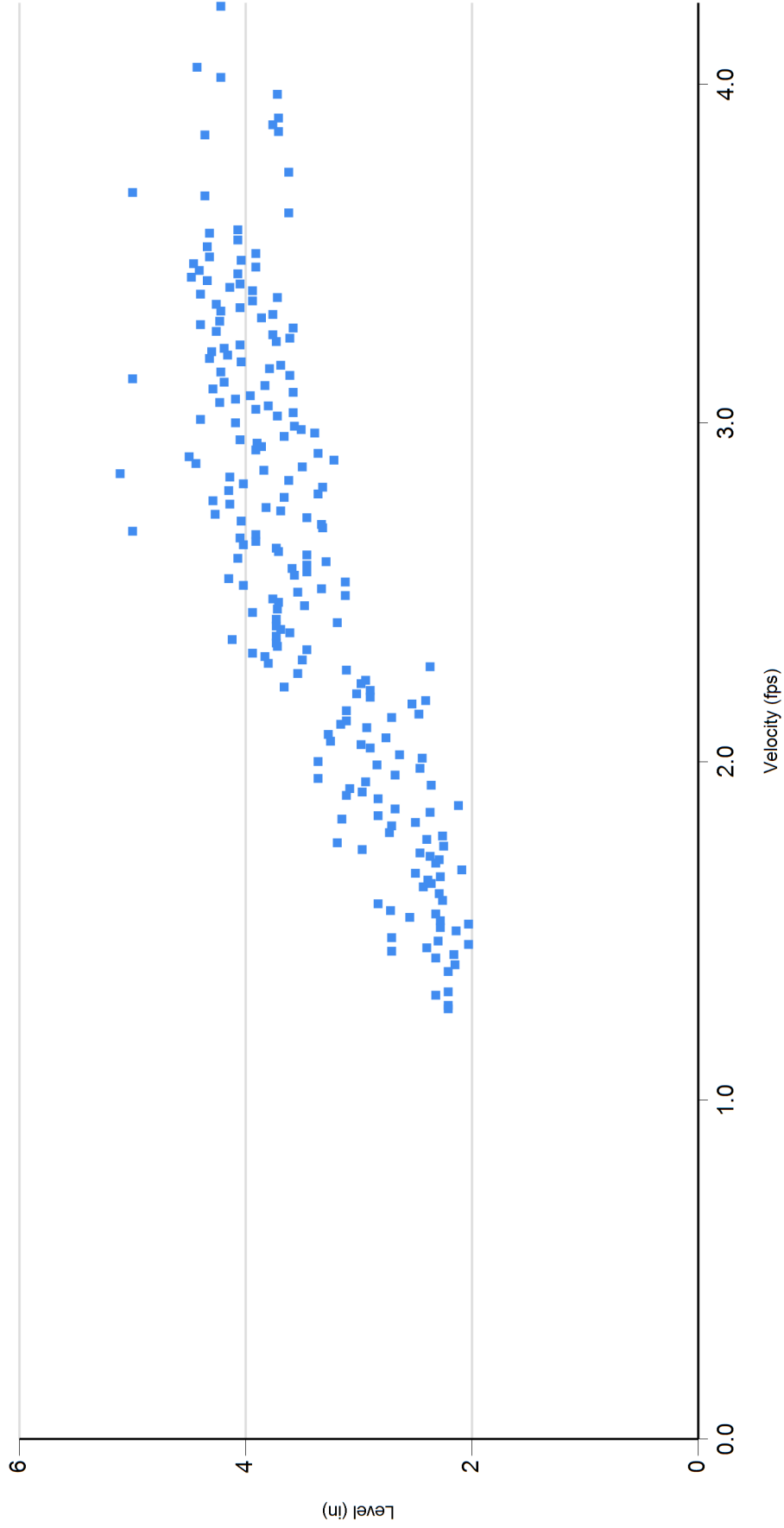
	Velocity (fps)	Level (in)	Flow (gpm)	RainFall		Inches	
Average	2.763	3.277	284.667				
Maximum	3.570	4.480	529.304				
Minimum	1.270	2.090	67.778				



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# 2018.10 University MH



10/16/2018 thru 11/02/2018



11/5/2018 12:42:41 PM

D (in) = 0.67 ft (8-inch)

# Manning's Spreadsheet #1

with n = .013, Q (cfs) at Slope =

d/D	d	AR <sup>2/3</sup> /d <sup>4/3</sup> [1]	AR <sup>2/3</sup>	0.06	0.05	0.04	0.03	0.02	0.01	0.008	0.006	0.005	0.004	0.002	0.001
0.11	0.0734 ft	2.861	0.002699	0.076	0.069	0.062	0.053	0.044	0.031	0.028	0.024	0.022	0.020	0.014	0.010
0.111	0.074 ft	2.847	0.002752	0.077	0.070	0.063	0.054	0.044	0.031	0.028	0.024	0.022	0.020	0.014	0.010
0.15	0.1001 ft	2.3852	0.005146	0.144	0.132	0.118	0.102	0.083	0.059	0.053	0.046	0.042	0.037	0.026	0.019
0.18	0.1201 ft	2.1329	0.007482	0.209	0.191	0.171	0.148	0.121	0.086	0.076	0.066	0.060	0.054	0.038	0.027
0.2	0.1334 ft	1.9953	0.00927	0.260	0.237	0.212	0.184	0.150	0.106	0.095	0.082	0.075	0.067	0.047	0.034
0.25	0.1668 ft	1.7214	0.014501	0.406	0.371	0.332	0.287	0.234	0.166	0.148	0.128	0.117	0.105	0.074	0.052
0.3	0.2001 ft	1.5134	0.020731	0.580	0.530	0.474	0.410	0.335	0.237	0.212	0.184	0.168	0.150	0.106	0.075
0.34	0.2268 ft	1.3777	0.026349	0.738	0.673	0.602	0.522	0.426	0.301	0.269	0.233	0.213	0.190	0.135	0.095
0.38	0.2535 ft	1.2615	0.032457	0.909	0.830	0.742	0.643	0.525	0.371	0.332	0.287	0.262	0.235	0.166	0.117
0.42	0.2801 ft	1.1601	0.038979	1.091	0.996	0.891	0.772	0.630	0.446	0.399	0.345	0.315	0.282	0.199	0.141
0.443	0.2955 ft	1.1073	0.042889	1.201	1.096	0.981	0.849	0.693	0.490	0.438	0.380	0.347	0.310	0.219	0.155
0.46	0.3068 ft	1.0702	0.045831	1.283	1.171	1.048	0.907	0.741	0.524	0.469	0.406	0.370	0.331	0.234	0.166
0.5	0.3335 ft	0.9895	0.052926	1.482	1.353	1.210	1.048	0.856	0.605	0.541	0.469	0.428	0.383	0.271	0.191
0.54	0.3602 ft	0.9163	0.060176	1.685	1.538	1.376	1.191	0.973	0.688	0.615	0.533	0.486	0.435	0.308	0.218
0.58	0.3869 ft	0.8492	0.067477	1.889	1.725	1.543	1.336	1.091	0.771	0.690	0.597	0.545	0.488	0.345	0.244
0.62	0.4135 ft	0.7873	0.074734	2.093	1.910	1.709	1.480	1.208	0.854	0.764	0.662	0.604	0.540	0.382	0.270
0.63	0.4202 ft	0.7725	0.076526	2.143	1.956	1.750	1.515	1.237	0.875	0.782	0.678	0.619	0.553	0.391	0.277
0.66	0.4402 ft	0.7296	0.081822	2.291	2.091	1.871	1.620	1.323	0.935	0.837	0.724	0.661	0.592	0.418	0.296
0.7	0.4669 ft	0.6755	0.088625	2.481	2.265	2.026	1.755	1.433	1.013	0.906	0.785	0.716	0.641	0.453	0.320
0.75	0.5003 ft	0.6121	0.096528	2.703	2.467	2.207	1.911	1.560	1.103	0.987	0.855	0.780	0.698	0.493	0.349
0.8	0.5336 ft	0.5524	0.103474	2.897	2.645	2.366	2.049	1.673	1.183	1.058	0.916	0.836	0.748	0.529	0.374

Table A

d/D [1]	Q (gpm) @ Slope =														
	0.06	0.05	0.04	0.03	0.02	0.01	0.008	0.006	0.005	0.004	0.002	0.001			
11.0%	34	31	28	24	20	14	12	11	10	9	6	4			
11.1%	35	32	28	24	20	14	13	11	10	9	6	4			
15.0%	65	59	53	46	37	26	24	20	19	17	12	8			
18.0%	94	86	77	66	54	38	34	30	27	24	17	12			
20.0%	116	106	95	82	67	48	43	37	34	30	21	15			
25.0%	182	166	149	129	105	74	67	58	53	47	33	24			
30.0%	261	238	213	184	150	106	95	82	75	67	48	34			
34.0%	331	302	270	234	191	135	121	105	96	85	60	43			
38.0%	408	372	333	288	235	167	149	129	118	105	74	53			
42.0%	490	447	400	346	283	200	179	155	141	126	89	63			
44.3%	539	492	440	381	311	220	197	170	156	139	98	70			
46.0%	576	526	470	407	333	235	210	182	166	149	105	74			
50.0%	665	607	543	470	384	272	243	210	192	172	121	86			
54.0%	756	690	617	535	437	309	276	239	218	195	138	98			
58.0%	848	774	692	600	490	346	310	268	245	219	155	109			
62.0%	939	857	767	664	542	383	343	297	271	242	171	121			
63.0%	962	878	785	680	555	393	351	304	278	248	176	124			
66.0%	1,028	939	840	727	594	420	375	325	297	265	188	133			
70.0%	1,114	1,017	909	787	643	455	407	352	321	288	203	144			
75.0%	1,213	1,107	990	858	700	495	443	384	350	313	221	157			
80.0%	1,300	1,187	1,062	919	751	531	475	411	375	336	237	168			

[1] Per Basic Hydraulics for Civil Engineers, Frank Jangar, 1985

Linden MH  
Canyon Crest MH

Range of flows for serving 100% of NDDP (plus existing flow) with PARALLEL 8-INCH SEWER in Canyon Crest Dr (50% of total flow).

D (in) = 1.50 ft (18-inch)

## Manning's Spreadsheet #2

with n = .013, Q (cfs) at Slope =

d/D	d	AR <sup>2/3</sup> /d <sup>8/3</sup> [1]	AR <sup>2/3</sup>	0.06	0.05	0.04	0.03	0.02	0.01	0.008	0.006	0.004	0.002	0.001
0.2	0.3	1.9953	0.080476	2.253	2.057	1.840	1.593	1.301	0.920	0.823	0.713	0.582	0.411	0.291
0.24	0.36	1.7698	0.116073	3.250	2.967	2.654	2.298	1.876	1.327	1.187	1.028	0.839	0.593	0.420
0.28	0.42	1.5905	0.157349	4.406	4.022	3.597	3.115	2.544	1.799	1.609	1.393	1.138	0.804	0.569
0.31	0.465	1.4773	0.191724	5.368	4.900	4.383	3.796	3.099	2.192	1.960	1.698	1.386	0.980	0.693
0.34	0.51 ft	1.3777	0.22874	6.405	5.847	5.229	4.529	3.698	2.615	2.339	2.025	1.654	1.169	0.827
0.38	0.57 ft	1.2615	0.281765	7.889	7.202	6.442	5.579	4.555	3.221	2.881	2.495	2.037	1.440	1.019
0.42	0.63 ft	1.1601	0.338379	9.474	8.649	7.736	6.699	5.470	3.868	3.460	2.996	2.446	1.730	1.223
0.443	0.665 ft	1.1073	0.372322	10.425	9.517	8.512	7.371	6.019	4.256	3.807	3.297	2.692	1.903	1.346
0.46	0.69 ft	1.0702	0.397859	11.140	10.169	9.096	7.877	6.432	4.548	4.068	3.523	2.876	2.034	1.438
0.5	0.75 ft	0.9895	0.459458	12.865	11.744	10.504	9.097	7.427	5.252	4.697	4.068	3.322	2.349	1.661
0.54	0.81 ft	0.9163	0.522393	14.627	13.352	11.943	10.343	8.445	5.971	5.341	4.625	3.777	2.670	1.888
0.58	0.87 ft	0.8492	0.585771	16.401	14.972	13.392	11.597	9.469	6.696	5.989	5.187	4.235	2.994	2.117
0.62	0.93 ft	0.7873	0.648776	18.165	16.583	14.832	12.845	10.488	7.416	6.633	5.744	4.690	3.317	2.345
0.63	0.945 ft	0.7725	0.664329	18.601	16.980	15.188	13.153	10.739	7.594	6.792	5.882	4.803	3.396	2.401
0.66	0.99 ft	0.7296	0.710306	19.888	18.155	16.239	14.063	11.482	8.119	7.262	6.289	5.135	3.631	2.568
0.7	1.05 ft	0.6755	0.769361	21.542	19.665	17.589	15.232	12.437	8.794	7.866	6.812	5.562	3.933	2.781
0.75	1.125 ft	0.6121	0.837971	23.463	21.419	19.157	16.591	13.546	9.579	8.567	7.420	6.058	4.284	3.029
0.8	1.2 ft	0.5524	0.898263	25.151	22.960	20.536	17.784	14.521	10.268	9.184	7.953	6.494	4.592	3.247

Table 6

d/D [1]	Q (gpm) @ Slope =													
	0.06	0.05	0.04	0.03	0.02	0.01	0.008	0.006	0.004	0.002	0.001			
20.0%	1,011	923	826	715	584	413	369	320	261	185	131			
24.0%	1,459	1,332	1,191	1,031	842	595	533	461	377	266	188			
28.0%	1,977	1,805	1,614	1,398	1,142	807	722	625	511	361	255			
31.0%	2,409	2,199	1,967	1,704	1,391	984	880	762	622	440	311			
34.0%	2,874	2,624	2,347	2,033	1,660	1,173	1,050	909	742	525	371			
38.0%	3,541	3,232	2,891	2,504	2,044	1,445	1,293	1,120	914	646	457			
42.0%	4,252	3,882	3,472	3,007	2,455	1,736	1,553	1,345	1,098	776	549			
44.3%	4,679	4,271	3,820	3,308	2,701	1,910	1,708	1,480	1,208	854	604			
46.0%	5,000	4,564	4,082	3,535	2,887	2,041	1,826	1,581	1,291	913	645			
50.0%	5,774	5,271	4,714	4,083	3,333	2,357	2,108	1,826	1,491	1,054	745			
54.0%	6,565	5,993	5,360	4,642	3,790	2,680	2,397	2,076	1,695	1,199	847			
58.0%	7,361	6,720	6,010	5,205	4,250	3,005	2,688	2,328	1,901	1,344	950			
62.0%	8,153	7,442	6,657	5,765	4,707	3,328	2,977	2,578	2,105	1,488	1,053			
63.0%	8,348	7,621	6,816	5,903	4,820	3,408	3,048	2,640	2,155	1,524	1,078			
66.0%	8,926	8,148	7,288	6,312	5,153	3,644	3,259	2,823	2,305	1,630	1,152			
70.0%	9,668	8,826	7,894	6,836	5,582	3,947	3,530	3,057	2,496	1,765	1,248			
75.0%	10,530	9,613	8,598	7,446	6,080	4,299	3,845	3,330	2,719	1,923	1,359			
80.0%	11,288	10,304	9,216	7,982	6,517	4,608	4,122	3,570	2,914	2,061	1,457			

[1] Per Basic Hydraulics for Civil Engineers, Frank Jangar, 1985