



-REVISED REPORT-  
LIMITED LEAD TESTING

For  
Rose Hill Courts  
14 Residential Buildings (100 Units)  
and Administration Building  
Florizel Street, Boundary Avenue, Mercury Avenue, McKenzie Avenue and Victorine Street  
Los Angeles, California

Requested by:

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Sampling Dates: June 7, 2016 and December 5, 2016  
Altec CP No. 505-2016166

A handwritten signature in black ink, appearing to read "Mason S. Adams".

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- Appendix A - Common Acronyms/Definitions
- Appendix B - Supplemental Information (Sampling Overview, Strategy, Protocol, Limitations)
- Appendix C - Site Maps/Foundation Diagram/Soil Sample Location Maps
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## 1.0 INTRODUCTION

Related Companies of California, LLC, a California limited liability company, hired Altec Testing & Engineering, Inc. (Altec) to perform limited lead paint testing and lead soil sampling for Rose Hill Courts, a 100-unit multi-family residential apartment property located at Florizel Street, Boundary Avenue, Mercury Avenue, McKenzie Avenue and Victorine Street in the Montecito Heights area of Los Angeles, California 90032. The Rose Hill Courts property consists of 14 apartment buildings containing 100 units and an administration/social hall building. The interiors and exteriors of these structures will be renovated in the near future and are currently occupied with residential tenants. The housing units are numbered 1 through 100 and each has an individual street address on Florizel Street, Mercury Avenue or McKenzie Avenue. The buildings are numbered using two different number systems; one was assigned when the buildings were designed/constructed in 1941 and the other was adopted at a later date. See Figure 1 for a site plan with the most recent numbering system.

**Site Plan**



The scope of work included the following tasks:

1. Perform lead testing by use of an XRF (X-Ray Fluorescence) device.
2. Collect composite soil samples along the drip line/foundations of each building and the child playground and submit each sample for laboratory analysis in accordance with US EPA Method 6010B.

Altec was provided with interior access to 8 vacant units and the administration/social hall building on June 7, 2016 and limited lead paint testing was performed. Altec was provided with interior access to only 8 vacant units and the administration/social hall building. The tested apartments include Units 2, 3, 10, 13, 14, 46, 76, and 78. See Table 1 below for a complete list of building/unit numbers and addresses associated with the property. Altec accessed the exteriors and roofs of each building and testing was performed for those areas as well. Building/units that were tested are highlighted in yellow.

On December 5, 2016, Altec completed a walk through visual inspection of the 92 remaining units. Lead paint testing was not performed in these units; however, one additional soil sample was collected from the child playground (see Section 3.0 Lead Soil Sampling, for results).

**Table 1 – Building/Unit Identification**

<u>Unit #</u>	<u>Address</u>	<u>Street</u>	1941 As-Built Bldg. #	Later Adopted Bldg. #	<u>Unit #</u>	<u>Address</u>	<u>Street</u>	1941 As-Built Bldg. #	Later Adopted Bldg. #
1	4468	Florizel Street	#5	#4	35	4479	Mercury Avenue	#3-4	#12
2	4470	Florizel Street	#5	#4	36	4477	Mercury Avenue	#3-4	#12
3	4472	Florizel Street	#5	#4	37	4475	Mercury Avenue	#3-4	#12
4	4474	Florizel Street	#5	#4	38	4473	Mercury Avenue	#3-4	#12
5	4476	Florizel Street	#5	#4	39	4471	Mercury Avenue	#3-4	#12
6	4478	Florizel Street	#5	#4	40	4469	Mercury Avenue	#3-4	#12
7	4486	Florizel Street	#4-2	#5	41	4467	Mercury Avenue	#3-4	#12
8	4484	Florizel Street	#4-2	#5	42	4465	Mercury Avenue	#3-4	#12
9	4482	Florizel Street	#4-4	#7	43	4463	Mercury Avenue	#3-4	#12
10	4480	Florizel Street	#4-4	#7	44	4461	Mercury Avenue	#3-4	#12
11	3531	McKenzie Avenue	#4-1	#6	45	4459	Mercury Avenue	#3-3	#11
12	3529	McKenzie Avenue	#4-1	#6	46	4457	Mercury Avenue	#3-3	#11
13	3527	McKenzie Avenue	#4-3	#8	47	4455	Mercury Avenue	#3-3	#11
14	3525	McKenzie Avenue	#4-3	#8	48	4453	Mercury Avenue	#3-3	#11
15	3521	McKenzie Avenue	#3-6	#14	49	4451	Mercury Avenue	#3-3	#11
16	3519	McKenzie Avenue	#3-6	#14	50	4449	Mercury Avenue	#3-3	#11
17	3517	McKenzie Avenue	#3-6	#14	51	4447	Mercury Avenue	#3-3	#11
18	3513	McKenzie Avenue	#3-6	#14	52	4445	Mercury Avenue	#3-3	#11
19	3511	McKenzie Avenue	#3-6	#14	53	4443	Mercury Avenue	#3-3	#11
20	3509	McKenzie Avenue	#3-6	#14	54	4441	Mercury Avenue	#3-3	#11
21	3507	McKenzie Avenue	#3-6	#14	55	4439	Mercury Avenue	#3-2	#10
22	3505	McKenzie Avenue	#3-6	#14	56	4437	Mercury Avenue	#3-2	#10
23	3503	McKenzie Avenue	#3-6	#14	57	4435	Mercury Avenue	#3-2	#10
24	3501	McKenzie Avenue	#3-6	#14	58	4433	Mercury Avenue	#3-2	#10
25	4499	Mercury Avenue	#3-5	#13	59	4431	Mercury Avenue	#3-2	#10
26	4497	Mercury Avenue	#3-5	#13	60	4429	Mercury Avenue	#3-2	#10
27	4495	Mercury Avenue	#3-5	#13	61	4427	Mercury Avenue	#3-2	#10
28	4493	Mercury Avenue	#3-5	#13	62	4425	Mercury Avenue	#3-2	#10
29	4491	Mercury Avenue	#3-5	#13	63	4423	Mercury Avenue	#3-2	#10
30	4489	Mercury Avenue	#3-5	#13	64	4421	Mercury Avenue	#3-2	#10
31	4487	Mercury Avenue	#3-5	#13	65	4401	Mercury Avenue	#3-1	#9
32	4485	Mercury Avenue	#3-5	#13	66	4403	Mercury Avenue	#3-1	#9
33	4483	Mercury Avenue	#3-5	#13	67	4405	Mercury Avenue	#3-1	#9
34	4481	Mercury Avenue	#3-5	#13	68	4407	Mercury Avenue	#3-1	#9
					69	4409	Mercury Avenue	#3-1	#9
					70	4411	Mercury Avenue	#3-1	#9

**Table 1 – Building/Unit Identification (continued)**

<u>Unit #</u>	<u>Address</u>	<u>Street</u>	1941 As-Built Bldg. #	Later Adopted Bldg. #
71	4413	Mercury Avenue	#3-1	#9
72	4415	Mercury Avenue	#3-1	#9
73	4417	Mercury Avenue	#3-1	#9
74	4419	Mercury Avenue	#3-1	#9
75	4418	Florizel Street	#1-1	#1
76	4416	Florizel Street	#1-1	#1
77	4414	Florizel Street	#1-1	#1
78	4412	Florizel Street	#1-1	#1
79	4410	Florizel Street	#1-1	#1
80	4408	Florizel Street	#1-1	#1
81	4406	Florizel Street	#1-1	#1
82	4404	Florizel Street	#1-1	#1
83	4402	Florizel Street	#1-1	#1
84	4400	Florizel Street	#1-1	#1
85	4420	Florizel Street	#1-2	#2
86	4422	Florizel Street	#1-2	#2
87	4424	Florizel Street	#1-2	#2
88	4426	Florizel Street	#1-2	#2
89	4428	Florizel Street	#1-2	#2
90	4430	Florizel Street	#1-2	#2
91	4432	Florizel Street	#1-2	#2
92	4434	Florizel Street	#1-2	#2
93	4436	Florizel Street	#1-2	#2
94	4438	Florizel Street	#1-2	#2
95	4450	Florizel Street	#2	#3
96	4448	Florizel Street	#2	#3
97	4445	Florizel Street	#2	#3
98	4444	Florizel Street	#2	#3
99	4442	Florizel Street	#2	#3
100	4440	Florizel Street	#2	#3
	4466	Florizel Street	#6	no number assigned

## 2.0 LEAD PAINT TESTING

### 2.1 Scope of Work

Altec performed surface-by-surface testing that was *patterned* on the United States (U.S.) Department of Housing and Urban Development (HUD) Housing and U.S. Environmental Protection Agency (EPA) guidelines established within 40 CFR Part 745 and Title X - The Residential Lead-Based Paint Hazard Reduction Act of 1992. These guidelines were established for occupied residential structures. It was not Altec's intention to conduct an evaluation of lead-based paint hazards in compliance with HUD lead inspection/risk assessment protocol, as such evaluation requires a very extensive sampling strategy and documentation that exceeded the scope of work for this project.

### 2.2 Inspector Qualifications

Altec's lead sampling technicians have completed an EPA and State of California Department of Public Health (CDPH) approved curriculum in Lead in Construction Inspector/Risk Assessor and/or Sampling Technician Training. They are certified by the State of California Department of Public Health (CDPH) as a Lead in Construction Sampling Technician. Altec's Sampling Techs work under the direct supervision of a CDPH Lead Inspector/Risk Assessor. Altec defines direct supervision as follows: (1) following clear and concise instruction for the testing of paint/coatings, collection of samples, and the assessment of sampled media, (2) establishing forms/maps used to document the assessment information, (3) being physically present at the testing/sampling location during testing, or being available at all times during the inspection and available to respond to the location if needed, (4) daily monitoring of project progress, and (5) reviewing and approving all collected data. Personnel certifications are provided in Appendix C.

### 2.3 XRF Testing Results

Lead XRF testing was performed in the scope of work areas to identify components containing lead above the established action level or threshold of 0.7 milligram per square centimeter (mg/cm<sup>2</sup>). In addition, the current condition of the tested paint/coating was noted. Ceramic tile was also tested to identify the presence of lead in the glazing.

Prior to the start of testing and at the end of the test period (or 4 hours, whichever is less), Altec recorded pre- and post-calibration readings on a calibration form. Altec recorded the XRF readings on data sheets which are presented in Appendix F. Please note that many additional confirmatory and/or quality assurance readings were taken during the inspection, but listing each of the additional tests/readings along with the locations, material assessment, etc. would require an exhaustive effort that was not part of the scope of work.

CDPH<sup>1</sup>, EPA and HUD defines LBP as paint or other surface coating that contains any amount of lead equal to or exceeding 1.0 mg/cm<sup>2</sup> or more than 0.5% by weight. It must be understood that painted/coated materials that contain lead at concentrations of less than 1.0 mg/cm<sup>2</sup> still contain lead, but these lesser amounts have been determined to be "safe" by CDPH, EPA and HUD. Cal/OSHA, however, does not consider concentrations above 600 ppm "safe", and

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<sup>1</sup> CDPH (Title 17 CCR Division 1, Chapter 8, Section 35033).

requires bulk sampling and/or air sampling for exposure assessment purposes to determine regulatory compliance for general industry or construction work.

The following table list of the components that were tested with the XRF device within the 8 tested units and the administration building. Coatings with lead concentrations above the 0.7 mg/cm<sup>2</sup> are in bold red italics text. Please note that quantities have been estimated for positive components only, where possible.



**Table 3 – Tested Components**

Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
<b>Walls</b>							
Administration	Storage	Interior	Stucco	White	0.1	Intact	UNQ
Administration	Storage	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Warehouse	Interior	Wood	Cream	0.2	Intact	UNQ
Administration	Office #1	Interior	Plaster	Cream	-0.1	Intact	UNQ
Administration	Front Entry	Interior	Plaster	White	-0.1	Intact	UNQ
Administration	Office #2	Interior	Plaster	White	-0.3	Intact	UNQ
Administration	Main Room	Interior	Plaster	White	-0.2	Intact	UNQ
Administration	Kitchen	Interior	Plaster	White	-0.1	Intact	UNQ
Administration	Women’s Bathroom	Interior	Plaster	White	0.2	Intact	UNQ
Administration	Men’s Bathroom	Interior	Plaster	White	0.1	Intact	UNQ
Unit 10	Entry	Interior	Plaster	Brown	-0.2	Intact	UNQ
Unit 10	Kitchen	Interior	Plaster	White	0.1	Intact	UNQ
Unit 76	Entry	Interior	Plaster	White	-0.3	Intact	UNQ
Unit 76	Kitchen	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 76	Bedroom	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 76	Bathroom	Interior	Plaster	White	0.2	Intact	UNQ
Unit 78	Entry	Interior	Plaster	White	0.1	Intact	UNQ
Unit 78	Kitchen	Interior	Plaster	White	0.1	Intact	UNQ
Unit 78	Bedroom	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 78	Bathroom	Interior	Plaster	White	0.1	Intact	UNQ
Unit 13	Entry	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 13	Stairwell	Interior	Plaster	White	-0.4	Intact	UNQ
Unit 13	Bedrooms	Interior	Plaster	White	0.1	Intact	UNQ
Unit 2	Entry	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 2	Entry	Interior	Plaster	Green	0.1	Intact	UNQ



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
Unit 2	Entry	Interior	Plaster	Yellow	0.1	Intact	UNQ
Unit 2	Dining Room	Interior	Plaster	White	-0.2	Intact	UNQ
Unit 2	Dining Room	Interior	Plaster	Cream	-0.2	Intact	UNQ
Unit 2	Bathroom	Interior	Plaster	White	-0.1	Intact	UNQ
<b>Doors</b>							
Administration	Warehouse Entry	Interior	Wood	Maroon	-0.2	Intact	UNQ
Administration	Warehouse/Office 1	Interior	Wood	Maroon	-0.1	Intact	UNQ
Administration	Office 1 Closet	Interior	Wood	White	0.2	Intact	UNQ
Administration	Office 1/Front Entry	Interior	Wood	White	0.1	Intact	UNQ
Administration	Entry/Main Room	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Kitchen	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Kitchen Closet	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Women's Bathroom	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Men's Bathroom	Interior	Wood	White	0.1	Intact	UNQ
Administration	Main Room Exit	Interior	Metal	White	0.2	Intact	UNQ
Unit 76	Front	Interior	Metal	White	0.1	Intact	UNQ
Unit 76	Back	Interior	Metal	White	0.1	Intact	UNQ
Unit 76	Bathroom	Interior	Wood	White	-0.1	Intact	UNQ
Unit 76	Kitchen	Interior	Wood	White	-0.2	Intact	UNQ
Unit 76	Bedroom	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Front	Interior	Wood	White	-0.1	Intact	UNQ
Unit 78	Back	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Bathroom	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Kitchen	Interior	Wood	White	0.1	Intact	UNQ
Unit 78	Bedroom	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Front	Interior	Metal	White	-0.2	Intact	UNQ
Unit 10	Closet Under Stairs	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Back	Interior	Metal	White	0.1	Intact	UNQ



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
Unit 2	Front	Interior	Metal	White	-0.3	Intact	UNQ
Unit 2	Back	Interior	Metal	White	-0.4	Intact	UNQ
Unit 2	Closet	Interior	Wood	White	0.3	Intact	UNQ
Unit 2	Bathroom	Interior	Wood	White	0.1	Intact	UNQ
Unit 13	Front	Interior	Metal	White	-0.2	Intact	UNQ
Unit 13	Back	Interior	Metal	White	-0.2	Intact	UNQ
Unit 13	Bedrooms	Interior	Wood	White	-0.4	Intact	UNQ
Unit 14	Front	Interior	Metal	White	-0.1	Intact	UNQ
Unit 14	Back	Interior	Metal	White	0.2	Intact	UNQ
Unit 14	Closet Under Stairs	Interior	Wood	White	-0.6	Intact	UNQ
<b>Door Frames &amp; Trim</b>							
Administration	Warehouse Entry	Interior	Wood	Maroon	-0.2	Intact	UNQ
Administration	Warehouse/Office 1	Interior	Wood	Maroon	-0.1	Intact	UNQ
Administration	Office 1 Closet	Interior	Wood	White	0.2	Intact	UNQ
Administration	Office 1/Front Entry	Interior	Wood	White	0.1	Intact	UNQ
Administration	Entry/Main Room	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Kitchen	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Kitchen Closet	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Women's Bathroom	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Men's Bathroom	Interior	Wood	White	0.1	Intact	UNQ
Administration	Main Room Exit	Interior	Metal	White	0.2	Intact	UNQ
Unit 76	Front	Interior	Metal	White	0.1	Intact	UNQ
Unit 76	Back	Interior	Metal	White	0.1	Intact	UNQ
Unit 76	Bathroom	Interior	Wood	White	-0.1	Intact	UNQ
Unit 76	Kitchen	Interior	Wood	White	-0.2	Intact	UNQ
Unit 76	Bedroom	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Front	Interior	Wood	White	-0.1	Intact	UNQ
Unit 78	Back	Interior	Wood	White	-0.2	Intact	UNQ



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
Unit 78	Bathroom	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Kitchen	Interior	Wood	White	0.1	Intact	UNQ
Unit 78	Bedroom	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Front	Interior	Metal	White	-0.2	Intact	UNQ
Unit 10	Closet Under Stairs	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Back	Interior	Metal	White	0.1	Intact	UNQ
Unit 2	Front	Interior	Metal	White	-0.3	Intact	UNQ
Unit 2	Back	Interior	Metal	White	-0.4	Intact	UNQ
Unit 2	Closet	Interior	Wood	White	0.3	Intact	UNQ
Unit 2	Bathroom	Interior	Wood	White	0.1	Intact	UNQ
Unit 13	Front	Interior	Metal	White	-0.1	Intact	UNQ
Unit 13	Back	Interior	Metal	White	-0.3	Intact	UNQ
<b>Unit 13</b>	<b>Bedrooms</b>	<b>Interior</b>	<b>Wood</b>	<b>White</b>	<b>2.4</b>	<b>Intact</b>	<b>10 SF</b>
<b>Unit 13</b>	<b>Closet Under Stairs</b>	<b>Interior</b>	<b>Wood</b>	<b>White</b>	<b>2.1</b>	<b>Intact</b>	<b>10 SF</b>
Unit 14	Front	Interior	Metal	White	0.1	Intact	UNQ
Unit 14	Back	Interior	Metal	White	-0.2	Intact	UNQ
<b>Unit 14</b>	<b>Bedrooms</b>	<b>Interior</b>	<b>Wood</b>	<b>White</b>	<b>2.8</b>	<b>Intact</b>	<b>10 SF</b>
<b>Unit 14</b>	<b>Closet Under Stairs</b>	<b>Interior</b>	<b>Wood</b>	<b>White</b>	<b>2.5</b>	<b>Intact</b>	<b>10 SF</b>
<b>Windows</b>							
<b>Administration</b>	<b>Warehouse</b>	<b>Interior</b>	<b>Metal</b>	<b>Cream</b>	<b>5.4</b>	<b>Intact</b>	<b>3 Windows</b>
Administration	Office #1	Interior	Metal	White	-0.1	Intact	UNQ
Administration	Front Entry	Interior	Metal	White	-0.3	Intact	UNQ
Administration	Main Room	Interior	Metal	White	-0.2	Intact	UNQ
Administration	Kitchen	Interior	Metal	White	-0.2	Intact	UNQ
Administration	Women's Bathroom	Interior	Metal	White	-0.3	Intact	UNQ
Administration	Men's Bathroom	Interior	Metal	White	-0.3	Intact	UNQ
Unit 76	Living Room	Interior	Metal	White	0.1	Intact	UNQ
Unit 76	Bedroom	Interior	Metal	White	-0.0	Intact	UNQ



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
Unit 76	Kitchen	Interior	Metal	White	-0.1	Intact	UNQ
Unit 78	Living Room	Interior	Metal	White	-0.2	Intact	UNQ
Unit 78	Bedroom	Interior	Metal	White	0.2	Intact	UNQ
Unit 78	Kitchen	Interior	Metal	White	-0.1	Intact	UNQ
<b>Unit 10</b>	<b>Living Room</b>	<b>Interior</b>	<b>Metal</b>	<b>White</b>	<b>1.0</b>	<b>Intact</b>	<b>10 Windows</b>
<b>Unit 2</b>	<b>Entry</b>	<b>Interior</b>	<b>Metal</b>	<b>White</b>	<b>1.2</b>	<b>Intact</b>	<b>4 Windows</b>
<b>Unit 13</b>	<b>Bedrooms</b>	<b>Interior</b>	<b>Metal</b>	<b>White</b>	<b>0.7</b>	<b>Intact</b>	<b>10 Windows</b>
<b>Unit 14</b>	<b>Bedrooms</b>	<b>Interior</b>	<b>Metal</b>	<b>White</b>	<b>1.0</b>	<b>Intact</b>	<b>10 Windows</b>
<b>Window Sills</b>							
<b>Administration</b>	<b>Warehouse</b>	<b>Interior</b>	<b>Wood</b>	<b>Cream</b>	<b>1.3</b>	<b>Intact</b>	<b>3 Sills</b>
Administration	Office #1	Interior	Wood	White	-0.1	Intact	UNQ
Administration	Front Entry	Interior	Wood	White	-0.3	Intact	UNQ
Administration	Main Room	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Kitchen	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Women's Bathroom	Interior	Wood	White	-0.3	Intact	UNQ
Administration	Men's Bathroom	Interior	Wood	White	-0.3	Intact	UNQ
Unit 76	Living Room	Interior	Wood	White	0.1	Intact	UNQ
Unit 76	Bedroom	Interior	Wood	White	-0.0	Intact	UNQ
Unit 76	Kitchen	Interior	Wood	White	-0.1	Intact	UNQ
Unit 78	Living Room	Interior	Wood	White	-0.2	Intact	UNQ
Unit 78	Bedrooms	Interior	Wood	White	0.2	Intact	UNQ
Unit 78	Kitchen	Interior	Wood	White	-0.1	Intact	UNQ
Unit 10	Entry	Interior	Wood	White	-0.3	Intact	UNQ
Unit 10	Dining Room	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Bedrooms	Interior	Wood	White	0.2	Intact	UNQ
Unit 2	Entry	Interior	Wood	White	-0.2	Intact	UNQ
Unit 2	Back Door	Interior	Wood	White	-0.2	Intact	UNQ
Unit 2	Dining Room	Interior	Wood	White	0.1	Intact	UNQ



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
<i>Unit 13</i>	<i>Dining Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>2.8</i>	<i>Intact</i>	<i>10 Sills</i>
<i>Unit 13</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.2</i>	<i>Intact</i>	<i>10 Sills</i>
<i>Unit 13</i>	<i>Bedrooms</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.3</i>	<i>Intact</i>	<i>10 Sills</i>
<i>Unit 14</i>	<i>Dining Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.0</i>	<i>Intact</i>	<i>10 Sills</i>
<i>Unit 14</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.2</i>	<i>Intact</i>	<i>10 Sills</i>
<i>Unit 14</i>	<i>Bedrooms</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.2</i>	<i>Intact</i>	<i>10 Sills</i>
<b>Window Trim</b>							
Unit 10	Entry	Interior	Wood	White	-0.2	Intact	UNQ
Unit 10	Dining Room	Interior	Wood	White	0.2	Intact	UNQ
Unit 10	Bedrooms	Interior	Wood	White	0.1	Intact	UNQ
Unit 10	Bathroom	Interior	Wood	White	0.2	Intact	UNQ
Unit 2	Entry	Interior	Wood	White	0.1	Intact	UNQ
Unit 2	Back Door	Interior	Wood	White	0.1	Intact	UNQ
Unit 2	Dining Room	Interior	Wood	White	-0.2	Intact	UNQ
<i>Unit 13</i>	<i>Dining Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>6.3</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 13</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>4.7</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 13</i>	<i>Bedrooms</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>5.2</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 13</i>	<i>Bathroom</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>5.4</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 14</i>	<i>Dining Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.8</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 14</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>4.2</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 14</i>	<i>Bedrooms</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>4.6</i>	<i>Intact</i>	<i>10 Windows</i>
<i>Unit 14</i>	<i>Bathroom</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>4.3</i>	<i>Intact</i>	<i>10 Windows</i>
<b>Baseboards</b>							
Unit 10	Living Room	Interior	Wood	White	-0.3	Intact	UNQ
Unit 10	Kitchen	Interior	Wood	White	0.1	Intact	UNQ
<i>Unit 13</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>3.3</i>	<i>Intact</i>	<i>250 LF</i>
<i>Unit 13</i>	<i>Bedrooms</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>4.2</i>	<i>Intact</i>	<i>250 LF</i>
<i>Unit 14</i>	<i>Living Room</i>	<i>Interior</i>	<i>Wood</i>	<i>White</i>	<i>1.8</i>	<i>Intact</i>	<i>250 LF</i>



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
<b>Unit 14</b>	<b>Bedrooms</b>	<b>Interior</b>	<b>Wood</b>	<b>White</b>	<b>2.4</b>	<b>Intact</b>	<b>250 LF</b>
Unit 14	Kitchen	Interior	Wood	White	0.1	Intact	UNQ
Unit 76	Living Room	Interior	Wood	White	-0.2	Intact	UNQ
Unit 76	Bedrooms	Interior	Wood	White	0.1	Intact	UNQ
Unit 78	Living Room	Interior	Wood	White	-0.1	Intact	UNQ
Unit 78	Bedrooms	Interior	Wood	White	0.1	Intact	UNQ
<b>Exterior</b>							
<b>Administration</b>	<b>Eaves</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>5.6</b>	<b>Intact</b>	<b>750 SF</b>
<b>Administration</b>	<b>Joists</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>2.8</b>	<b>Intact</b>	<b>UNQ</b>
<b>Administration</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Maroon</b>	<b>4.7</b>	<b>Fair</b>	<b>12 Windows</b>
<b>Administration</b>	<b>Window Sills</b>	<b>Exterior</b>	<b>Wood</b>	<b>Maroon</b>	<b>5.1</b>	<b>Intact</b>	<b>12 Windows</b>
Administration	Walls	Exterior	Stucco	Cream	0.5	Fair	UNQ
Administration	Walls	Exterior	Stucco	Cream	0.2	Intact	UNQ
Administration	Railing	Exterior	Metal	Maroon	0.2	Intact	UNQ
Administration	Window Covers/Bars	Exterior	Metal	Maroon	-0.1	Fair	UNQ
<b>Building 3</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Tan</b>	<b>2.0</b>	<b>Fair</b>	<b>30 Windows</b>
<b>Building 3</b>	<b>Eaves</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>3.8</b>	<b>Fair</b>	<b>1000 SF</b>
<b>Building 3</b>	<b>Fascia</b>	<b>Exterior</b>	<b>Wood</b>	<b>Tan</b>	<b>4.5</b>	<b>Fair</b>	<b>350 LF</b>
<b>Building 2</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Maroon</b>	<b>4.3</b>	<b>Fair</b>	<b>44 Windows</b>
<b>Building 2</b>	<b>Eaves</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>3.8</b>	<b>Fair</b>	<b>800 SF</b>
<b>Building 2</b>	<b>Fascia</b>	<b>Exterior</b>	<b>Wood</b>	<b>Maroon</b>	<b>1.9</b>	<b>Fair</b>	<b>300 LF</b>
<b>Building 1</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Maroon</b>	<b>3.7</b>	<b>Fair</b>	<b>44 Windows</b>
<b>Building 1</b>	<b>Eaves</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>4.3</b>	<b>Fair</b>	<b>800 SF</b>
<b>Building 1</b>	<b>Fascia</b>	<b>Exterior</b>	<b>Wood</b>	<b>Maroon</b>	<b>4.9</b>	<b>Fair</b>	<b>300 LF</b>
<b>Building 4</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Maroon</b>	<b>2.4</b>	<b>Fair</b>	<b>40 Windows</b>
<b>Building 4</b>	<b>Eaves</b>	<b>Exterior</b>	<b>Wood</b>	<b>White</b>	<b>3.6</b>	<b>Fair</b>	<b>1000 SF</b>
<b>Building 4</b>	<b>Fascia</b>	<b>Exterior</b>	<b>Wood</b>	<b>Maroon</b>	<b>4.1</b>	<b>Fair</b>	<b>350 LF</b>
<b>Building 5</b>	<b>Windows</b>	<b>Exterior</b>	<b>Metal</b>	<b>Maroon</b>	<b>3.4</b>	<b>Fair</b>	<b>20 Windows</b>



Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
<i>Building 5</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>3.9</i>	<i>Fair</i>	<i>600 SF</i>
<i>Building 5</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>3.3</i>	<i>Fair</i>	<i>200 LF</i>
<i>Building 6</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>2.9</i>	<i>Fair</i>	<i>20 Windows</i>
<i>Building 6</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>4.6</i>	<i>Fair</i>	<i>600 SF</i>
<i>Building 6</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>4.1</i>	<i>Fair</i>	<i>200 LF</i>
<i>Building 7</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>2.8</i>	<i>Fair</i>	<i>20 Windows</i>
<i>Building 7</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>3.7</i>	<i>Fair</i>	<i>600 SF</i>
<i>Building 7</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>4.2</i>	<i>Fair</i>	<i>200 LF</i>
<i>Building 8</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>4.6</i>	<i>Fair</i>	<i>20 Windows</i>
<i>Building 8</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>4.3</i>	<i>Fair</i>	<i>600 SF</i>
<i>Building 8</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>4.2</i>	<i>Fair</i>	<i>200 LF</i>
<i>Building 9</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>3.8</i>	<i>Fair</i>	<i>60 Windows</i>
<i>Building 9</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>2.7</i>	<i>Fair</i>	<i>1200 SF</i>
<i>Building 9</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>3.2</i>	<i>Fair</i>	<i>400 LF</i>
<i>Building 10</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>4.8</i>	<i>Fair</i>	<i>60 Windows</i>
<i>Building 10</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>4.3</i>	<i>Fair</i>	<i>1200 SF</i>
<i>Building 10</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>2.9</i>	<i>Fair</i>	<i>400 LF</i>
<i>Building 11</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>3.1</i>	<i>Fair</i>	<i>60 Windows</i>
<i>Building 11</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>3.4</i>	<i>Fair</i>	<i>1200 SF</i>
<i>Building 11</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>3.1</i>	<i>Fair</i>	<i>400 LF</i>
<i>Building 12</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>4.8</i>	<i>Fair</i>	<i>60 Windows</i>
<i>Building 12</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>3.6</i>	<i>Fair</i>	<i>1200 SF</i>
<i>Building 12</i>	<i>Fascia</i>	<i>Exterior</i>	<i>Wood</i>	<i>Maroon</i>	<i>4.2</i>	<i>Fair</i>	<i>400 LF</i>
Building 13	Windows	Exterior	Metal	Maroon	-0.2	Fair	UNQ
Building 13	Eaves	Exterior	Wood	White	0.1	Fair	UNQ
Building 13	Fascia	Exterior	Wood	Maroon	-0.1	Fair	UNQ
<i>Building 14</i>	<i>Windows</i>	<i>Exterior</i>	<i>Metal</i>	<i>Maroon</i>	<i>4.8</i>	<i>Fair</i>	<i>60 Windows</i>
<i>Building 14</i>	<i>Eaves</i>	<i>Exterior</i>	<i>Wood</i>	<i>White</i>	<i>2.6</i>	<i>Fair</i>	<i>1200 SF</i>





Unit/Building	Location	Interior/ Exterior	Substrate	Visible Color	XRF Reading (≥0.7 mg/cm <sup>2</sup> )	Condition	Approximate Quantity or Unquantified (UNQ)
<b><i>Building 14</i></b>	<b><i>Fascia</i></b>	<b><i>Exterior</i></b>	<b><i>Wood</i></b>	<b><i>Maroon</i></b>	<b><i>3.7</i></b>	<b><i>Fair</i></b>	<b><i>400 LF</i></b>
<b>Miscellaneous Components</b>							
Administration	Warehouse stairs	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Kitchen counter	Interior	Tile	White	-0.1	Intact	UNQ
Administration	Kitchen cabinets	Interior	Wood	White	-0.4	Intact	UNQ
Administration	Kitchen Closet Shelves	Interior	Wood	White	-0.3	Intact	UNQ
Administration	Kitchen Counter	Interior	Wood	White	-0.2	Intact	UNQ
Administration	Main Room Chair Rail	Interior	Wood	White	-0.4	Intact	UNQ
Administration	Main Room Beams	Interior	Wood	Pink	-0.1	Intact	UNQ
<b><i>Unit 10</i></b>	<b><i>Kitchen Counter</i></b>	<b><i>Interior</i></b>	<b><i>Tile</i></b>	<b><i>Green</i></b>	<b><i>3.6</i></b>	<b><i>Intact</i></b>	<b><i>50 SF</i></b>
<b><i>Unit 13</i></b>	<b><i>Kitchen Counter</i></b>	<b><i>Interior</i></b>	<b><i>Tile</i></b>	<b><i>Tan</i></b>	<b><i>&gt;9.9</i></b>	<b><i>Intact</i></b>	<b><i>50 SF</i></b>
<b><i>Unit 76</i></b>	<b><i>Kitchen Counter</i></b>	<b><i>Interior</i></b>	<b><i>Tile</i></b>	<b><i>Tan</i></b>	<b><i>2.8</i></b>	<b><i>Intact</i></b>	<b><i>35 SF</i></b>
Unit 10	Bathroom Wall	Interior	Tile	White	-0.2	Intact	UNQ
<b><i>Unit 13</i></b>	<b><i>Stairwell</i></b>	<b><i>Interior</i></b>	<b><i>Wood</i></b>	<b><i>White</i></b>	<b><i>1.6</i></b>	<b><i>Fair</i></b>	<b><i>3 SF</i></b>
<b><i>Unit 14</i></b>	<b><i>Stairwell Wall Trim</i></b>	<b><i>Interior</i></b>	<b><i>Wood</i></b>	<b><i>White</i></b>	<b><i>2.3</i></b>	<b><i>Fair</i></b>	<b><i>3 SF</i></b>
Unit 76	Bathroom Wall	Interior	Tile	White	-0.6	Intact	UNQ



## 2.4 Supplemental Visual Inspection

On December 5, 2016, Altec completed a walk through visual inspection of the 92 remaining units but no additional lead paint testing was performed. The testing performed in the 8 vacant units is representative of the remaining units. Visually, the painted components were similar in appearance and condition as those tested in the initial 8 units (results listed in Table 3). Interior lead components located throughout all units likely include doors, door trim, window sills/trim, baseboards, stairway trim and kitchen counter tile. The exterior lead components include windows/trim, eaves and fascia.

Please note that the proposed/performed lead testing work was not a unit-by-unit HUD-compliant lead inspection.

## 2.5 Prior Lead Paint Testing & Stabilization

Several documents were reviewed that document limited lead paint (and asbestos) testing and stabilization has been performed in a few of the units at Rose Hill Courts.

Lead Hazard Reduction Workplan – Rose Hill Courts, Buildings Units 1-6, Units 95-100, and Administration Building, 4466 Florizel Street, Los Angeles, CA 90032 (July 29, 2008). LFR Inc. This workplan covers proposed work performed in Units 1-6 (Building #4) and 95-100 (Building #3) and the Administration building. The work included removal of loose and flaking lead-based paint chips from eaves, fascia boards and drip boards from the three building exteriors, removal of visible paint chip debris within 16 feet of the building walls, and the removal lead contaminated soil from the perimeters of the three buildings. The workplan indicates that post abatement soil and wipe samples would be collected by HACLA's representative in accordance with HUD guidelines after the contractor indicates they have completed the work. The adopted clearance criteria were: 1,000 ppm (mg/kg) for bare soil areas and 800 µg/ft<sup>2</sup> for the concrete/blacktop exterior surfaces. The workplan also indicated that waste characterization samples would be collected before the waste materials were transported for disposal.

Limited Asbestos & Lead-Based Paint Sampling and Visual Mold Assessment, Rose Hill Courts Development, 4466 Florizel Street, Los Angeles, California (September 10, 2012). SCA/LA Environmental, Inc.

SCA/LA performed limited asbestos and lead-based paint sampling and visual mold assessment for Units 3 and 14 and the social hall (Administration building) on August 28, 2012. A total of 57 bulk asbestos samples and 13 bulk paint chip samples were collected. Asbestos was detected in the kitchen flooring, in the flooring within the kitchen closet and on the stairs, in the window caulking and was assumed present in the vapor barrier beneath the wood flooring in Unit 3. Asbestos was detected in window caulking and was assumed present in the vapor barrier beneath the wood flooring in Unit 14. Asbestos was detected in window caulking of the social hall. Lead paint was assumed present in the ceramic wall tiles in the bathrooms of Units 3 and 1. Lead paint was identified in the brown paint on the exterior window frames of the social hall. The three areas were assessed for water damage and mold growth; all tested areas were below 10% on the moisture meter used during the assessment. No visible mold was observed.



Abatement Work Plan – Summary of Work Hazardous Material Abatement – Rose Hill Courts, 4466 Florizel Street, Los Angeles, CA 90032 (February 9, 2009). SCA/LA Environmental, Inc.  
This document covers procedures for the removal, handling and disposal of various hazardous materials in accordance with the Housing Authority’s (HACLA) Master Specification Sections 01110 and 02090 and applicable federal, state and local regulations. It appears to reference proposed work in Units 3, 14 and the social hall (Administration building) only.

Asbestos Abatement and Lead-Related Demolition Closeout Report. Rose Hill Courts Apartments, 4466 Florizel Street, Los Angeles, CA 90032. SCA/LA Environmental, Inc.  
This document references selected asbestos removal and lead paint removal in Units 3, 14 and the social hall (Administration building) only. A total of 16 square feet of asbestos-containing flooring was removed from Unit 3; no other asbestos removal was performed. Ceramic tiles (with assumed lead-coated glazing) were removed from Unit 3 and 14. No other asbestos or lead removal was included in the work scope accomplished during this limited project.



### 3.0 LEAD SOIL SAMPLING

#### 3.1 Scope of Work

The site buildings were developed during the time that lead-based paint was commonly used (through 1978). For older structures on which lead-based paint have been historically applied, there is a potential that shallow soils at the perimeter of the structures (also called the “drip line”) are impacted with lead from the accumulated weathering and deterioration of lead-based paints and from scraping and sanding preparation activities associated with repainting efforts. The presence of elevated lead concentrations in soil constitutes a lead hazard<sup>2</sup> and could put future occupants, especially children, at risk.

Because the surface coatings and paints on the exteriors of the buildings contain lead in concentrations above 0.7 mg/cm<sup>2</sup>, there is a potential that lead was released to the shallow soil adjacent to the exterior building walls (in non-paved areas) due to previous scraping/surface preparation for repainting purposes or due to normal weathering of the exterior surfaces. Soil sampling along the building perimeters is recommended if the current buildings will not be demolished, and if no import soil will be added to the site, and the site will not be significantly graded for compaction purposes.

Soil samples were collected to confirm the presence or absence of lead in the shallow subsurface related to the existing buildings and soil around the perimeters between the roof drip line and the foundations/exterior walls. The scope of work included collection of one soil sample (comprised of up to 10 aliquots or subsamples) along the foundation or closest open soil areas to assess for the presence of lead. The samples were collected in general accordance with US EPA HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (July 2012), Appendix 13.3 Collecting Soil Samples for Lead Determination. Further collection details are provided in Appendix B.

The samples were submitted to a National Lead Laboratory Accreditation Program (NLLAP) accredited laboratory for analysis by EPA 600/R-93/200 Preparation Modified, EPA Method 7000B Analysis Modified (which is equivalent to ASTM E 1729 – Standard Practice for Field Collection of Dried Paint Samples for Subsequent Lead Determination).

<b>Laboratory</b>	Testamerica, 17461 Derian Avenue, Suite 100, Irvine, CA (Sample 1-16)
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Laboratory analysis was performed in accordance with EPA Method 6010B (lead). Chain of custody for the samples was maintained. The laboratory certifications are included in Appendix D.

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<sup>2</sup> CDPH indicates lead soil hazards are 400 mg/kg or ppm or greater in child play areas and 1000 mg/kg or ppm in all other areas.



### 3.2 Sample Results

**Table 4 – Composite Soil Sample Results**

Date Collected	Sample Number	Description	Lead Total Concentration Result (mg/kg)	Lead STLC <sup>3</sup> Result (mg/l)	Lead TCLP <sup>4</sup> Result (mg/l)
6-7-16	1	Shallow foundation/drip line soil composite around the Administration Building	18	Not analyzed (NA)	NA
6-7-16	2	Shallow foundation/drip line soil composite around Bldg. #1 (1941 ID #1-1)	73	3.2	NA
6-7-16	3	Shallow foundation/drip line soil composite around Bldg. #2 (1941 ID #1-2)	110	190	0.099
6-7-16	4	Shallow foundation/drip line soil composite around Bldg. #3 (1941 ID #2)	76	2.8	NA
6-7-16	5	Shallow foundation/drip line soil composite around Bldg. #4 (1941 ID #5)	13	NA	NA
6-7-16	6	Shallow foundation/drip line soil composite around Bldg. #5 (1941 ID #4-2)	40	NA	NA
6-7-16	7	Shallow foundation/drip line soil composite around Bldg. #6 (1941 ID #4-1)	110	6.4	0.13
6-7-16	8	Shallow foundation/drip line soil composite around Bldg. #7 (1941 ID #4-4)	100	5.7	0.16
6-7-16	9	Shallow foundation/drip line soil composite around Bldg. #8 (1941 ID #4-3)	67	3.7	NA
6-7-16	10	Shallow foundation/drip line soil composite around Bldg. #9 (1941 ID #3-1)	91	4.7	NA
6-7-16	11	Shallow foundation/drip line soil composite around Bldg. #10 (1941 ID #3-2)	57	5.1	NA
6-7-16	12	Shallow foundation/drip line soil composite around Bldg. #11 (1941 ID #3-3)	130	6.9	0.018
6-7-16	13	Shallow foundation/drip line soil composite around Bldg. #12 (1941 ID #3-4)	200	5.1	0.027
6-7-16	14	Shallow foundation/drip line soil composite around Bldg. #13 (1941 ID #3-5)	140	8.4	0.076
6-7-16	15	Shallow foundation/drip line soil composite around Bldg. #14 (1941 ID #3-6)	110	5.9	0.052
12-5-16	16	Child playground – bare soil areas behind Administration Building	5.4	NA	NA

<sup>3</sup> STLC = California’s soluble threshold limit concentration (lead - 5.0 mg/l)

<sup>4</sup> TCLP = US EPA RCRA toxic characteristic leaching procedure (lead - 5.0 mg/l)



### 3.3 Results Discussion

#### Agency Guidelines and Regulations

Federal and state agencies publish and update guidelines/ regulations for lead soil concentrations at residential properties. These include:

Agency	Regulatory/Screening Level (Residential Property)
California Office of Environmental Health Hazard Assessment (OEHHA), California Human Health Screening Level (CHHSL)	80 mg/kg <sup>5</sup> (Screening Level)
California Regional Water Quality Control Board (RWQCB), Environmental Screening Level (ESL), shallow soil	80 mg/kg (Screening Level)
US EPA Region 9, Regional Screening Level (RSL)	400 mg/kg (Screening Level)
California Department of Public Health (CDPH), Title 17, California Code of Regulations (CCR), Division 1, Chapter 8, §35036	400 mg/kg (Regulatory Limit – bare soil in child play areas) 1000 mg/kg (Regulatory Limit – bare soil in all other areas)
U.S. Department of Housing and Urban Development (HUD), Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012)	400 mg/kg (Regulatory Limit – bare soil in child play areas) 1200 mg/kg (Regulatory Limit – bare soil non-play areas)

Identifying which regulatory limit and/or screening level is applicable can depend on a variety of factors such as the location of the sample (child play area vs. non-play area), whether children reside at the property, the intent of the assessment (whether it is to investigate an EBL-elevated blood lead level in a child or to perform hazard assessment due to deteriorating exterior lead paint) or whether the site has had prior industrial use.

#### Screening Levels vs. Regulatory Limits

Screening levels (SLs) – SLs are published by OEHHA, RWQCB, and USEPA for many chemical compounds (including lead) found at contaminated sites. They provide a simple and inexpensive alternative to site-specific risk assessment and are intended to help expedite the evaluation of smaller sites with limited contamination. In general, concentrations below screening levels are considered to have little to no potential to cause adverse health or environmental effects (less than one in one million). By comparing site data to the SL, cleanup decisions can be made rapidly without regulatory agency oversight. SLs are not regulations, and their use by regulators, or other parties, is entirely optional; however, their demonstrated effectiveness has resulted in consistent agency use. At more complicated or heavily contaminated sites where contaminants pose significant risks to human health or the environment, SLs serve as a starting point for site-specific risk assessment performed under regulatory oversight.

Regulatory limits - For lead concentrations in soil at multi-family residential properties, California’s Title 17 provides the regulatory limits of 400 mg/kg (child play areas) and 1,000 mg/kg (all other areas). Soil containing lead concentrations of 400 or 1,000 mg/kg or above (in

<sup>5</sup> Mg/kg = milligrams per kilogram (also expressed as parts per million (ppm))



play areas and non-play areas, respectively) requires abatement. Abatement can include either permanent measures such as removal or paving, or temporary measures such as installing fences, decks, by covering with rock, bark, turf, by planting thorny bushes to prevent contact with the soil) and even by surface cultivation/rototilling if the original soil concentration does not exceed 1,200 mg/kg (HUD).

**Site-Specific Results**

Three distinct laboratory analyses were performed for one or more of the collected soil samples. Initially, all samples were analyzed for lead to obtain the total concentration by EPA Method 6010B. Soluble threshold limit concentration (STLC) waste extraction analysis was performed for the soil samples whose total concentration exceeded 50 mg/kg. Toxic characteristic leaching procedure (TCLP) waste extraction analysis was performed for the soil samples whose total concentration exceeded 100 mg/kg. These additional STLC and TCLP analyses were performed to further evaluate whether the soil, if excavated and removed, would be considered a California or Federal hazardous waste. These results are useful for budgeting purposes because transportation and disposal rates differ drastically based on waste classification. Discussion of the STLC and TCLP results have been withheld at this time because these results will only become applicable if/when the soil is excavated and set for offsite transportation and disposal. They do not have any bearing on the soil if it remains in situ (in its current position).

The following table lists the building numbers and the analytical results obtained for the composite samples collected; they are presented in ascending order based on detected concentration:

**Table 5 – Grouped Results (Below/Above 80 mg/kg)**

Sample Number	Sample Location	Total Concentration Result (Lead - mg/kg)	STLC <sup>6</sup> Result (Lead - mg/l)	TCLP <sup>7</sup> Result (Lead - mg/l)
16	Child playground	5.4	Not analyzed (NA)	NA
5	Bldg. #4 (1941 ID #5)	13	NA	NA
1	Administration Building	18	NA	NA
6	Bldg. #5 (1941 ID #4-2)	40	NA	NA
11	Bldg. #10 (1941 ID #3-2)	57	5.1	NA
9	Bldg. #8 (1941 ID #4-3)	67	3.7	NA
2	Bldg. #1 (1941 ID #1-1)	73	3.2	NA
4	Bldg. #3 (1941 ID #2)	76	2.8	NA
10	Bldg. #9 (1941 ID #3-1)	91	4.7	NA
8	Bldg. #7 (1941 ID #4-4)	100	5.7	0.16
3	Bldg. #2 (1941 ID #1-2)	110	190	0.099
7	Bldg. #6 (1941 ID #4-1)	110	6.4	0.13
15	Bldg. #14 (1941 ID #3-6)	110	5.9	0.052

<sup>6</sup> STLC = California’s soluble threshold limit concentration (lead - 5.0 mg/l)

<sup>7</sup> TCLP = US EPA RCRA toxic characteristic leaching procedure (lead - 5.0 mg/l)



Sample Number	Sample Location	Total Concentration Result (Lead - mg/kg)	STLC <sup>6</sup> Result (Lead - mg/l)	TCLP <sup>7</sup> Result (Lead - mg/l)
12	Bldg. #11 (1941 ID #3-3)	130	6.9	0.018
14	Bldg. #13 (1941 ID #3-5)	140	8.4	0.076
13	Bldg. #12 (1941 ID #3-4)	200	5.1	0.027

Results Discussion

The lead concentrations<sup>8</sup> for the 16 samples are below the California Title 17 regulatory levels of 1,000 mg/kg (non-play areas), as well as below the level for child play areas (400 mg/kg), indicating that, from a regulatory standpoint, no lead hazard abatement is required.

Recommended Action

Prior to initial sample collection in June 2016, it was determined that identifying the soil concentrations before exterior lead paint abatement was performed would assist Related in project budgeting purposes. The pre-abatement soil data would also allow Related to plan for soil abatement, if needed. As indicated above, all lead soil concentrations are below 400 mg/kg and lead hazard abatement is not mandatory for the soil. Lead concentrations for Buildings 3, 7, 8, 10, 12, 13, 14 and 15 do exceed the California screening level of 80 mg/kg. In keeping with a conservative site rehabilitation approach, the shallow soil (0 to 6 inches) should be removed around these structures to reduce the lead concentrations below 80 mg/kg. This work should be performed after exterior lead abatement/stabilization is completed.

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<sup>8</sup> total lead concentration

