APPENDIX H3

HAZARDOUS BUILDING MATERIAL SURVEY

Hazardous Building Material Survey

Lincoln Avenue and Manchester Avenue
Anaheim, California 92801

STV Incorporated

1055 West Seventh Street, Suite 3150 | Los Angeles, California 90017

August 18, 2017 | Project No. 210248001

Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

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CONTENTS

1 INTRODUCTION 1
2 PURPOSE AND SCOPE OF SERVICES 1
3 SITE BUILDING DESCRIPTION 2
4 FIELD LIMITATIONS 2
5 ASBESTOS SAMPLE COLLECTION AND LABORATORY ANALYSIS 2
5.1 Asbestos Survey 2
5.1.1 Visual Inspection 3
5.1.1.1 Friability Classifications 3
5.1.2 Sampling Procedures 4
5.1.3 Quantification 4
5.2 Asbestos Laboratory Analysis Procedures 4
6 LCS SURVEY 5
7 INVENTORY OF UNIVERSAL WASTES 6
8 SURVEY RESULTS 6
8.1 Asbestos Survey 6
8.2 Asbestos Results Summary 6
8.3 Lead-Containing Surfaces Summary 8
8.4 Universal Wastes Inventory 9
9 RECOMMENDATIONS 9
9.1 Asbestos 9
9.2 Lead 10
9.3 Universal Wastes 10
10 LIMITATIONS 11

TABLES

1 – Positive Asbestos Survey Results 7
2 – Non-Asbestos Containing Materials Sampled 7
3 – Lead Results Summary 8
4 – Universal Waste Inventory 9

A – XRF Readings Summary

FIGURES

1 – Site Location

2 – Site Plan

APPENDICES

A – Consultant Certificates

B – California Department of Public Health Form 8552

C – Analytical Results and Chain-of-Custody Records

D – Photographs

E – Field Drawing

1 INTRODUCTION

In accordance with STV Incorporated's authorization, Ninyo & Moore has performed a hazardous building material survey (HBMS) in support of upcoming demolition activities within the property at Lincoln Avenue and Manchester Avenue, Anaheim, California (site; Figure 1). This report has been prepared in accordance with generally accepted environmental science and engineering practices. This report is based on conditions at the site at the time of the sampling activities and provides documentation of our findings and recommendations.

2 PURPOSE AND SCOPE OF SERVICES

The objectives of the survey is to provide information about current conditions within the site structure regarding the potential presence of asbestos containing materials (ACMs), lead containing surfaces (LCS), and other hazardous materials which are present within the building which will require removal prior to the planned demolition activities. For the purposes of this assessment, LCS refers to both lead-based paint (LBP) and other potential lead-containing materials, as defined by the California Department of Public Health (CDPH) and United States Department of Housing and Urban Development (HUD).

The scope of services we performed for the study is identified below.

- Performed a visual reconnaissance of the property to evaluate for the possible presence of ACMs and LCSs.
- Collected 47 bulk samples and submitted these samples to an independent laboratory for analysis of asbestos content. Samples were analyzed in accordance with the United States Environmental Protection Agency (EPA) recommended method of Polarized Light Microscopy (PLM) in accordance with EPA Test Method 600/R-93/116 July 93.
- Collected of 134 X-Ray fluorescence (XRF) readings (including calibrations) of potential LCS.
- Prepared field drawings showing ACM and LCS sample locations.
- Performed a visual assessment and quantification of miscellaneous hazardous materials including, but not limited to, fluorescent light bulbs (possible mercury); fluorescent light ballasts (possible polychlorinated biphenyl [PCB]-containing oils); high intensity light bulbs (possible mercury); thermostat switches (possible liquid mercury and/or batteries); emergency lighting and exit signs (possible lead acid or other metal containing batteries or tritium); heating, ventilation, and air-conditioning (HVAC) and refrigeration systems (possible chlorofluorocarbon [CFC] gas); and other possible hazardous materials.
- Prepared this HBMS report which presents our data and summarizes field activities, evaluated materials, and locations. This report includes field drawn sample location maps, a general building description, laboratory testing information, laboratory test results, and conclusions and recommendations.

3 SITE BUILDING DESCRIPTION

The site structure is composed of four separate auto garage units with addresses at 1514 West Lincoln Avenue, 1516 West Lincoln Avenue, 1518 West Lincoln Avenue and 1520 West Lincoln Avenue in the city of Anaheim (Figure 2). The structure is a one-story concrete-framed slab on grade building, which occupies an approximate 12,000 square foot (SF) area. Each individual unit has an office space, garage area and a restroom. The interior walls are concrete or drywall. The exterior walls are concrete. The flooring areas are either unfinished concrete, or finished with ceramic tiles and vinyl floor tiles in the offices and restrooms. The ceiling areas are finished with drywall in the offices and restrooms and are unfinished in the garages. The roof system includes built-up composition roofing materials.

4 FIELD LIMITATIONS

Since non-destructive sampling techniques were used, there is a possibility that additional ACMs and LCSs may be encountered in inaccessible areas (e.g., wall cavities, interstitial spaces) during building demolition activities.

5 ASBESTOS SAMPLE COLLECTION AND LABORATORY ANALYSIS

The asbestos survey was performed on July 28, 2017, by Mr. Pedro Rodriguez-Mendez, a California Department of Occupational Safety and Health (DOSH) Site Surveillance Technician. The survey was performed under the direct supervision of Mr. Michael Cushner, a DOSH Certified Asbestos Consultant. Consultant certificates are presented in Appendix A.

5.1 Asbestos Survey

The survey inspection and sampling procedures were performed in accordance with the guidelines published by the EPA in 40 Code of Federal Regulations (CFR) Part 763 Subpart E, October 30, 1987 (Asbestos Hazards Emergency Response Act [AHERA]); the EPA guidance document “Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985); the National Emission Standards for Hazardous Air Pollutants (NESHAP; 40 CFR Part 61, subpart M); and the South Coast Air Quality Management District (SCAQMD) Rule 1403.

The survey consisted of three parts including: visual inspection, sampling, and quantification of the building materials.

5.1.1 Visual Inspection

Initial observations were made throughout the structure to evaluate for the presence and condition of accessible suspect materials. Materials which were similar in general appearance were grouped into homogeneous sampling areas (areas in which the materials are uniform in color, texture, construction, or application date), as recommended by the EPA. Each homogeneous area was observed for material type, location, condition, and friability.

In accordance with the EPA and AHERA, suspect materials were placed in one of three categories:

- **Surfacing Materials** - materials generally applied via sprayed or trowel methods,
- **Thermal Systems Insulations (TSI)** - materials generally applied to various mechanical systems, or
- **Miscellaneous Materials** - any materials which do not fit in the Surfacing or TSI classifications.

If asbestos is identified in a sample from a homogeneous area, the entire homogeneous area is considered to contain asbestos.

Representative samples were collected from each homogeneous area within the survey area, except areas that were inaccessible, or areas of assumed ACM, within the limitations of the survey.

5.1.1.1 Friability Classifications

The definition of friability is any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. The EPA's NESHAP regulation has different material categories for ACMs. These categories are used when demolition or renovation projects are being conducted. Each identified suspect homogeneous material was placed in one of the following EPA classifications:

- **Category I Non-friable** - NESHAP defines a Category I non-friable ACM as packing, gaskets, resilient floor covering (except sheet flooring products which are considered friable), and asphalt roofing products which contain more than one percent asbestos.
- **Category II Non-friable** - NESHAP defines a Category II non-friable ACM as any material, except for Category I non-friable ACM, which contains more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry.

- **Regulated Asbestos Containing Material (RACM)** - is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

5.1.2 Sampling Procedures

Following the walkthrough, the inspectors collected selected samples of accessible materials identified as suspect ACM. EPA, AHERA, NESHAP, and SCAQMD guidelines were used to determine the sampling protocol. Sampling locations were chosen to be representative of the homogeneous material. Samples of surfacing material were collected in general accordance with the EPA sampling protocol outlined in EPA 560/5-85-030a, October 1985. Representative samples were taken from already damaged areas or areas which were the least visible. Samples of miscellaneous materials were taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material. Generally, three samples of each homogeneous material were collected of miscellaneous materials and TSI, if present.

5.1.3 Quantification

Quantities of accessible and/or exposed building materials that were suspected of containing asbestos were estimated by taking approximate measurements in the field. Quantities are presented in SF or linear feet to be used as a guide for contractor estimates on bidding for abatement activities. It is the abatement contractor's responsibility to confirm quantities prior to bidding and removal.

5.2 Asbestos Laboratory Analysis Procedures

Analysis was performed at EM Lab P&K (EM Lab), Irvine, California. EM Lab is a National Volunteer Laboratory Accreditation Program accredited laboratory. A chain-of-custody, documenting the possession of the samples from the time they were collected until analyzed and stored, was submitted with the bulk samples. The original chain-of-custody accompanied the materials at all times. Custody documentation began at the time samples were collected and each transferor retained a copy of the chain-of-custody record.

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.), and non- fibrous constituents.

Refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation identified asbestos. The same characteristics were used to identify the non-asbestos constituents.

The microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample, using a stereoscope. The bulk samples were analyzed by PLM with dispersion staining as described by the method of the determination of asbestos in bulk insulation, EPA/600/R-93/116, July 1993. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays which result, enable mineral identification.

6 LCS SURVEY

The LCS survey was performed on July 28, 2017, by Mr. Peter Kelley, a CDPH Lead-Related Construction (LRC) Inspector/Assessor. The survey was performed under the supervision of Mr. Michael Cushner, a CDPH LRC Inspector/Assessor and Project Monitor. Consultant certificates are presented in Appendix A.

The survey was conducted using a portable NITON XLp 300A XRF spectrum analyzer in accordance with accepted environmental science and engineering practices. The protocol used for selecting components and sampling locations was that contained in the federal HUD "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" (Chapter 7 "Lead-Based Paint Inspection"), except the inspection was limited to accessible materials and once a pattern was recognized for the component results, fewer readings for each component were collected.

The XRF analyzer used for the testing is a direct-reading instrument that determines the concentration of lead in paints by subjecting the paint to energy from a small radioactive source when the instrument is held against the paint and analyzing the absorption of X-Rays by the paint. The instrument was calibrated to the manufacturer's specifications and was also verified, at least every four hours and at the beginning and completion of each set of readings, against known lead sample standards produced by the National Institute of Standards and Testing. The XRF instrument measures lead in units of milligrams of lead per square centimeter of tested surface (mg/cm^2). The CDPH requires that after a lead evaluation is performed a copy of CDPH form 8552 "Lead Hazard Evaluation Report" should be submitted. Ninyo & Moore has faxed this form to the CDPH and a copy is included in Appendix B.

7 INVENTORY OF UNIVERSAL WASTES

A visual evaluation of the structure was performed to quantify miscellaneous hazardous building materials. This included, but was not limited to, potential mercury-containing thermostats, switches, and fluorescent light tubes; items potentially containing PCBs; potential tritium or battery-containing exit signs; and potential CFC-containing refrigeration systems.

8 SURVEY RESULTS

The following sections describe the survey results.

8.1 Asbestos Survey

A total of 47 samples of suspect ACMs were collected and transferred to EM Lab for analysis. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. In the state of California, DOSH regulations define asbestos containing construction materials (ACCMs) if one sample from a homogeneous area contains asbestos content of greater than one tenth of 1 percent (>0.1 percent). Materials in which no asbestos was detected are defined in the laboratory report as “None detected.” Materials containing asbestos, but in amounts less than 1 percent, are defined as containing “trace” amounts and for the purpose of this report are assumed to be ACCM. If inaccessible suspect ACMs were present which were suspect of being ACM or ACCM, they will be noted to be assumed asbestos containing.

8.2 Asbestos Results Summary

Based on observations and the analytical results of bulk samples collected during the survey, ACMs were detected within the property. The ACMs and assumed ACMs found to be present are described in Table 1. Other building materials which were sampled and found to be non-asbestos containing are summarized in Table 2. A copy of the laboratory analytical report and chain-of-custody record is presented in Appendix C. General photographic documentation of the ACMs is presented in Appendix D. The sampling locations of the materials found to be ACM are presented within the field drawings provided in Appendix E.

Table 1 – Positive Asbestos Survey Results

Material	Location	ACM Category	Condition	Approximate Quantity	Photograph No.
Exterior					
Penetration mastic	Roof	NESHAP Category II Non-friable	Good	30 SF ACM	2
Mastic at HVAC seams	Roof	NESHAP Category II Non-friable	Good	10 SF ACM	2
1514 West Lincoln Avenue					
NA					
1516 West Lincoln Avenue					
NA					
1518 West Lincoln Avenue					
Vinyl floor sheeting	Restroom	NESHAP Category II Non-friable	Good	25 SF ACM	3
Mastic associated with 1' x 1' gray vinyl floor tile	Offices	NESHAP Category II Non-friable	Good	200 SF ACM	4
1520 West Lincoln Avenue					
NA					

Notes:
ACM – asbestos containing material
HVAC – heating, ventilation and air conditioning
NA – not applicable
NESHAP – National Emission Standards for Hazardous Air Pollutants
No. – number
SF – square feet
' – foot

Please note that quantities of ACMs are approximate. It is the abatement contractor's responsibility to confirm quantities prior to bidding and removal activities.

Table 2 – Non-Asbestos Containing Materials Sampled

Sample Material Description	Material Location
Exterior	
Roof core asphalt sheeting	Roof
Parapet wall	Roof
Expansion joints	Roof
1514 West Lincoln Avenue	
Drywall and joint compound	Office, Garage, Restroom
1' x 1' gray vinyl floor tile and mastic	Office
Vinyl floor sheeting and mastic	Restroom
Acoustic (popcorn) ceiling	Office
Black cove base and mastic	Office
1516 West Lincoln Avenue	
Drywall and joint compound	Office, Restroom, Garage
Acoustic (popcorn) ceiling	Office
1518 West Lincoln Avenue	
Drywall and joint compound	Office, Restroom
Acoustic (popcorn) ceiling	Office
1520 West Lincoln Avenue	
NA	

Notes:
' – foot
NA – not applicable

8.3 Lead-Containing Surfaces Summary

Federal efforts to regulate LBP began with the LBP Poison Prevention Act in 1971. In 1973, the Consumer Product Safety Commission (CPSC) defined LBP as paint having lead content equal to or greater than 0.5 percent by weight in a dry film of newly applied paint. In 1978, the CPSC lowered the allowable lead levels in new paint to 0.06 percent. HUD developed guidelines relating to HUD facilities that specified lead content of 0.5 percent as an action level in determining the need for corrective action. Federal and State DOSH do not define the amount of lead in paint to a regulatory requirement, rather the activities, or task, define when the regulation is in effect. Both Federal and State standards use the term "trigger task" activities. In the work place, employers must make certain assumptions of the exposure levels and comply with regulations based on the level of disturbance rather than the lead level.

A total of 134 XRF readings were collected from the representative testing combinations (e.g., unique combination of room equivalent, building component, and substrate) within the structure. LCSs were detected within the structure which is planned for demolition. Building components with detectable quantity greater than or equal to 1.0 mg/cm^2 are presented in Table 3 below. A summary of the XRF analysis data is included in the attached Table A. General photographic documentation is presented in Appendix D.

Table 3 – Lead Results Summary

Room/Area	Component	Substrate	Condition	Color	Approximate Quantity	Photograph No.
Exterior						
Exterior	Bollard	Metal	Poor	Yellow	12 each	5
Exterior	Sewer grate	Metal	Poor	Gray	1 SF	6
1514 West Lincoln Avenue						
NA						
1516 West Lincoln Avenue						
Office, Restroom	Floor tile	Ceramic	Intact	White	123 SF	7
Office, Restroom	Baseboard	Ceramic	Intact	White	25 LF	7
Office and Break Room	Crown molding	Wood	Intact	White	100 LF	8
1518 West Lincoln Avenue						
NA						
1520 West Lincoln Avenue						
NA						

Notes:
LF – linear feet
NA – not applicable
No. – number
SF – square feet

Please note that quantities of LCSs are approximate. It is the abatement contractor's responsibility to confirm quantities prior to bidding and removal activities.

8.4 Universal Wastes Inventory

Universal wastes were found within the structure. The universal wastes and locations are presented below in Table 4.

Table 4 – Universal Waste Inventory

Hazardous Material Location	Hazardous Material Description	Estimated Quantity
Exterior		
Roof	HVAC units (refrigerant)	2 each
Ladder to Roof	Bird droppings	40 SF
1514 West Lincoln Avenue		
Throughout	Light ballasts	12
Throughout	Fluorescent lights	24
Office	Water-stained ceiling	4 SF
Garage	Waste oil pit/Clarifier	1 each
Garage	Box of fluorescent lights	1 each
Garage	Paint cans	8 containers
Office	Mercury thermostat switches	2 each
1516 West Lincoln Avenue		
Throughout	Light ballasts	16
Throughout	Fluorescent light ballasts	30
North garage	Oil staining on floor	900 SF
1518 West Lincoln Avenue		
Throughout	Light ballasts	7
Throughout	Fluorescent light ballasts	14
1520 West Lincoln Avenue		
Throughout	Light ballasts	4
Throughout	Fluorescent light ballasts	8
Garage	Oil staining on east wall	60 SF

Notes:
HVAC – heating, ventilation and air conditioning
SF – square feet

9 RECOMMENDATIONS

The following recommendations are provided:

9.1 Asbestos

- The identified ACMs should not be disturbed. Prior to demolition activities which would disturb identified ACMs and assumed ACMs, a licensed abatement removal contractor should remove the ACMs. The licensed abatement contractor must maintain current licenses as required by applicable state or local jurisdictions for the removal, transporting, disposal, or other regulated activities.

- Applicable laws and regulations should be followed, including those provisions requiring notification to regulatory agencies, building occupants, demolition contractors, and workers of the presence of asbestos.

- Asbestos abatement monitoring consulting services should be performed by a third party environmental consultant, to include oversight of abatement contractor activities to be performed in accordance with the abatement specifications, daily air monitoring,

clearances, verification of complete removal of hazardous materials, and preparation of a closeout report summarizing the abatement activities.

9.2 Lead

- The identified LCSs should not be disturbed. The lead containing ceramic tile removal activities should be performed by a licensed abatement contractor with certified lead personnel. The exterior paint in the non-intact condition (bollard and sewer gate) should be stabilized and the substrate should be encapsulated. All lead related removal activities should be performed in accordance with the DOSH Lead in Construction Standard, Title 8 California Code of Regulations (CCR) 1532.1.

- Proper LCS waste stream categorization is required for the two lead containing wastes. A composite sample of each of the representative LCS material should be analyzed for total lead for comparison with the Total Threshold Limit Concentration in accordance with EPA reference method SW-846. If the concentration of total lead is greater than or equal to 1,000 mg/kg, the LCS waste material must be disposed at a landfill which can receive such wastes. If the concentration is less than 50 mg/kg the sample may be disposed as construction debris, if it is to remain in California. If the total lead result is greater than or equal to 50 mg/kg and less than 1,000 mg/kg, the sample must be further analyzed for soluble lead by the Waste Extraction Test for comparison with the Soluble Threshold Limit Concentration (STLC) as described in Title 22 CCR 66261.24a. Additionally, if the result is greater than or equal to 100 mg/kg the sample must be further analyzed for leachable lead by the Toxicity Characteristic Leaching Procedure (TCLP) for comparison with the Resource Conservation and Recovery Act (RCRA) limits. Based on the results of the soluble and leachable analysis the waste material may require disposal as a RCRA-Hazardous waste or non-RCRA- (California-) Hazardous waste.

- Lead abatement monitoring consulting services should be performed by a third party environmental consultant, to include oversight of abatement contractor activities to be performed in accordance with the abatement specifications, daily air monitoring, clearances, verification of complete removal of hazardous materials, and preparation of a closeout report summarizing the abatement activities.

9.3 Universal Wastes

- Universal wastes discussed in this report (Table 4), should be removed and properly recycled or disposed by the licensed abatement contractor prior to renovation activities. Contractor should provide proper manifesting for all hazardous materials removed and recycled to prove the disposal of all materials was completed in accordance with local, state, and federal requirements.

- If demolition plans change to renovations for re-occupancy the following universal wastes (bird droppings at exterior ladder; and water stained ceiling in Unit 1514) will require additional investigation in order to develop recommendations for remediation.

- The oil pit/clarifier observed in Unit 1514 may contain liquids and should be emptied prior to building demolition. The liquid should be waste characterized for appropriate disposal. Limited soil sampling (borings) should be performed at two locations, one on each end of the waste oil pit/clarifier to confirm that petroleum hydrocarbons have not penetrated to the subsurface.

- The oil staining and light ponding observed at the flooring area within Unit 1514 should be cleaned up and waste characterized for appropriate disposal. Once the oil has been cleaned, the concrete should be observed for cracks. If cracks in the concrete are present, limited soil sampling (boring) should be performed to confirm that petroleum hydrocarbons have not penetrated to the subsurface.

- Monitoring consulting services should be performed by a third party environmental consultant, to ensure the appropriate removal of the hazardous materials prior to building demolition activities.

10 LIMITATIONS

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited sampling and chemical analysis. Further assessment of potential adverse environmental impacts may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated. However, if additional suspect ACMs or LCSs are encountered during renovation activities, these materials should be sampled by qualified personnel, and analyzed for content prior to further disturbance. In addition, please note that quantities of ACMs and LCSs are approximate. These numbers should be confirmed prior to removal or repair activities.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site can change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

Table A – XRF Readings Summary

Reading No.	Room	Floor	Side	Component	Substrate	Condition	Color	Action Level (mg/cm^2)	Results	Approximate Quantity	Lead Reading (mg/cm^2)
5	**Start**			**Standard Calibration Check 1.04 +/- 0.06 mg/cm^2**				**1.0**	**Positive**	**1.03**	**1.05**
6				**Standard Calibration Check 1.04 +/- 0.06 mg/cm^2**				**1.0**	**Positive**	**0.98**	**1.08**
7				**Standard Calibration Check 1.04 +/- 0.06 mg/cm_2**				**1.0**	**Positive**	**1.03**	**1.04**
8	Roof	R	Center	Skylight	Metal	Intact	White	1.0	Negative	NA	0.0
9	Roof	R	Center	HVAC	Metal	Intact	Gray	1.0	Negative	NA	0.0
10	Roof	R	Center	HVAC	Metal	Intact	Gray	1.0	Negative	NA	0.0
11	Roof	R	Center	Skylight	Metal	Intact	White	1.0	Negative	NA	0.0
12	Roof	R	Center	Vent	Metal	Intact	White	1.0	Negative	NA	0.0
13	Roof	R	Center	HVAC control box	Metal	Intact	White	1.0	Negative	NA	0.0
14	Roof	R	NE	Ladder	Metal	Fair	Gray	1.0	Negative	NA	0.0
15	Exterior	E	NE	Roof access ladder	Metal	Fair	Gray	1.0	Negative	NA	0.0
16	Exterior	E	NE	Roof access ladder	Metal	Intact	Black	1.0	Negative	NA	0.0
17	Exterior	E	NE	Wall	Concrete	Intact	Gray	1.0	Negative	NA	0.0
18	Exterior	E	NE	Wall	Concrete	Intact	Black	1.0	Negative	NA	0.0
19	Exterior	E	Center	Wall	Concrete	Intact	Gray	1.0	Negative	NA	0.0
20	Exterior	E	Center	Wall	Concrete	Intact	Black	1.0	Negative	NA	0.0
21	Exterior	E	NW	Wall	Concrete	Intact	Gray	1.0	Negative	NA	0.0
22	Exterior	E	NW	Wall	Concrete	Intact	Black	1.0	Negative	NA	0.0
23	Exterior	E	NW	Rolling door	Metal	Intact	Black	1.0	Negative	NA	0.0
24	Exterior	E	Center	Rolling door	Metal	Intact	Gray	1.0	Negative	NA	0.0
25	Exterior	E	E	Rolling door	Metal	Intact	Black	1.0	Negative	NA	0.0
26	Exterior	E	E	Gutter	Metal	Intact	Black	1.0	Negative	NA	0.0
27	Exterior	E	Center	Gutter	Metal	Intact	Gray	1.0	Negative	NA	0.0
28	Exterior	E	N	Gutter	Metal	Intact	Black	1.0	Negative	NA	0.0
29	Exterior	E	1514	Wall	Wood	Fair	Gray	1.0	Negative	NA	0.0
30	Exterior	E	1514	Wall	Wood	Fair	Gray	1.0	Negative	NA	0.0
31	Exterior	E	1514	Electrical box	Metal	Intact	Gray	1.0	Negative	NA	0.0
32	Exterior	E	1514	Electrical box	Metal	Intact	Black	1.0	Negative	NA	0.0
33	Exterior	E	1514	Floor	Concrete	Poor	Gray	1.0	Negative	NA	0.0
34	**Exterior**	**E**	**Center**	**Bollard**	**Metal**	**Poor**	**Yellow**	**1.0**	**Positive**	**12 each**	**0.92**
35	**Exterior**	**E**	**Parking**	**Bollard**	**Metal**	**Poor**	**Yellow**	**1.0**	**Positive**	**12 each**	**0.49**
36	Exterior	E	Parking	Transformer	Metal	Intact	Green	1.0	Negative	NA	0.0
37	Exterior	E	1520	Gate	Metal	Intact	Black	1.0	Negative	NA	0.0
38	Exterior	E	1520	Door frame	Metal	Intact	Black	1.0	Negative	NA	0.0
39	Exterior	E	1520	Door	Metal	Intact	Black	1.0	Negative	NA	0.0
40	1514 Office	1	E	Wall	Drywall	Intact	White	1.0	Negative	NA	0.0
41	1514 Office	1	S	Wall	Drywall	Intact	Beige	1.0	Negative	NA	0.0
42	1514 Office	1	N	Wall	Concrete	Fair	White	1.0	Negative	NA	0.0
43	1514 Office	1	-	Ceiling	Drywall	Fair	White	1.0	Negative	NA	0.0
44	1514 Office	1	-	Partition	Drywall	Intact	White	1.0	Negative	NA	0.0
45	1514 Garage	1	N	Wall	Concrete	Intact	White	1.0	Negative	NA	0.0
46	1514 Garage	1	S	Wall	Concrete	Intact	White	1.0	Negative	NA	0.0
47	1514 Garage	1	S	Column	Wood	Intact	White	1.0	Negative	NA	0.0

Table A – XRF Readings Summary

Reading No.	Room	Floor	Side	Component	Substrate	Condition	Color	Action Level (mg/cm^2)	Results	Approximate Quantity	Lead Reading (mg/cm^2)
48	1514 Garage	1	E	Door	Metal	Intact	White	1.0	Negative	NA	0.0
49	1514 Garage	1	E	Door frame	Metal	Intact	White	1.0	Negative	NA	0.0
50	1514 Garage	1	S	Conduit	Metal	Intact	White	1.0	Negative	NA	0.0
51	1514 Garage	1	E	Conduit	Metal	Intact	White	1.0	Negative	NA	0.0
52	1514 Garage	1	N	Conduit	Metal	Intact	White	1.0	Negative	NA	0.0
53	1514 Garage	1	E	Baseboard	Wood	Intact	White	1.0	Negative	NA	0.0
54	1514 Garage	1	S	Baseboard	Wood	Intact	White	1.0	Negative	NA	0.0
55	1514 Bathroom	1	W	Sink	Porcelain	Intact	White	1.0	Negative	NA	0.0
56	1514 Bathroom	1	W	Toilet	Porcelain	Intact	White	1.0	Negative	NA	0.0
57	1514 Garage	1	-	Parking stripe	Concrete	Intact	Yellow	1.0	Negative	NA	0.0
58	1516 Office	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
59	1516 Office	1	N	Wall	Wood	Intact	Purple	1.0	Negative	NA	0.0
60	1516 Office	1	S	Wall	Wood	Intact	Purple	1.0	Negative	NA	0.0
61	1516 Office	1	-	Floor tile	Ceramic	Intact	Black	1.0	Negative	NA	0.0
62	**1516 Office**	**1**	**-**	**Floor tile**	**Ceramic**	**Intact**	**White**	**1.0**	**Positive**	**102 SF**	**0.24**
63	1516 Office	1	E	Baseboard	Ceramic	Intact	Black	1.0	Negative	NA	0.0
64	**1516 Office**	**1**	**E**	**Baseboard**	**Ceramic**	**Intact**	**White**	**1.0**	**Positive**	**5 SF**	**0.32**
65	1516 Office	1	E	Window frame	Wood	Intact	Purple	1.0	Negative	NA	0.09
66	1516 Office	1	N	Wall	Concrete	Intact	Purple	1.0	Negative	NA	0.0
67	**1516 Office**	**1**	**W**	**Crown Molding**	**Wood**	**Intact**	**White**	**1.0**	**Positive**	**100 LF**	**0.21**
68	1516 Break Room	1	E	Wall	Wood	Intact	White	1.0	Negative	NA	0.0
69	**1516 Break Room**	**1**	**N**	**Crown Molding**	**Wood**	**Intact**	**White**	**1.0**	**Positive**	**Same as 67**	**0.23**
70	1516 Break Room	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
71	1516 Break Room	1	E	Door	Wood	Intact	Brown	1.0	Negative	NA	0.0
72	1516 Garage	1	W	Floor	Concrete	Poor	Red	1.0	Negative	NA	0.0
73	1516 Garage	1	W	Wall	Drywood	Intact	White	1.0	Negative	NA	0.0
74	1516 Garage	1	E	Wall	Drywall	Intact	White	1.0	Negative	NA	0.0
75	1516 Garage	1	W	Wall	Wood	Intact	White	1.0	Negative	NA	0.0
76	1516 Garage	1	S	Wall	Concrete	Intact	White	1.0	Negative	NA	0.0
77	1516 Garage	1	S	Column	Wood	Intact	White	1.0	Negative	NA	0.0
78	**1516 Restroom**	**1**	**-**	**Floor tile**	**Ceramic**	**Intact**	**White**	**1.0**	**Positive**	**21 SF**	**0.30**
79	1516 Restroom	1	-	Floor tile	Ceramic	Intact	Black	1.0	Negative	NA	0.0
80	1516 Restroom	1	N	Baseboard	Ceramic	Intact	Black	1.0	Negative	NA	0.0
81	**1516 Restroom**	**1**	**S**	**Baseboard**	**Ceramic**	**Intact**	**White**	**1.0**	**Positive**	**25 LF**	**0.25**
82	1516 Restroom	1	W	Sink	Porcelain	Intact	White	1.0	Negative	NA	0.0
83	1516 Restroom	1	W	Toilet	Porcelain	Intact	White	1.0	Negative	NA	0.0
84	1516 Restroom	1	S	Wall	Drywall	Intact	White	1.0	Negative	NA	0.0
85	1516 Restroom	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
86	1516 Restroom	1	E	Door	Wood	Intact	White	1.0	Negative	NA	0.0
87	1518 Garage	1	W	Wall	Concrete	Intact	White	1.0	Negative	NA	0.0
88	1518 Garage	1	W	Wall	Concrete	Intact	Red	1.0	Negative	NA	0.0
89	1518 Garage	1	E	Wall	Drywall	Intact	Red	1.0	Negative	NA	0.0
90	1518 Garage	1	W	Column	Wood	Intact	Red	1.0	Negative	NA	0.0
91	1518 Garage	1	W	Column	Wood	Intact	White	1.0	Negative	NA	0.0

Table A – XRF Readings Summary

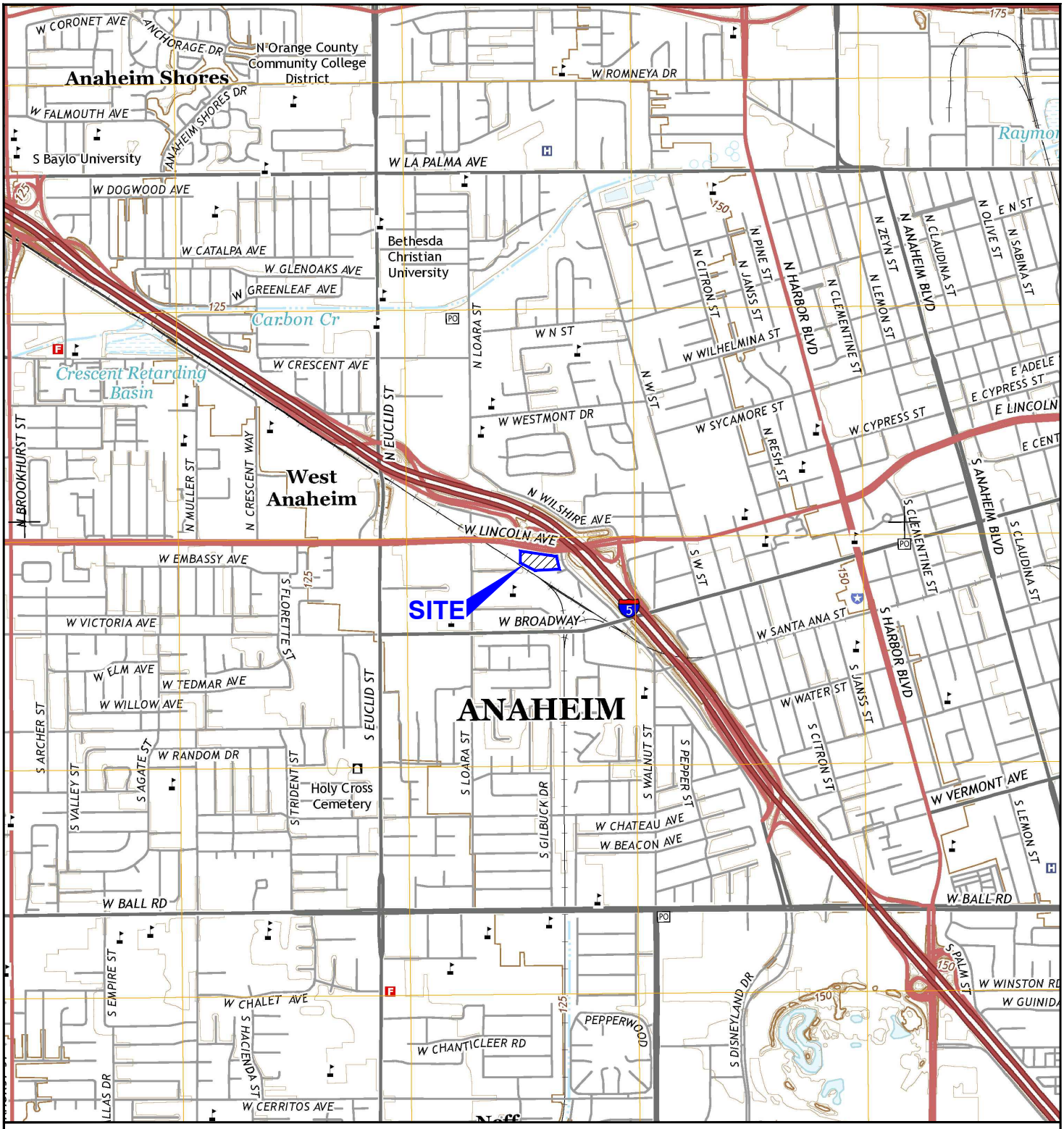
Reading No.	Room	Floor	Side	Component	Substrate	Condition	Color	Action Level (mg/cm^2)	Results	Approximate Quantity	Lead Reading (mg/cm^2)
92	1518 Garage	1	-	Floor paint	Concrete	Poor	Gray	1.0	Negative	NA	0.0
93	1518 Restroom	1	E	Wall	Drywall	Intact	White	1.0	Negative	NA	0.0
94	1518 Restroom	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
95	1518 Restroom	1	S	Sink	Porcelain	Intact	White	1.0	Negative	NA	0.0
96	1518 Restroom	1	S	Toilet	Porcelain	Intact	White	1.0	Negative	NA	0.0
97	1518 Restroom	1	E	Door	Wood	Intact	White	1.0	Negative	NA	0.0
98	1518 Garage	1	SW	Baseboard	Wood	Intact	White	1.0	Negative	NA	0.0
99	1518 Office	1	E	Wall	Drywall	Intact	Green	1.0	Negative	NA	0.0
100	1518 Office	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
101	1518 Office	1	N	Baseboard	Wood	Intact	White	1.0	Negative	NA	0.0
102	1518 Office	1	S	Window sill	Drywall	Intact	Gray	1.0	Negative	NA	0.0
103	1518 Office	1	S	Door	Wood	Intact	Brown	1.0	Negative	NA	0.0
104	1520 Office	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
105	1520 Office	1	S	Wall	Drywall	Intact	Brown	1.0	Negative	NA	0.0
106	1520 Office	1	E	Wall	Concrete	Intact	Tan	1.0	Negative	NA	0.0
107	1520 Office	1	W	Door frame	Wood	Intact	White	1.0	Negative	NA	0.0
108	1520 Office	1	-	Floor tile	Ceramic	Intact	White	1.0	Negative	NA	0.0
109	1520 Office	1	-	Floor tile	Ceramic	Intact	White	1.0	Negative	NA	0.0
110	1520 Storage	1	-	Ceiling	Drywall	Intact	White	1.0	Negative	NA	0.0
111	1520 Storage	1	W	Wall	Drywall	Intact	White	1.0	Negative	NA	0.0
112	1520 Storage	1	N	Wall frame	Wood	Intact	White	1.0	Negative	NA	0.0
113	1520 Storage	1	S	Door frame	Wood	Intact	White	1.0	Negative	NA	0.0
114	1520 Storage	1	-	Floor	Concrete	Intact	Red	1.0	Negative	NA	0.0
115	1520 Storage	1	-	Floor	Concrete	Intact	Red	1.0	Negative	NA	0.0
116	1520 Garage	1	W	Wall	Drywall	Fair	Blue	1.0	Negative	NA	0.0
117	1520 Garage	1	W	Wall	Concrete	Fair	Blue	1.0	Negative	NA	0.0
118	1520 Garage	1	W	Baseboard	Wood	Fair	Blue	1.0	Negative	NA	0.0
119	1520 Garage	1	E	Baseboard	Wood	Fair	Blue	1.0	Negative	NA	0.0
120	1520 Restroom	1	S	Wall	Drywood	Intact	Blue	1.0	Negative	NA	0.0
121	1520 Restroom	1	-	Ceiling	Drywood	Intact	Beige	1.0	Negative	NA	0.0
122	1520 Restroom	1	E	Door	Wood	Intact	Black	1.0	Negative	NA	0.0
123	1520 Restroom	1	E	Door frame	Wood	Intact	Blue	1.0	Negative	NA	0.0
124	1520 Restroom	1	N	Sink	Porcelain	Intact	White	1.0	Negative	NA	0.0
125	1520 Restroom	1	N	Toilet	Porcelain	Intact	White	1.0	Negative	NA	0.0
126	1520 Restroom	1	-	Floor tile	Ceramic	Intact	Tan	1.0	Negative	NA	0.0
127	1520 Restroom	1	-	Floor tile	Ceramic	Intact	Tan	1.0	Negative	NA	0.0
128	1520 Restroom	1	W	Slashguard	Plastic	Intact	Beige	1.0	Negative	NA	0.0
129	1520 Restroom	1	S	Slashguard	Plastic	Intact	Beige	1.0	Negative	NA	0.0
130	1520 Restroom	1	W	Baseboard	Ceramic	Intact	Tan	1.0	Negative	NA	0.0
131	1520 Restroom	1	E	Baseboard	Ceramic	Intact	Tan	1.0	Negative	NA	0.0
132	Exterior	1	N	Parking stripe	Asphalt	Poor	Blue	1.0	Negative	NA	0.0
133	**Exterior**	**1**	**N**	**Sewer grate**	**Metal**	**Poor**	**Gray**	**1.0**	**Positive**	**1 SF**	**0.05**
134	Exterior	1	N	Wall	Wood	Intact	Gray	1.0	Negative	NA	0.0
135	Exterior	1	W	Wall	Concrete	Intact	Beige	1.0	Negative	NA	0.0

Table A – XRF Readings Summary

Reading No.	Room	Floor	Side	Component	Substrate	Condition	Color	Action Level (mg/cm^2)	Results	Approximate Quantity	Lead Reading (mg/cm^2)
136	End			Standard Calibration Check 1.04 +/- 0.06 mg/cm^2				1.0	Positive	1.1	1.02
137				Standard Calibration Check 1.04 +/- 0.06 mg/cm^2				1.0	Positive	1.03	0.98
138				Standard Calibration Check 1.04 +/- 0.06 mg/cm^2				1.0	Positive	1.04	1.00

Notes:
HVAC - heating, ventilation and air conditioning
mg/cm^2 - micrograms per cubic centimeter
LF - linear feet
No. - number
NA - not applicable
SF - square feet
XRF - X-Ray fluorescence

FIGURES



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: USGS, 2015.

N

FEET

0 2,000 4,000

210248001_SL.dwg 08/09/2017 JP

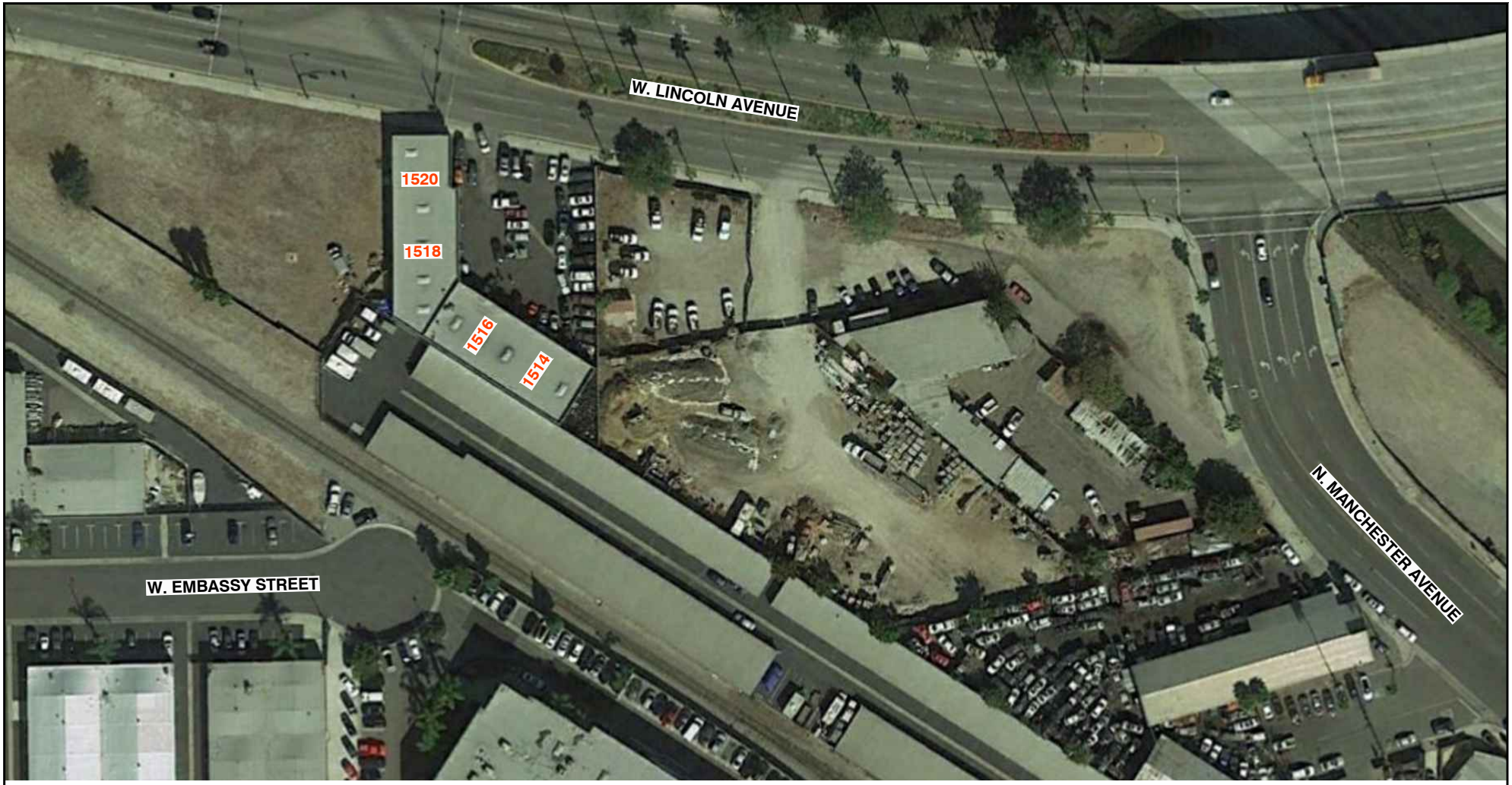
FIGURE 1

SITE LOCATION

LINCOLN AVENUE AND MANCHESTER AVENUE
ANAHEIM, CALIFORNIA

210248001 I 8/17

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants



LEGEND

1520 ADDRESS

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: GOOGLE EARTH, 2017.

N

FEET

0 100 200

FIGURE 2

SITE PLAN

LINCOLN AVENUE AND MANCHESTER AVENUE
ANAHEIM, CALIFORNIA

210248001 I 8/17

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

210248001_SP.dwg 08/09/2017 JP

APPENDIX A

Consultant Certificates

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Peter F Kelley
Name

Certification No. **15-5463**

Expires on **07/14/18**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Inspector/Assessor

Expiration Date

04/08/2018

Peter F. Kelley

ID #: 18995

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type: Sampling Technician

Expiration Date: 01/09/2018

26090

Pedro Rodriguez

ID #: 23793

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Pedro Rodriguez-Mendez
Name

Certification No. 13-5109

Expires on 01/15/18

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Name **Michael S Cushner**

Certification No. **11-4711**

Expires on **07/20/18**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	09/26/2017
Project Monitor	09/26/2017

Michael S. Cushner

ID #: 16953

APPENDIX B

California Department of Public Health Form 8552

State of California—Health and Human Services Agency

California Department of Public Health

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 7/28/17

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☑ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify) _____

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
1514-1520 West Lincoln Avenue	Anaheim	Orange	92801

Construction date (year) of structure	Type of structure	Children living in structure?
1970s	☐ Multi-unit building ☐ School or daycare ☐ Single family dwelling ☑ Other commercial	☐ Yes ☑ No ☐ Don't Know

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
Orange County Transportation Agency	714.560.6282

Address [number, street, apartment (if applicable)]	City	State	Zip Code
550 S. Main St.	Orange	CA	92868

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☑ No lead-based paint detected ☐ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other_____

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
Peter Kelley	949.689.8679

Address [number, street, apartment (if applicable)]	City	State	Zip Code
475 Goddard, Suite 200	Irvine	CA	92618

CDPH certification number	Signature	Date
18995	Peter Kelley	8/1/17

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

APPENDIX C

Analytical Results and Chain-of-Custody Records

EMLab P&K
A TestAmerica Company

Report for:

Mr. Mike Cushner
Ninyo & Moore - Irvine
475 Goddard
Suite 200
Irvine, CA 92618

Regarding: Project: 210248001; OCTA
EML ID: 1766890

Approved by:

Approved Signatory
Gregorio Delgado

Dates of Analysis:
Asbestos PLM: 08-02-2017

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K
6310 Rothway St., Houston, TX 77040
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - Irvine
C/O: Mr. Mike Cushner
Re: 210248001; OCTA

Date of Sampling: 07-28-2017
Date of Receipt: 07-28-2017
Date of Report: 08-02-2017

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted:	47
Total Samples Analyzed:	47
Total Samples with Layer Asbestos Content > 1%:	11

Location: 1, 1514-1520, Eastern - Roof Core Asphalt Sheeting

Lab ID-Version‡: 8259025-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 2, 1514-1520, Central - Roof Core Asphalt Sheeting

Lab ID-Version‡: 8259026-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 3, 1514-1520, Western (North) - Roof Core Asphalt Sheeting

Lab ID-Version‡: 8259027-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	20% Glass Fibers
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
6310 Rothway St., Houston, TX 77040
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - Irvine
C/O: Mr. Mike Cushner
Re: 210248001; OCTA

Date of Sampling: 07-28-2017
Date of Receipt: 07-28-2017
Date of Report: 08-02-2017

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 4, 1514-1520, Eastern (North) - Parapet Wall Asphalt Sheeting Lab ID-Version‡: 8259028-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar	ND
Gray Cementitious Material	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
6310 Rothway St., Houston, TX 77040
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - Irvine
C/O: Mr. Mike Cushner
Re: 210248001; OCTA

Date of Sampling: 07-28-2017
Date of Receipt: 07-28-2017
Date of Report: 08-02-2017

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 5, 1514-1520, Central - Parapet Wall Asphalt Sheeting Lab ID-Version‡: 8259029-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6, 1514-1520, Western (South) - Parapet Wall Asphalt Sheeting Lab ID-Version‡: 8259030-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 7, 1514-1520, Eastern (Central) - Penetration Mastic Lab ID-Version‡: 8259031-1

Sample Layers	Asbestos Content
Gray/Black Roofing Mastic with Pebbles	10% Chrysotile
Black Roofing Tar	ND
Sample Composite Homogeneity:	Poor

Location: 8, 1514-1520, Central (Central) - Penetration Mastic Lab ID-Version‡: 8259032-1

Sample Layers	Asbestos Content
Black Roofing Mastic	10% Chrysotile
Black Roofing Tar	ND
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
6310 Rothway St., Houston, TX 77040
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - Irvine
C/O: Mr. Mike Cushner
Re: 210248001; OCTA

Date of Sampling: 07-28-2017
Date of Receipt: 07-28-2017
Date of Report: 08-02-2017

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 9, 1514-1520, Western (Central) - Penetration Mastic Lab ID-Version‡: 8259033-1

Sample Layers	Asbestos Content
Gray/Black Roofing Mastic with Pebbles	10% Chrysotile
Black Roofing Tar	ND
Sample Composite Homogeneity:	Poor

Location: 10, 1514-1520, At Roof NE - Expansion Joint Lab ID-Version‡: 8259034-1

Sample Layers	Asbestos Content
Gray Expansion Joint with Yellow Foam	ND
Sample Composite Homogeneity:	Moderate

Location: 11, 1514-1520, At Perimeter NW - Expansion Joint Lab ID-Version‡: 8259035-1

Sample Layers	Asbestos Content
Gray Expansion Joint with Black Coating	ND
Sample Composite Homogeneity:	Moderate

Location: 12, 1514-1520, At Perimeter North - Expansion Joint Lab ID-Version‡: 8259036-1

Sample Layers	Asbestos Content
Gray Expansion Joint with Yellow Foam	ND
Sample Composite Homogeneity:	Moderate

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Client: Ninyo & Moore - Irvine
C/O: Mr. Mike Cushner
Re: 210248001; OCTA

Date of Sampling: 07-28-2017
Date of Receipt: 07-28-2017
Date of Report: 08-02-2017

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 13, 1514-1520, Central at HVAC Seams - Mastic Lab ID-Version‡: 8259037-1

Sample Layers	Asbestos Content
Gray/Black Roofing Mastic	10% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 14, 1514-1520, HVAC at Seams (Central) - Mastic Lab ID-Version‡: 8259038-1

Sample Layers	Asbestos Content
Gray/Black Roofing Mastic	10% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 15, 1514-1520, HVAC at Seams (Central) - Mastic Lab ID-Version‡: 8259039-1

Sample Layers	Asbestos Content
Gray/Black Roofing Mastic	10% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 16, 1514, Office Wall (N) - Drywall and Joint Compound Lab ID-Version‡: 8259040-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Texture with Multilayered Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 17, 1514, Garage Wall (W) - Drywall and Joint Compound Lab ID-Version‡: 8259041-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Foam with Blue Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 18, 1514, Restroom Ceiling (C) - Drywall and Joint Compound Lab ID-Version‡: 8259042-1

Sample Layers	Asbestos Content
Pink Drywall with Brown Paper	ND
White Joint Compound with Gray Paint	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 19, 1514, NE Floor at Office - 1x1 VFT Gray and Mastic Lab ID-Version‡: 8259043-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 20, 1514, Central Floor at Office - 1x1 VFT Gray and Mastic Lab ID-Version‡: 8259044-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Mastic with White Compound	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 21, 1514, NW Floor at Office - 1x1 VFT Gray and Mastic Lab ID-Version‡: 8259045-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 22, 1514, Restroom Floor (N) - VF Sheeting and Mastic Lab ID-Version‡: 8259046-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
White Mastic	ND
Composite Non-Asbestos Content:	5% Synthetic Fibers 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 23, 1514, Restroom Floor (Central) - VF Sheeting and Mastic Lab ID-Version‡: 8259047-1

Sample Layers	Asbestos Content
Tan Sheet Flooring with Fibrous Backing	ND
Cream Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose 2% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: 24, 1514, Office at (E) Ceiling - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259048-1

Sample Layers	Asbestos Content
White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 25, 1514, Office at (W) Ceiling - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259049-1

Sample Layers	Asbestos Content
White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 26, 1514, Office at (C) Ceiling - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259050-1

Sample Layers	Asbestos Content
White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 27, 1514, At Office Wall (NE) - Cove Base/Black/Mastic Lab ID-Version‡: 8259051-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Yellow Mastic	ND
Brown Mastic	ND
White Texture with Beige Paper	ND
Composite Non-Asbestos Content:	3% Cellulose
Sample Composite Homogeneity:	Poor

Location: 28, 1516, Office (E) Wall - Drywall and Joint Compound Lab ID-Version‡: 8259052-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound with Gray Paint	ND
White Joint Compound with White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 29, 1516, Restroom (Ceiling) - Drywall and Joint Compound Lab ID-Version‡: 8259053-1

Sample Layers	Asbestos Content
Brown Drywall with Brown/Green Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Texture with Light Gray Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 30, 1516, Garage Wall (W) - Drywall and Joint Compound Lab ID-Version‡: 8259054-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound with Off-White Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 31, 1516, Front Office (N) - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259055-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 32, 1516, Back Office (CTR) - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259056-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 33, 1516, Back Office (CTR) - Acoustic Ceiling (Popcorn)

Lab ID-Version‡: 8259057-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 34, 1518, Restroom Ceiling - Drywall and Joint Compound

Lab ID-Version‡: 8259058-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Texture with Gray Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 35, 1518, Back Office Wall (E) -Drywall and Joint Compound

Lab ID-Version‡: 8259059-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Texture with Multilayered Paint	ND
White Joint Compound with Cream Paint	ND
White Joint Compound with Red Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 36, 1518, Office Wall (W) -Drywall and Joint Compound

Lab ID-Version‡: 8259060-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound with Red Paint	ND
Composite Non-Asbestos Content:	10% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 37, 1518, Restroom NE Floor - VF Sheeting Lab ID-Version‡: 8259061-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	15% Chrysotile
Tan Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 38, 1518, Restroom NW Floor - VF Sheeting Lab ID-Version‡: 8259062-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	15% Chrysotile
Tan Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 39, 1518, Office Back at NE - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259063-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 40, 1518, Office Front (CTR) - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259064-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 41, 1518, Office Front (CTR) - Acoustic Ceiling (Popcorn) Lab ID-Version‡: 8259065-1

Sample Layers	Asbestos Content
Off-White Popcorn Ceiling	ND
Sample Composite Homogeneity:	Good

Location: 42, 1518, Office (Back) (E) Floor - 1x1 Gray VFT and Mastic Lab ID-Version‡: 8259066-1

Sample Layers	Asbestos Content
Dark Gray Floor Tile	ND
Tan Mastic	ND
Black Mastic	3% Chrysotile
Sample Composite Homogeneity:	Poor

Location: 43, 1518, Office (Back) (W) Floor - 1x1 Gray VFT and Mastic Lab ID-Version‡: 8259067-1

Sample Layers	Asbestos Content
Dark Gray Floor Tile	ND
Tan Mastic	ND
Black Mastic	3% Chrysotile
Sample Composite Homogeneity:	Poor

Location: 44, 1518, Office (Front) (CTR) Floor - 1x1 Gray VFT and Mastic Lab ID-Version‡: 8259068-1

Sample Layers	Asbestos Content
Dark Gray Floor Tile	ND
Tan Mastic	ND
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 45, 1518, Front Office E Wall - Drywall and Joint Compound Lab ID-Version‡: 8259069-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound with Blue Paint	ND
Composite Non-Asbestos Content:	10% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 46, 1518, Restroom Ceiling (CTR) - Drywall and Joint Compound Lab ID-Version‡: 8259070-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound with Blue Paint	ND
Composite Non-Asbestos Content:	10% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 47, 1518, Back Office E/Upper Wall - Drywall and Joint Compound Lab ID-Version‡: 8259071-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Texture with Multilayered Paint	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore 475 Goddard, Suite 200 Irvine, CA 92618 Tel: (949) 753-7070 Fax: (949) 753-7071	Project Name : OCTA Project No.: 210248001 Project Manager: Michael Cushnier mcushner@ninyoandmoore.com	Date Sampled: Sampled By: Pedro Rodriguez prodriguez@ninyoandmoore.com	Laboratory: EMLab Tel: Fax:

CHAIN OF CUSTODY INFORMATION: Analysis:PLM EPA 600/R-93/116 TAT: Standard/Normal

001766890

Relinquished By: (sign/print)	Company	Date	Time(24 hr.)	Received By: (sign/print)
Pedro Rodriguez	Ninyo & Moore	7/28/17		7/28/17 1047

LabID	Sample ID	Building Number	Sample Location	HA No.	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	1	1514-1520	Eastern	1	Roof Core Asphalt Sheets	1,200 SF	N	good
	2		Central					
	3		Western (north)					
	4		Eastern (North)	2	Parapet wall	200 SF	N	good
	5		Central					
	6		Western (south)					
	7		Eastern (central)	3	Penetration mastic	30 SF	N	good
	8		Central (central)					
	9		Western (central)					
	10		@ Roof NE	4	Expansion Joint	400 LF	N	good
	11		@ Perimeter NW					
	12		@ Perimeter North					
	13		Central @ HVAC Seams	5	Mastic	10 SF	N	good

ASBESTOS BULK SAMPLE DATA SHEET

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Irvine, CA 92618
Tel: (949) 753-7070
Fax: (949) 753-7071

Project Name : OCTA
Project No.: 210248001
Project Manager: Michael Cushner
mcushner@ninyoandmoore.com

Date Sampled:
Sampled By: Pedro Rodriguez
prodriguez@ninyoandmoore.com

Laboratory:
EMLab
Tel:
Fax:

001766890

CHAIN OF CUSTODY INFORMATION: Analysis:PLM EPA 600/R-93/116 TAT: Standard/Normal

Relinquished By: (sign/print)	Company	Date	Time(24 hr.)	Received By: (sign/print)	
/ Pedro Rodriguez	Ninyo & Moore	7/28/17			7/28/17
/					

LabID	Sample ID	Building Number	Sample Location	HA No.	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	14	1514-1520	HVAC @ Seams (central)	5	mastic	10SF	N	good
	15	↓	↓	↓	↓	↓	↓	↓
	16	1514	office wall (N)	6	Drywall + joint compound	1,000SF	Y	good
	17		Garage wall (W)	↓	↓	↓	↓	↓
	18		Restroom Cshy (C)	↓	↓	↓	↓	↓
	19		NE Floor @ office	7	1x1' VFT gray + mastic	200SF	N	good
	20		central	↓	↓	↓	↓	↓
	21		NW	↓	↓	↓	↓	↓
	22		Restroom Floor (N)	8	VF Sheeting + mastic	25SF	N	good
	23		↓ (CTR)	8	↓	↓	↓	↓
	24		Office @ (E) Cshy	9	Acoustic (Popcorn) Ceiling	200SF	Y	good
	25		(W)	↓	↓	↓	↓	↓
	26	↓	(C)	↓	↓	↓	↓	↓

ASBESTOS BULK SAMPLE DATA SHEET

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Tel: (949) 753-7070
Fax: (949) 753-7071

Project Name: OCTA
Project No.: 210248001
Project Manager: Michael Cushner
mcushner@ninyoandmoore.com

Date Sampled:
Sampled By: Pedro Rodriguez
prodriguez@ninyoandmoore.com

Laboratory: EMLab
Tel:
Fax:

CHAIN OF CUSTODY INFORMATION: Analysis: PLM EPA 600/R-93/116 TAT: Standard/Normal

001766890

Relinquished By: (sign/print)	Company	Date	Time(24 hr.)	Received By: (sign/print)
Pedro Rodriguez	Ninyo & Moore	7/28/17		7/28/17

LabID	Sample ID	Building Number	Sample Location	HA No.	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	27	1514	@ offices wall (NE)	10	Cove Base/Black/mastic	60LF	N	good
	28	1516	offices (E) wall	11	Drywall/joint compound	1,000 SF	N	good
	29		Restroom (ceiling)					
	30		Storage wall (N)					
	31		Front offices (N)	12	Acoustic Ceiling (Popcorn)	750 SF	Y	good
	32		Back offices (CTR)					
	33		(CTR)					
	34	1518	Restroom ceiling	13	Drywall/joint comp.	1,000 SF	Y	good
	35		Back offices wall (E)					
	36		Back offices wall (W)					
	37		Restroom NE Floor	14	V.F. Sheeting	25 SF	N	good
	38		NW					
	39		office Back @ NE	15	Acoustic Ceiling (Popcorn)	200 SF	Y	good

Ninyo & Moore

ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore 475 Goddard, Suite 200 Irvine, CA 92618 Tel: (949) 753-7070 Fax: (949) 753-7071	Project Name: OCTA Project No.: 210248001 Project Manager: Michael Cushner mcushner@ninyoandmoore.com	Date Sampled: Sampled By: Pedro Rodriguez prodriguez@ninyoandmoore.com	Laboratory: En Lab Tel: Fax:

CHAIN OF CUSTODY INFORMATION: Analysis: PLM EPA 600/R-93/116 TAT: Standard/Normal

001766890

Relinquished By: (sign/print)	Company	Date	Time(24 hr.)	Received By: (sign/print)
/ Pedro Rodriguez	Ninyo & Moore	7/28/17		7/28/17

LabID	Sample ID	Building Number	Sample Location	HA No.	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	40	1518	office front (CTR)	15	(popcorn) acoustic ceiling	200SF	Y	good
	41	↓	↓ ↓ (CTR)	↓	↓ ↓	↓	↓	↓
	42	1518	office (Back) (E) Floor	16	IX Grey VFT + mastic	200SF	N	good
	43	↓	↓ (W)	↓	↓ ↓	↓	↓	↓
	44	↓	↓ (Front) (CTR) ↓	↓	↓ ↓	↓	↓	↓
	45		Front office SE Wall	17	Drywall + Joint Cap.	1,000SF	Y	good
	46		Restroom ceiling (CTR)	↓	↓ ↓	↓	↓	↓
	47		Back office E/upper Wall	↓	↓ ↓	↓	↓	↓

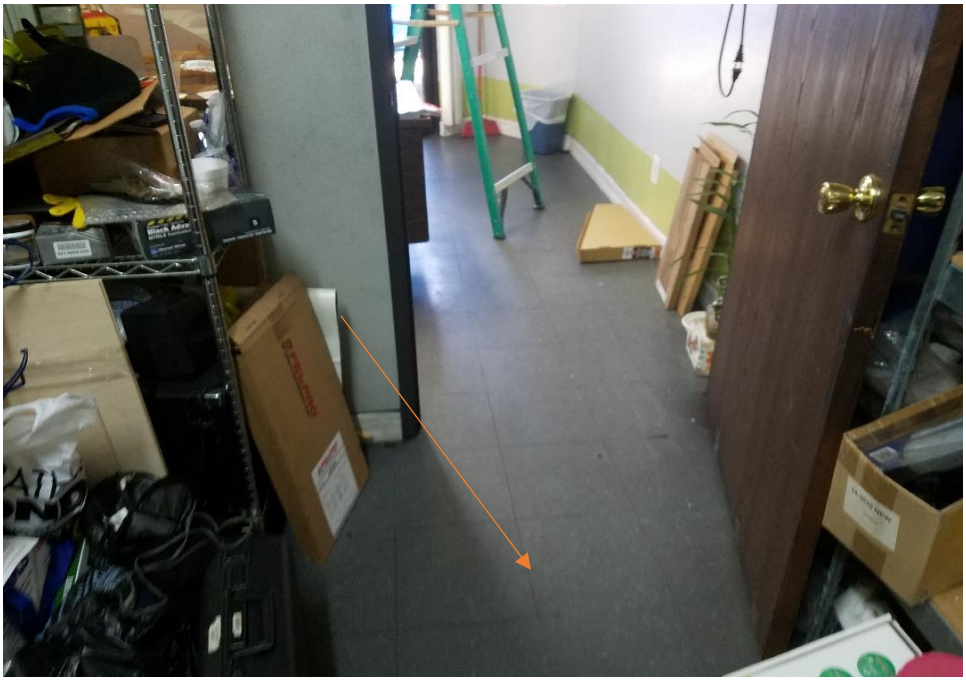
APPENDIX D

Photographs

Photograph 1: **General view of the site structure.**

Photograph 2: **View of the asbestos containing penetration mastic and HVAC seam mastic.**

Photograph 3: **View of the asbestos containing vinyl floor sheeting in Unit 1518 restroom.**



Photograph 4: **View of the asbestos containing 1’ x 1’ gray vinyl floor tile and mastic in Unit 1518.**

Photograph 5: **View of the lead-containing paint on bollards with paint in a poor condition.**

Photograph 6: **View of the lead-containing paint sewer grate in a poor condition.**

Photograph 7: **View of the lead-containing white ceramic wall tile and baseboard in Unit 1516 office.**

Photograph 8: **View of the lead-containing white wood crown molding in Unit 1516 office and break room.**

Photograph 9: **View of exterior rooftop HVAC units.**

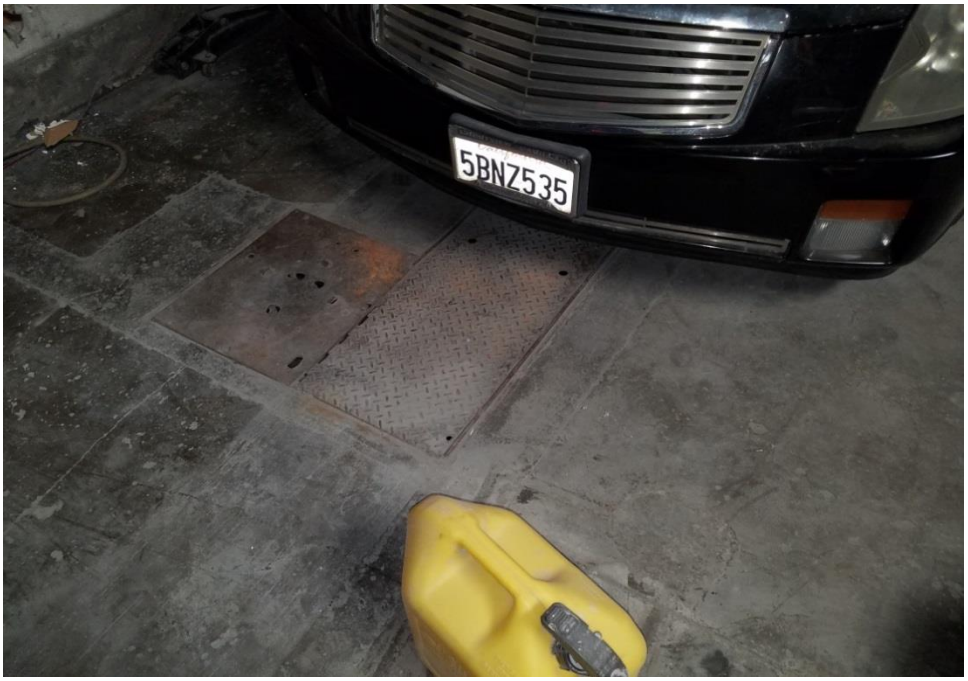
Photograph 10: **View of bird droppings at exterior roof access ladder.**

Photograph 11: **View of representative fluorescent lights and ballasts.**

Photograph 12: **View of representative mercury-containing thermostat switches.**

Photograph 13: **View of paint cans.**

Photograph 14: **View of oil staining located in Unit 1514.**



Photograph 15: **View of either oil pit or clarifier located in Unit 1514.**

APPENDIX E

Field Drawing

Ninyo & Moore

Project Name OCTA
Project Number 210248001
Calculated By PFK/PRM Date 7/28/17
Checked By MSC Date 8/17/17
Scale N/A ~~Date~~ 3 of 3

Lead

Legend

(#) - Positive XRF sample location
R/R - Restroom
- oil staining location
- oil pit or clarifier
37 - interior asbestos sample location

Ninyo & Moore

Geotechnical & Environmental Sciences Consultants

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