

BUILDING MATERIALS SURVEY REPORT

**MADSEN HOUSE BUILDING
640 VIRGINIA STREET
EL SEGUNDO, CALIFORNIA 90245**

Client:

**EL SEGUNDO UNIFIED SCHOOL DISTRICT
641 SHELDON STREET
EL SEGUNDO, CALIFORNIA 90245**

Consultant:

**B2 ENVIRONMENTAL, INC.
502 WEST ROUTE 66, SUITE 22
GLEN DORA, CALIFORNIA 92410**

B2E Project Number: 40086.0001

February 19, 2018

Prepared by:



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TABLE OF CONTENTS

1.0	SCOPE OF SERVICES	1
2.0	EXECUTIVE SUMMARY	1
3.0	ASBESTOS	4
3.1	Asbestos Inspection Report	4
3.1.1	Homogeneous Areas	4
3.1.2	Sampling Strategy	4
3.1.3	Laboratory Analytical Results	5
4.0	LEAD-BASED PAINT	8
4.1	Sampling Methods and Laboratory Analytical Results	8
5.0	HAZARDOUS AND UNIVERSAL WASTE.....	11
6.0	ASSUMPTIONS AND LIMITATIONS	13
7.0	DISCLAIMER AND RECOMMENDATIONS.....	14
8.0	DEFINITIONS AND REFERENCES	15

APPENDICES

ASBESTOS LABORATORY ANALYTICAL REPORT	APPENDIX A
LEAD LABORATORY ANALYTICAL REPORT	APPENDIX B
SAMPLE LOCATION DRAWING	APPENDIX C
QUALIFICATIONS.....	APPENDIX D



1.0 SCOPE OF SERVICES

B2 Environmental, Inc. (B2E) performed a hazardous materials inspection at the Madsen House Building located at 640 Virginia Street in El Segundo, California to identify the types of waste generated on site during demolition and/or renovation of the building. These wastes consist of the following: 1) inert or nonhazardous waste; 2) hazardous waste as regulated by the United States Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA), (40 CFR, Parts 260 to 279); and 3) items that contain hazardous components that may be regulated by some states. The survey included: sampling for asbestos-containing materials (ACM), lead-based painted (LBP) building materials, and a visual assessment to identify hazardous waste (listed and characteristic) and universal waste.

The purpose of the survey was to locate and identify interior and exterior suspect building materials and components for the presence of asbestos, LBP, and universal waste. The survey included a visual inspection of building materials comprising the property; the acquisition and analysis of bulk samples from suspect and homogeneous building materials for detectable levels of asbestos; X-Ray Fluorescence (XRF) analysis of suspect and homogeneous painted building components for lead content; and a visual inspection of interior and exterior suspect building materials and components for universal waste.

On February 16th, 2018 B2E inspector Nathan Guericke inspected the site for ACM and universal waste. B2E inspector Todd Hill inspected the site for LBP. Mr. Guericke has completed the requisite training for asbestos accreditation as an inspector at a state approved training provider under TSCA Title II. Mr. Hill has completed the requisite training for lead accreditation as an inspector/risk assessor at a state approved training provider. Mr. Guericke's State of California Certified Site Surveillance Technician (CSST) number is 17-6097. Mr. Hill's Department of Public Health (CDPH) inspector/assessor number is 21265.

2.0 EXECUTIVE SUMMARY

The following table is a summary of all ACM, LBP, and suspect universal waste:

M A T E R I A L	L O C A T I O N	C O N T A M I N A N T	Q U A N T I T Y
Roof mastic (black)	Roof penetrations	Asbestos	50 sf
Transite (gray)	Roof flue pipes	Asbestos	10 lf
White paint on wood exterior wall	Girls restroom (C)	Lead-Based Paint	Throughout
White paint on wood exterior wall	Girls restroom (C)	Lead-Based Paint	Throughout
White paint on wood exterior wall	Girls restroom (C)	Lead-Based Paint	Throughout
Blue paint on wood bottom plate	Restroom (C)	Lead-Based Paint	Throughout



M A T E R I A L	L O C A T I O N	C O N T A M I N A N T	Q U A N T I T Y
White paint on wood bottom plate	Restroom (C)	Lead-Based Paint	Throughout
White paint on wood exterior wall	Restroom (C)	Lead-Based Paint	Throughout
Brown paint on wood bottom plate	Storage Room 1 (D)	Lead-Based Paint	Throughout
White paint on wood exterior wall	Storage Room 1 (C)	Lead-Based Paint	Throughout
White paint on wood exterior wall	Storage Room 1 (D)	Lead-Based Paint	Throughout
White paint on wall	Storage Room 2 (A)	Lead-Based Paint	Throughout
White paint on wall	Storage Room 2 (A)	Lead-Based Paint	Throughout
White paint on wall	Storage Room 2 (B)	Lead-Based Paint	Throughout
White paint on wall	Storage Room 2 (D)	Lead-Based Paint	Throughout
Blue paint on wood drawer	Storage Room 2 (D)	Lead-Based Paint	Throughout
Red paint on wood drawer	Storage Room 2 (D)	Lead-Based Paint	Throughout
Green paint on wood drawer	Storage Room 2 (D)	Lead-Based Paint	Throughout
Yellow paint on wood drawer	Storage Room 2 (D)	Lead-Based Paint	Throughout
White paint on wood soffit	Exterior (A)	Lead-Based Paint	Throughout
White paint on wood soffit	Exterior (A)	Lead-Based Paint	Throughout
White paint on wood small soffit	Exterior (C)	Lead-Based Paint	Throughout
Potential mercury containing fluorescent bulbs/tubes	Throughout the areas inspected	Universal Waste	26 CT
Potential PCB containing light fixture ballasts	Throughout the areas inspected	Universal Waste	13 CT
Universal waste in exit signs	Throughout the areas inspected	Universal Waste	3 CT

M A T E R I A L	L O C A T I O N	C O N T A M I N A N T	Q U A N T I T Y
Potential Freon-containing Halon fire extinguishers	Throughout the areas inspected	Universal Waste	1 CT
Potential Freon-containing Halon fire systems	Throughout the areas inspected	Universal Waste	7 CT

The assessment site is an approximately 2,090 square foot school building. The building consists of a 1 story structure constructed on a concrete pad with wood walls extending up to the roof level. Interior walls consist of framing covered with drywall. Interior flooring consists of floor tile. Roof framing members are wood supporting a wood deck covered with roofing felt, asphalt shingles, and mastic.

All accessible interior and exterior features of the onsite structure were visually inspected. Building materials not identified in this report may be present within hidden and/or concealed areas.

3.0 ASBESTOS

B2E provided a representative asbestos survey at the identified building in general accordance with the referenced agreement and as outlined below:

1. Review any existing asbestos reports relating to the site, if available.
2. Survey the site building(s).
3. Identify accessible suspect asbestos-containing materials (ACM) in general accordance with the USEPA NESHAP, (40 CFR, Part 61).
4. Collect and analyze bulk samples of suspect materials.
5. Quantify any asbestos containing materials and record location.

3.1 Asbestos Inspection Report

B2E visually inspected the site for the presence of suspect ACM. Materials that were hidden, not accessible (i.e. boilers, areas of safety concern), or when sampled would damage the integrity of the structure or component (i.e. electrical wiring), were not sampled as part of this inspection. **B2E did not sample materials that were visibly identified as non-asbestos (fibrous glass, foam rubber, wood, etc.).** The asbestos inspection consisted of three steps: 1) a visual inspection of the site(s); 2) a determination of homogeneous areas with suspect surfacing, thermal system insulation, and miscellaneous materials; and 3) sampling accessible, friable and non-friable, suspect materials.

Friable materials are materials that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable materials are materials that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Non-friable materials, when subjected to sanding, grinding, cutting or abrading, may become friable.

3.1.1 Homogeneous Areas

Prior to sampling, B2E identified homogeneous areas to facilitate a sampling strategy. A homogeneous sampling area is described as one or more areas with suspect material similar in appearance and texture that have the same installation date and function. Homogeneous areas are further classified as Surfacing Materials, Thermals System Insulation (TSI), and/or Miscellaneous Materials with notations regarding their friability and condition. The actual number of samples collected from each homogeneous sampling area varies, dependent upon material type and the professional judgment of the inspector.

3.1.2 Sampling Strategy

B2E's sampling strategy incorporated AHERA requirements, quantities of suspect material, and the inspector's judgment to aid in the identification of suspect ACM. B2E's sampling strategy was to identify and collect accessible suspect ACM in general accordance with the USEPA NESHAP, (40 CFR, Part 61). If the analytical results indicated that all the samples collected per homogeneous area did not contain asbestos, then the homogeneous area (material) was considered non-asbestos containing. However, if the analytical results of one or more of the samples collected per homogeneous area indicated that asbestos was present in quantities greater than one percent asbestos, all of the homogeneous area (material) was treated as an asbestos-containing material regardless of other analytical results. If the analytical results of one or more of the samples collected per homogeneous area indicated that asbestos was present in quantities less than or equal to one percent asbestos, all of the homogeneous area (material) was treated as an asbestos-containing construction material regardless of other analytical results. Actual collection of a bulk asbestos sample involves physically removing approximately



one square inch (1 in²) of the material and placing it in an airtight sample container marked with a unique identification number.

3.1.3 Laboratory Analytical Results

LA Testing, Inc., located at 5431 Industrial Drive in Huntington Beach, California, ((714) 828-4999), NVLAP #101384-0, analyzed the bulk samples using polarized light microscopy (PLM). PLM analysis utilizes dispersion staining techniques (ref.: USEPA Method 600/R-93/116) to determine the asbestos content of the bulk samples collected at the site.

The following table is a summary of the suspect ACM that have been determined, through laboratory analysis and/or assumed, to contain asbestos:

MADSEN HOUSE							
ASBESTOS-CONTAINING MATERIALS							
MATERIAL	LOCATION	SAMPLE NUMBER	NESHAP CATEGORY	CAL/OSHA CLASS	FRIABLE ⁽¹⁾	QUANTITY ⁽²⁾	ASBESTOS CONTENT
Roof mastic (black)	Roof penetrations	53,54,55	I	II	No	50 sf	2% Chrysotile
Transite (gray)	Roof flue pipes	56	II	II	No	10 lf	8% Chrysotile 4% Crocidolite
sf = Square Feet, ND = Non Detect, NA = Not Applicable, lf = Linear Feet, mf = Mechanical Fittings, SF = sheet flooring							
⁽¹⁾ Friability is based only on conditions that were observed during B2E's inspection of the site.							
⁽²⁾ Actual quantities should be field verified.							

Any material that contains greater than one percent (1.0%) asbestos is considered an ACM and is categorized as either friable ACM or non-friable ACM. Friable ACM is categorized as regulated asbestos-containing material (RACM). There are two categories of non-friable materials: Category I non-friable ACM and Category II non-friable ACM.

- Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one tenth of one percent asbestos.
- Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than one tenth of one percent asbestos.

Cal/OSHA assigns classes to materials in order to differentiate between the requirements of different removal, operations and maintenance operations, and custodial activities performed on or around ACM.

- Class I: activities involving the removal of TSI and surfacing ACM.
- Class II: activities involving the removal of ACM which is not TSI or surfacing material.
- Class III: repair and maintenance operations, in which ACM (including TSI, surfacing, and miscellaneous materials) is likely to be disturbed.
- Class IV: maintenance and custodial activities during which employees contact, but do not disturb ACM and activities to clean up dust, waste, and debris resulting from Class I, II,



and III activities.

Any material that contains greater than one tenth of one percent (0.1%) but less than or equal to one percent (1.0%) asbestos ($0.1\% < x \leq 1.0\%$) is considered an asbestos containing construction material (ACCM) and is categorized as friable ACCM or non-friable ACCM.

The following table is a summary of the suspect ACM that have been determined, through laboratory analysis, to not contain asbestos:

MADSEN HOUSE NON - ASBESTOS CONTAINING BUILDING MATERIALS		
MATERIAL	LOCATION	SAMPLE NUMBER
12"x12" floor tile (white) and glue (yellow)	Throughout the building	1,2,3
Vinyl sheet flooring (red) and mastic (black)	Throughout the building (underneath samples 1,2,3)	4,5,6
12"x12" floor tile (cream) and glue (white)	Boys restroom, girls restroom (sandwiched between samples 1,2,3 and 4,5,6)	7,8,9
12"x12" floor tile (blue) and glue (yellow)	Restroom (above samples 1,2,3)	10,11,12
4" basecove (blue) and adhesive (white)	Boys restroom	13,14,15
4" basecove (white) and glue (yellow)	Classroom 1	16,17,18
Basecove adhesive (brown) (no basecove present)	Classroom 2, restroom	19,20,21
Textured wall material (orange-peel)	Classroom 1, classroom 2, restroom, boys restroom (east wall only)	22,23,24,25,26
Textured ceiling material (popcorn)	Classroom 2, restroom (north half)	27,28,29
2'x4' ceiling tile (fissured/pinhole)	Classroom 1, boys restroom, girls restroom	30,31,32
Drywall and joint compound (walls)	Throughout the building	33,34,35
Drywall and joint compound (ceilings)	Classroom 2, restroom, storage room 1, storage room 2, water heater room	36,37,38
Caulk (white)	Boys restroom, girls restroom, restroom	39,40,41
Stucco (tan)	Exterior walls throughout	42,43,44,45,46
Roof felt (black)	Roof (top layer)	47,48,49
Asphalt shingles (red/black)	Roof (bottom layer)	50,51,52

Details of sample analysis are included in Appendix A, which contains a listing of all analyzed samples, sample locations, and analytical results relating to the site. Asbestos analytical results are reported as percentage and type. Other common non-asbestos components may also be noted in the analytical report.

State and local requirements may differ from NESHAP requirements. Consult with appropriate agencies prior to commencing abatement and/or demolition activities.



4.0 LEAD-BASED PAINT

On February 16th, 2018, B2E performed a lead-based paint (LBP) survey at the Madsen House Building located at 640 Virginia Street in El Segundo, California. B2E performed the survey utilizing methods and procedures set for by the United States Housing and Urban Development (HUD) Chapter 7 of the Guidelines for the evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Revision).

4.1 Sampling Methods and Laboratory Analytical Results

B2E performed testing using X-Ray Fluorescence (XRF) *in situ* analysis of painted building components utilizing a Niton 300 XLP Series manufactured by Niton Corporation Inc. for this assessment.

The lead survey was accomplished by entering each room equivalent. A room equivalent is an identifiable part of a building, such as a room, hallway, staircase, foyer, or exterior. Sides in a room indicate sample locations; sides are determined in the following order. Side A is always the wall where the primary entry door is located; once side A has been determined, proceed in a clockwise direction for sides B, C, and D.

Visible color may not be an accurate predictor of painting history and is not included in the definition of a testing location. Each reading's locations, physical conditions, accessibility, activity, and damage of suspect lead paint was also assessed and documented.

For reporting purposes, space designations were assigned to each functional space within the facilities using the pre-existing designation on the door or as indicated on the floor plans. Where neither was available, the space was labeled by the inspector and so indicated in the report. The following procedures were performed.

- A visual assessment to identify the location and type of building components suspected of containing lead paint within the scope of work.
- Obtain representative XRF readings from all painted building components within the scope of work.
- Present all survey results in a written report including recommendation, locations, quantities, and laboratory results.

All findings, recommendations, and XRF readings data presented in this report are based on the information (assessment and readings) obtained by our inspector during the survey.

The following table presents the building components identified as being coated with lead-based paint:

MADSEN HOUSE LEAD-BASED PAINT MATERIALS			
MATERIAL	LOCATION	SAMPLE NUMBER	LEAD CONTENT*
White paint on wood exterior wall	Girls restroom (C)	10	6.90
White paint on wood exterior wall	Girls restroom (C)	11	6.10
White paint on wood exterior wall	Girls restroom (C)	12	5.50



MADSEN HOUSE			
LEAD-BASED PAINT MATERIALS			
MATERIAL	LOCATION	SAMPLE NUMBER	LEAD CONTENT*
Blue paint on wood bottom plate	Restroom (C)	61	5.50
White paint on wood bottom plate	Restroom (C)	62	4.90
White paint on wood exterior wall	Restroom (C)	63	2.10
Brown paint on wood bottom plate	Storage Room 1 (D)	72	2.80
White paint on wood exterior wall	Storage Room 1 (C)	73	2.80
White paint on wood exterior wall	Storage Room 1 (D)	74	4.70
White paint on wall	Storage Room 2 (A)	75	4.30
White paint on wall	Storage Room 2 (A)	76	1.90
White paint on wall	Storage Room 2 (B)	77	2.20
White paint on wall	Storage Room 2 (D)	79	3.30
Blue paint on wood drawer	Storage Room 2 (D)	86	1.20
Red paint on wood drawer	Storage Room 2 (D)	87	1.20
Green paint on wood drawer	Storage Room 2 (D)	88	1.30
Yellow paint on wood drawer	Storage Room 2 (D)	89	1.20
White paint on wood soffit	Exterior (A)	101	9.30
White paint on wood soffit	Exterior (A)	102	8.10
White paint on wood small soffit	Exterior (C)	112	8.50
*milligrams per square centimeter (mg/cm ²)			

Details of sample analysis are included in Appendix B, which contains a listing of analyzed samples, sample locations, and analytical results for the building components sampled. Results are reported in mg/cm².

Any paint or surface coating that contains ≥ 1.0 milligrams per square centimeter (mg/cm²) is considered lead-containing and must be managed during demolition and/or renovation. The paints listed above do not represent all painted building components at the site. The paints, tested and untested, that do not contain lead in concentrations ≥ 1.0 mg/cm², may contain detectable amounts of lead. It is B2E's opinion that paint films and/or surface coatings containing any detectable concentration of lead should be viewed as a potential source of lead exposure and health hazard.

All construction and renovation debris from commercial and industrial sites, and lead-based paint waste from removal or remediation activities must be managed and disposed of as a



Resource Conservation and Recovery Act (RCRA) hazardous waste if they meet the toxicity characteristic for lead under RCRA.

Building materials containing any detectable amounts of lead are regulated by OSHA and Cal/OSHA, and applicable work practices and prohibitions must be followed accordingly (29 CFR, 1926.62 - Lead in Construction).

State and local requirements may differ from RCRA requirements. Consult with appropriate agencies prior to commencing renovation and/or demolition activities.



5.0 HAZARDOUS AND UNIVERSAL WASTE

B2E performed a visual assessment to identify potential hazardous waste, universal waste, and ozone-depleting substances present at the site. Devices with potential hazardous materials were visually identified during the survey and their quantities were estimated and recorded. No attempt was made to disassemble all devices or sample suspect materials within the devices. For example, fluorescent light fixtures were assumed to contain universal waste lamps and ballasts were assumed to contain PCB oil or electronic waste. Removal and disassembly of each unit may determine product specific information that proves otherwise. Appliances such as televisions, movable refrigerators, microwaves, etc. and telecommunications equipment such as telephones, intercoms, and internet were not surveyed because they are typically fixed assets and likely to be reused.

B2E visually determined the presence of the following:

- **Polychlorinated biphenyls (PCB's)** - potentially present in light ballasts, transformers and capacitors, hydraulic and motor oils, caulk, electrical devices, appliances, etc.

PCB-containing waste must be managed and disposed of in accordance with 40 CFR, Part 761 - Polychlorinated biphenyls (PCB's).

- **Mercury** - potentially present in lamps (fluorescence, mercury vapor, metal halide, high pressure sodium), thermostat probes (appliances), thermostats, smoke detectors, emergency lighting systems, security systems, alarms, sprinkler systems, barometers, exit signs, etc.

Mercury-containing wastes must be managed and disposed of as RCRA hazardous waste if they meet the toxicity characteristic for mercury under RCRA, except for the following:

1. mercury-containing batteries, thermostats, and lamps may be managed as universal waste, provided the state does not regulate the waste more stringently.
- **Universal waste** - 40 CFR, Part 273 - Standards for Universal Waste Management is designed to reduce regulatory management requirements to foster the environmentally sound recycling or disposal of certain specified categories of commonly generated hazardous wastes and applies to the following:
 1. spent batteries;
 2. pesticides;
 3. mercury-containing thermostats; and
 4. mercury-containing lamps.

Universal wastes must be handled, managed, transported and disposed of in accordance with 40 CFR, Part 273 - Standards for Universal Waste Management.

State and local requirements may differ from 40 CFR, Part 273 - Standards for Universal Waste Management. Consult with appropriate agencies prior to commencing renovation and/or demolition activities.

- **Ozone-depleting substances** - 40 CFR, Part 82 - Protection of Stratospheric Ozone, Subpart F - Recycling and Emissions Reduction requires service practices that maximize recovery and recycling of ozone-depleting substances (both



chlorofluorocarbons [CFC's] and hydrochlorofluorocarbons [HCFC's] and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment.

Refrigeration and air-conditioning equipment that is dismantled on-site before disposal (retail food refrigeration, central residential air conditioning, chillers, and industrial process refrigeration) or enters the waste stream with the charge intact (household refrigerators and freezers, and room air conditioners) must have the refrigerant recovered in accordance with 40 CFR, Part 82, Subpart F.

The following table details the findings of the visual assessment:

<u>MADSEN HOUSE</u> HAZARDOUS WASTE, UNIVERSAL WASTE, OZONE-DEPLETING SUBSTANCES		
MATERIAL	LOCATION	QUANTITY⁽¹⁾
Potential mercury containing fluorescent bulbs/tubes	Throughout the areas inspected	26 CT
Potential PCB containing light fixture ballasts	Throughout the areas inspected	13 CT
Universal waste in exit signs	Throughout the areas inspected	3 CT
Potential Freon-containing Halon fire extinguishers	Throughout the areas inspected	1 CT
Potential Freon-containing Halon fire systems	Throughout the areas inspected	7 CT
NI = None Identified, NA = Not Applicable, ct = Count ⁽¹⁾ Actual quantities should be field verified.		

6.0 ASSUMPTIONS AND LIMITATIONS

The results, findings, conclusions, and recommendations expressed in this report are based solely on conditions noted during the February 16th, 2018 B2E assessment of the site. Qualifications for the field personnel and analytical laboratory reports are provided in the appendices. As the user of this report, the Client and respective contractors are advised of the following limitations on the information presented in this report.

1. The data and findings presented in this report are valid as of the date when the survey was performed. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Work presented.
3. Subsurface investigations were not included in B2E's assessment of the site. Subsurface investigations may uncover the presence of infrastructure utilities that may contain hazardous materials. Safety can care should be used when uncovering subsurface infrastructure utilities in order to not disturb any potential hazardous materials.
4. Unless otherwise stated in the report, because of the limitations stated above, the findings observations, and conclusions expressed by B2E in this report are not, and should not be, considered an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation.
5. No warranty or guarantee, express or implied, is made with respect to the data or the reported findings, observations, and conclusions, all of which, however, accurately reflect site conditions in existence at the time of investigation.
6. B2E reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, state or local governmental agencies. Any use constitutes acceptance of the limits of B2E's liability. B2E's liability extends only to those parties contracted to complete this project and not to any other parties who may obtain the Report. Legal issues raised by the report should be reviewed by appropriate legal counsel.



7.0 DISCLAIMER AND RECOMMENDATIONS

Current federal and state regulations require only workers and/or contractors who have been properly trained in the correct handling of asbestos building materials or lead-containing building components can conduct any repair, renovation, and/or demolition activities. All environmental work should proceed under the guidance or direction of an independent State Certified Consultant.

Asbestos-Containing Building Materials – Current federal and state regulations (SCAQMD Rule 1403) require if during any renovation or demolition activities during which asbestos-containing building materials will be disturbed, then only contractors who have been properly trained in the correct handling of asbestos-containing building materials conduct any repair, removal, and/or demolition activities. A SCAQMD notification will have to be submitted and approved for any removal of 100 square feet or 160 linear feet of asbestos-containing building materials. If any asbestos-containing building materials becomes damaged or disturbed during any constructions activities, then a SCAQMD Procedure-5 work plan should be written and approved prior to any asbestos removal activity. All environmental work should proceed under the guidance or direction of an independent State Certified Consultant.

The recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Any opinions or recommendations presented herein apply to site conditions existing at the time of our investigation and cannot necessarily apply to site changes, of which this office is not aware of and/or has not had the opportunity to evaluate.

Lead Containing Building Components – Cal/OSHA requires that all workers be properly protected when working with any painted building component containing any level of lead in accordance with Title 8 CCR Section 1532.1. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.



8.0 DEFINITIONS AND REFERENCES

USEPA – United States Environmental Protection Agency

RCRA – Resource Conservation and Recovery Act

ACM – Asbestos-containing material

ACCM – Asbestos-containing construction material

LBP – Lead-based paint

PCB – Polychlorinated biphenyl

XRF – X-Ray Fluorescence

NESHAP – National Emission Standards for Hazardous Air Pollutants

ASHERA – Asbestos Hazard Emergency Response Act

PLM – Polarized Light Microscopy

CAC – Certified Asbestos Consultant

CSST – Certified Site Surveillance Technician

NVLAP – National Voluntary Laboratory Accreditation Program

NIST – National Institute of Standards and Technology

Cal/OSHA – California Occupational Safety and Health Administration

HUD – United States Housing and Urban Development

SCAQMD – South Coast Air Quality Management District

References:

- USEPA, *Resource Conservation and Recovery Act, 40 CFR Parts 260 to 279*
- USEPA, *National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M*
- USEPA, *ASHERA Asbestos-Containing Materials in Schools Rule, 40 CFR 763 Subpart E*
- USEPA, *Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116*
- SCAQMD, *Asbestos Emissions From Demolition/Renovation Activities, Rule 1403*
- HUD, *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7: Lead-Based Paint Inspection, 1997 Revision*
- OSHA, *Safety and Health Regulations for Construction, Lead, 29 CFR 1926.62*

APPENDIX A

ASBESTOS LABORATORY ANALYTICAL REPORT



LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / gardengrovelab@lateesting.com

LA Testing Order: 331804300

Customer ID: BENV85C

Customer PO:

Project ID:

Attention: Nathan Guericke

B2 Environmental

502 W. Route 66

Suite 22

Glendora, CA 91740

Project: 40086.0001 / El Segundo USD Madsen House

Phone: (626) 507-7161

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Received Date: 02/16/2018 11:10 AM

Analysis Date: 02/16/2018 - 02/20/2018

Collected Date: 02/16/2018

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Floor Tile 331804300-0001	RR - 12"x12" FT (white) + glue (yellow)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1-Glue 331804300-0001A	RR - 12"x12" FT (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2-Floor Tile 331804300-0002	Class 1 - 12"x12" FT (white) + glue (yellow)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2-Glue 331804300-0002A	Class 1 - 12"x12" FT (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3-Floor Tile 331804300-0003	BRR - 12"x12" FT (white) + glue (yellow)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3-Glue 331804300-0003A	BRR - 12"x12" FT (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4-Vinyl Sheet Flooring 331804300-0004	RR - Vinyl sheet flooring (red) + mastic (black)	Red/Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
4-Mastic 331804300-0004A	RR - Vinyl sheet flooring (red) + mastic (black)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5-Vinyl Sheet Flooring 331804300-0005	Class 1 - Vinyl sheet flooring (red) + mastic (black)	Red/Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
5-Mastic 331804300-0005A	Class 1 - Vinyl sheet flooring (red) + mastic (black)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6-Vinyl Sheet Flooring 331804300-0006	BRR - Vinyl sheet flooring (red) + mastic (black)	Red/Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
6-Mastic 331804300-0006A	BRR - Vinyl sheet flooring (red) + mastic (black)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Floor Tile 331804300-0007	BRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Glue 331804300-0007A	BRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8-Floor Tile 331804300-0008	BRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8-Glue 331804300-0008A	BRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Report amended: 02/20/2018 16:23:10 Replaces initial report from: 02/17/2018 16:51:21 Reason Code: Data Entry-Results Changed



LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / gardengrovelab@lateesting.com

LA Testing Order: 331804300

Customer ID: BENV85C

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos % Type
			% Fibrous	% Non-Fibrous	
9-Floor Tile 331804300-0009	GRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9-Glue 331804300-0009A	GRR - 12"x12" FT (cream) + glue (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-Floor Tile 331804300-0010	RR - 12"x12" FT (blue) + glue (yellow)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-Glue 331804300-0010A	RR - 12"x12" FT (blue) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11-Floor Tile 331804300-0011	RR - 12"x12" FT (blue) + glue (yellow)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11-Glue 331804300-0011A	RR - 12"x12" FT (blue) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Floor Tile 331804300-0012	RR - 12"x12" FT (blue) + glue (yellow)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Glue 331804300-0012A	RR - 12"x12" FT (blue) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13-Base Cove 331804300-0013	BRR - 4" basecove (blue) + adhesive (white)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13-Adhesive 331804300-0013A	BRR - 4" basecove (blue) + adhesive (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14-Base Cove 331804300-0014	BRR - 4" basecove (blue) + adhesive (white)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14-Adhesive 331804300-0014A	BRR - 4" basecove (blue) + adhesive (white)	Yellow/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
15-Base Cove 331804300-0015	BRR - 4" basecove (blue) + adhesive (white)	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15-Adhesive 331804300-0015A	BRR - 4" basecove (blue) + adhesive (white)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16-Base Cove 331804300-0016	Class 1 - 4" basecove (white) + glue (yellow)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16-Adhesive 331804300-0016A	Class 1 - 4" basecove (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17-Base Cove 331804300-0017	Class 1 - 4" basecove (white) + glue (yellow)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17-Adhesive 331804300-0017A	Class 1 - 4" basecove (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18-Base Cove 331804300-0018	Class 1 - 4" basecove (white) + glue (yellow)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331804300

Customer ID: BENV85C

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
18-Adhesive 331804300-0018A	Class 1 - 4" basecove (white) + glue (yellow)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19 331804300-0019	Class 2 - Basecove adhesive (brown)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20 331804300-0020	Class 2 - Basecove adhesive (brown)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21 331804300-0021	RR - Basecove adhesive (brown)	Brown/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
22 331804300-0022	RR - Textured wall material (orange peel)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23 331804300-0023	Class 1 - Textured wall material (orange peel)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24 331804300-0024	Class 2 - Textured wall material (orange peel)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25 331804300-0025	Class 2 - Textured wall material (orange peel)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26 331804300-0026	BRR - Textured wall material (orange peel)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27 331804300-0027	Class 2 - Textured ceiling material (popcorn)	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
28 331804300-0028	Class 2 - Textured ceiling material (popcorn)	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
29 331804300-0029	RR - Textured ceiling material (popcorn)	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
30 331804300-0030	Class 1 - 2'x4' fissure/pinhole CT	Brown/White Fibrous Heterogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
31 331804300-0031	BRR - 2'x4' fissure/pinhole CT	Brown/White Fibrous Heterogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
32 331804300-0032	GRR - 2'x4' fissure/pinhole CT	Brown/White Non-Fibrous Heterogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
33 331804300-0033	RR - Drywall joint compound (composite)	Brown/White Fibrous Heterogeneous	7% Cellulose 5% Glass	55% Gypsum 33% Non-fibrous (Other)	None Detected
34 331804300-0034	Class 1 - Drywall joint compound (composite)	Brown/White Fibrous Heterogeneous	6% Cellulose	55% Gypsum 39% Non-fibrous (Other)	None Detected
35 331804300-0035	Class 2 - Drywall joint compound (composite)	Brown/White Fibrous Heterogeneous	6% Cellulose 5% Glass	50% Gypsum 39% Non-fibrous (Other)	None Detected
36 331804300-0036	RR - Drywall joint compound (composite)	Brown/White Non-Fibrous Heterogeneous	7% Cellulose 5% Glass	55% Gypsum 33% Non-fibrous (Other)	None Detected

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LA Testing Order: 331804300

Customer ID: BENV85C

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Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
37 331804300-0037	Stor 1 - Drywall joint compound (composite)	Brown/White Fibrous Heterogeneous	8% Cellulose	50% Gypsum 42% Non-fibrous (Other)	None Detected
38 331804300-0038	Stor 2 - Drywall joint compound (composite)	Brown/White Fibrous Heterogeneous	4% Cellulose 7% Glass	50% Gypsum 39% Non-fibrous (Other)	None Detected
39 331804300-0039	BRR - White caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40 331804300-0040	BRR - White caulk	Brown/White Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
41 331804300-0041	RR - White caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42 331804300-0042 <i>Inseparable paint / coating layer included in analysis</i>	Exterior walls - Stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
43 331804300-0043 <i>Inseparable paint / coating layer included in analysis</i>	Exterior walls - Stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
44 331804300-0044 <i>Inseparable paint / coating layer included in analysis</i>	Exterior walls - Stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
45 331804300-0045 <i>Inseparable paint / coating layer included in analysis</i>	Exterior walls - Stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
46 331804300-0046 <i>Inseparable paint / coating layer included in analysis</i>	Exterior walls - Stucco	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
47 331804300-0047	Roof - Roof felt (black)	Black Fibrous Homogeneous	6% Cellulose 10% Synthetic	84% Non-fibrous (Other)	None Detected
48 331804300-0048	Roof - Roof felt (black)	Black Fibrous Homogeneous	8% Synthetic	92% Non-fibrous (Other)	None Detected
49 331804300-0049	Roof - Roof felt (black)	Black Fibrous Homogeneous	5% Cellulose 10% Synthetic	85% Non-fibrous (Other)	None Detected
50 331804300-0050	Roof (under felt) - Black/red shingles	Brown/Black Fibrous Heterogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
51 331804300-0051	Roof (under felt) - Black/red shingles	Brown/Black Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
52-Shingle 331804300-0052	Roof (under felt) - Black/red shingles	Brown/Black Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
52-Mastic 331804300-0052A	Roof (under felt) - Black/red shingles	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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LA Testing Order: 331804300

Customer ID: BENV85C

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
53 331804300-0053	Roof penetrations - Roof mastic (black)	Gray/Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
54 331804300-0054	Roof penetrations - Roof mastic (black)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
55 331804300-0055	Roof penetrations - Roof mastic (black)	Gray/Black Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
56 331804300-0056	Flue Pipe - Transite (gray)	Gray Fibrous Homogeneous		88% Non-fibrous (Other)	8% Chrysotile 4% Crocidolite

Analyst(s)

Harrison McGowan (25)

Monica Luna (24)

Sotheary Son (26)

Michael DeCavallas, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0, CA ELAP 1406

Report amended: 02/20/2018 16:23:10 Replaces initial report from: 02/17/2018 16:51:21 Reason Code: Data Entry-Results Changed

331 804300 #



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 1 of 6Client Name: El Segundo USDProject Location: Madsen HouseDate: 2/16/18 Field Technician: Nathan GwosdzProject Number: 40086.0001 Priority: ASAP 24 HR 8 3-5 Days

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
1	RR	12"x12" FT (white) + glue (yellow)	200sf
2	Class 1		
3	3 RR		
4	RR	Vinyl sheet flooring (red) + mastic (black)	200sf
5	Class 1		
6	3 RR		
7	3 RR	12"x12" FT (cream) + glue (white)	330sf
8	3 RR		
9	6 RR		
10	RR	12"x12" FT (blue) + glue (yellow)	45sf

Chain of Custody

Analytical Method: PLM 8 TEM: _____ Other: _____

Sampled By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:00am</u>
Relinquished By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:30am</u>
Received By	<u>[Signature] (AMS)</u>	Date	<u>2/16/18</u>	Time	<u>11:10h</u>
Relinquished By		Date		Time	
Received By		Date		Time	

331 804300 #



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 2 of 6Client Name: El Segundo USDProject Location: Madsen HouseDate: 2/16/18 Field Technician: Nathan GwischkeProject Number: 40086.0001 Priority: ASAP 24 HR 3-5 Days

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
11	RR	12"x12" FT (blue) + glue (yellow)	45 sq
12	RR	1	
13	RR	4" Basecoat (blue) + adhesive (white)	55 sq
14	RR	4" Basecoat (blue) + adhesive (white)	55 sq
15	RR	1	
16	Class 1	4" Basecoat (white) + glue (yellow)	130 sq
17	1	1	
18	1	1	
19	class 2	Basecoat adhesive (brown)	140 sq
20	1	1	

Chain of Custody

Analytical Method: PLM: X TEM: _____ Other: _____

Sampled By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:00 am</u>
Relinquished By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:30 am</u>
Received By		Date		Time	
Relinquished By		Date		Time	
Received By		Date		Time	

331 804300 #



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 3 of 6Client Name: El Segundo USDProject Location: Madsen HouseDate: 2/16/18 Field Technician: Nathan GuevicheProject Number: 40086-0001 Priority: ASAP 24 HR 3-5 Days

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
21	RR	Basecoat adhesive (brown)	1401sf
22	RR	Textured wall material	2200sf
23	~~RR~~ ^{NG} Class 1	(orange - peel)	
24	~~Class 1~~ ^{NG} Class 2		
25	~~Class 2~~ ^{NG} Class 2		
26	~~Class 2~~ ^{NG} 8 RR		
27	Class 2	Textured ceiling material (popcorn)	780sf
28	Class 2		
29	RR		
30	Class 1	2'x4' fissure/pinhole CT	1250sf

Chain of Custody

Analytical Method: PLM: X TEM: _____ Other: _____

Sampled By	<u>Nathan Gueviche</u>	Date	<u>2/16/18</u>	Time	<u>10:00am</u>
Relinquished By	<u>Nathan Gueviche</u>	Date	<u>2/16/18</u>	Time	<u>10:30am</u>
Received By		Date		Time	
Relinquished By		Date		Time	
Received By		Date		Time	



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 4 of 6Client Name: El Segundo USOProject Location: Madsen HouseDate: 4/16/18 Field Technician: Nathan GrevichProject Number: 40086.0001 Priority: ASAP 24 HR 8 3-5 Days

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
31	BRR	2x4' fissure / pink hole CT	1250sf
32	GRR		
33	RR	Dry wall + joint compound ~~(composite)~~	3500sf
34	Class 1		
35	Class 2		
36	~~Star~~ RR	Dry wall + joint compound ~~(composite)~~	1000sf
37	Star 1		
38	Star 2		
39	BRR	White Caulk	50sf
40	BRR		

Chain of Custody

Analytical Method: PLM 8 TEM: Other:

Sampled By	<u>Nathan Grevich</u>	Date	<u>4/16/18</u>	Time	<u>10:00am</u>
Relinquished By	<u>Nathan Grevich</u>	Date	<u>4/16/18</u>	Time	<u>10:30am</u>
Received By		Date		Time	
Relinquished By		Date		Time	
Received By		Date		Time	

331 804300 #



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 5 of 6Client Name: El Segundo USDProject Location: Madsen HouseDate: 2/16/18 Field Technician: Nathan GwicheProject Number: 40086-0001 Priority: ASAP 24 HR ~~3-5 Days~~

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
41	RR	white caulk	501sf
42	Exterior walls	Stucco	2350sf
43			
44			
45			
46			
47	roof	Roof felt (black)	2090sf
48			
49			
50	roof (under felt)	black/red shingles	2090sf

Chain of Custody

Analytical Method: PLM ~~TEM~~ Other: _____

Sampled By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:00m</u>
Relinquished By	<u>[Signature]</u>	Date	<u>2/16/18</u>	Time	<u>10:30am</u>
Received By		Date		Time	
Relinquished By		Date		Time	
Received By		Date		Time	

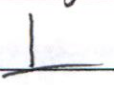
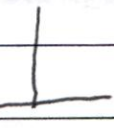
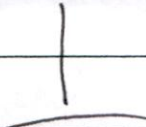
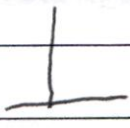
331 804 300 #



B2 ENVIRONMENTAL

ASBESTOS BULK SAMPLE

Page 6 of 6Client Name: El Segundo USOProject Location: Madsen HouseDate: 2/16/18 Field Technician: Nathan GwarcheProject Number: 40086.0001 Priority: ASAP 24 HR 3-5 Days

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
51	roof (under felt)	Black/red shingles	2090
52			
53	roof penetrations	roof mastek (black)	50 sf
54			
55			
56	Flue pipe	Transite (gray)	101 sf

Chain of Custody

Analytical Method: PLM: _____ TEM: _____ Other: _____

Sampled By		Date	Time
Relinquished By		Date	Time
Received By		Date	Time
Relinquished By		Date	Time
Received By		Date	Time

APPENDIX B

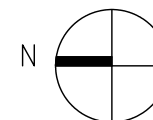
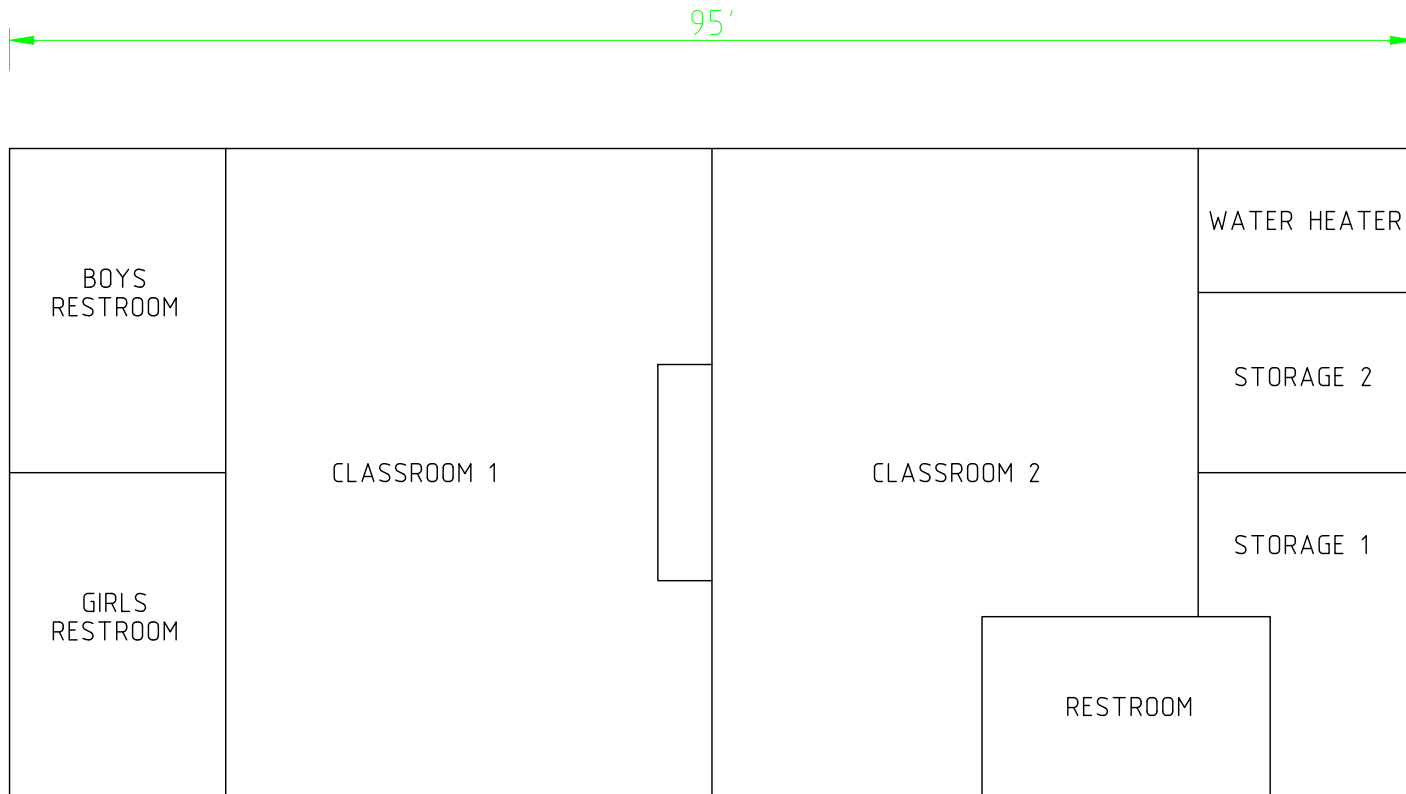
LEAD LABORATORY ANALYTICAL REPORT

Site: Madsen House Building 640 Virginia Street El Segundo, California 90245			Inspector: Todd Hill Action Level: 1.00 mg / cm ² Date: February 16, 2018		Manufacturer/Type: Niton 300 XLP Isotope: 40 mci Cadmium 109 Serial Number: 6908				
Reading	Side	Room	Structure	Color	Condition	Substrate	Results	PbC	Units
1		Calibration						0.80	mg / cm ²
2		Calibration						1.10	mg / cm ²
3		Calibration						1.00	mg / cm ²
4		Calibration						1.20	mg / cm ²
5	A	Girls Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
6	B	Girls Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
7	C	Girls Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
8	D	Girls Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
9	B	Girls Restroom	Exterior Wall	White	Intact	Wood	Negative	0.05	mg / cm ²
10	C	Girls Restroom	Exterior Wall	White	Intact	Wood	Positive	6.90	mg / cm ²
11	C	Girls Restroom	Exterior Wall	White	Intact	Wood	Positive	6.10	mg / cm ²
12	C	Girls Restroom	Exterior Wall	White	Intact	Wood	Positive	5.50	mg / cm ²
13	D	Girls Restroom	Stall	Pink	Intact	Metal	Negative	0.01	mg / cm ²
14	D	Girls Restroom	Sink	White	Intact	Porcelain	Negative	0.01	mg / cm ²
15	A	Girls Restroom	Door Trim	White	Intact	Wood	Negative	0.00	mg / cm ²
16	A	Boys Restroom	Door Trim	White	Intact	Wood	Negative	0.00	mg / cm ²
17	A	Boys Restroom	Door	White	Intact	Wood	Negative	0.00	mg / cm ²
18	A	Boys Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
19	B	Boys Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
20	C	Boys Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
21	D	Boys Restroom	Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
22	D	Boys Restroom	Window Sill	White	Intact	Drywall	Negative	0.00	mg / cm ²
23	D	Boys Restroom	Window	Silver	Intact	Metal	Negative	0.00	mg / cm ²
24	B	Boys Restroom	Stall	Blue	Intact	Metal	Negative	0.00	mg / cm ²
25	B	Boys Restroom	Toilet	White	Intact	Porcelain	Negative	0.08	mg / cm ²
26	B	Boys Restroom	Sink	White	Intact	Porcelain	Negative	0.01	mg / cm ²
27	A	Classroom 1	Wall	Blue	Intact	Drywall	Negative	0.00	mg / cm ²
28	B	Classroom 1	Wall	Blue	Intact	Drywall	Negative	0.00	mg / cm ²
29	C	Classroom 1	Wall	Blue	Intact	Drywall	Negative	0.00	mg / cm ²
30	D	Classroom 1	Wall	Blue	Intact	Drywall	Negative	0.00	mg / cm ²
31	A	Classroom 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
32	B	Classroom 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
33	C	Classroom 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
34	D	Classroom 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
35	D	Classroom 1	Window Sill	White	Intact	Drywall	Negative	0.00	mg / cm ²
36	D	Classroom 1	Window	White	Intact	Metal	Negative	0.00	mg / cm ²
37	D	Classroom 1	Door	Blue	Intact	Metal	Negative	0.00	mg / cm ²
38	D	Classroom 1	Door Trim	Blue	Intact	Metal	Negative	0.00	mg / cm ²
39	A	Classroom 1	Cabinet	Blue	Intact	Wood	Negative	0.00	mg / cm ²
40	A	Classroom 1	Shelf	Green	Intact	Wood	Negative	0.18	mg / cm ²
41	A	Classroom 1	Door	Blue	Intact	Wood	Negative	0.00	mg / cm ²
42	A	Classroom 1	Door Trim	Blue	Intact	Wood	Negative	0.00	mg / cm ²
43	B	Classroom 1	Exterior Wall	White	Intact	Wood	Negative	0.00	mg / cm ²
44	A	Classroom 2	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
45	B	Classroom 2	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
46	C	Classroom 2	Wall	Yellow	Intact	Drywall	Null	0.03	mg / cm ²
47	C	Classroom 2	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
48	D	Classroom 2	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
49	A	Classroom 2	Window Sill	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
50	A	Classroom 2	Window	Silver	Intact	Metal	Negative	0.00	mg / cm ²
51	A	Classroom 2	Door	Blue	Intact	Metal	Negative	0.00	mg / cm ²
52	A	Classroom 2	Door Trim	Blue	Intact	Metal	Negative	0.00	mg / cm ²
53		Classroom 2	Ceiling	White	Intact	Drywall	Negative	0.50	mg / cm ²
54	A	Restroom	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
55	B	Restroom	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
56	C	Restroom	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
57	D	Restroom	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
58	A	Restroom	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
59	B	Restroom	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
60	C	Restroom	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
61	C	Restroom	Bottom Plate	Blue	Intact	Wood	Positive	5.50	mg / cm ²
62	C	Restroom	Bottom Plate	White	Intact	Wood	Positive	4.90	mg / cm ²
63	C	Restroom	Exterior Wall	White	Intact	Wood	Positive	2.10	mg / cm ²
64		Restroom	Ceiling	White	Intact	Drywall	Negative	0.00	mg / cm ²
65	A	Restroom	Door Trim	White	Intact	Wood	Negative	0.00	mg / cm ²
66	A	Storage Room 1	Door Trim	White	Intact	Wood	Negative	0.00	mg / cm ²
67	A	Storage Room 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²

Site:	Madsen House Building 640 Virginia Street El Segundo, California 90245		Inspector: Action Level: Date:	Todd Hill 1.00 mg / cm ² February 16, 2018		Manufacturer/Type: Isotope: Serial Number:		Niton 300 XLP 40 mci Cadmium 109 6908	
Reading	Side	Room	Structure	Color	Condition	Substrate	Results	PbC	Units
68	B	Storage Room 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
69	C	Storage Room 1	Wall	White	Intact	Drywall	Null	0.00	mg / cm ²
70	C	Storage Room 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
71	D	Storage Room 1	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
72	D	Storage Room 1	Bottom Plate	Brown	Intact	Wood	Positive	2.80	mg / cm ²
73	C	Storage Room 1	Exterior Wall	White	Intact	Wood	Positive	2.80	mg / cm ²
74	D	Storage Room 1	Exterior Wall	White	Intact	Wood	Positive	4.70	mg / cm ²
75	A	Storage Room 2	Wall	White	Intact	Drywall	Positive	4.30	mg / cm ²
76	A	Storage Room 2	Wall	White	Intact	Drywall	Positive	1.90	mg / cm ²
77	B	Storage Room 2	Wall	White	Intact	Drywall	Positive	2.20	mg / cm ²
78	C	Storage Room 2	Wall	Yellow	Intact	Drywall	Negative	0.00	mg / cm ²
79	D	Storage Room 2	Wall	White	Intact	Drywall	Positive	3.30	mg / cm ²
80		Storage Room 2	Ceiling	White	Intact	Drywall	Negative	0.01	mg / cm ²
81		Storage Room 1	Ceiling	White	Intact	Drywall	Negative	0.00	mg / cm ²
82	A	Storage Room 2	Door	White	Intact	Wood	Negative	0.00	mg / cm ²
83	A	Storage Room 2	Door Trim	White	Intact	Wood	Negative	0.01	mg / cm ²
84	D	Storage Room 2	Cabinet	White	Intact	Wood	Negative	0.11	mg / cm ²
85	D	Storage Room 2	Drawer	Blue	Intact	Wood	Null	1.20	mg / cm ²
86	D	Storage Room 2	Drawer	Blue	Intact	Wood	Positive	1.20	mg / cm ²
87	D	Storage Room 2	Drawer	Red	Intact	Wood	Positive	1.20	mg / cm ²
88	D	Storage Room 2	Drawer	Green	Intact	Wood	Positive	1.30	mg / cm ²
89	D	Storage Room 2	Drawer	Yellow	Intact	Wood	Positive	1.20	mg / cm ²
90	A	Water Heater Room	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
91	B	Water Heater Room	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
92	C	Water Heater Room	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
93	D	Water Heater Room	Wall	White	Intact	Drywall	Negative	0.00	mg / cm ²
94		Water Heater Room	Ceiling	White	Intact	Drywall	Negative	0.00	mg / cm ²
95	A	Water Heater Room	Door	White	Intact	Drywall	Negative	0.00	mg / cm ²
96	A	Water Heater Room	Door Trim	White	Intact	Drywall	Negative	0.00	mg / cm ²
97	A	Exterior	Wall	Tan	Intact	Stucco	Negative	0.00	mg / cm ²
98	A	Exterior	Door	Blue	Intact	Metal	Negative	0.00	mg / cm ²
99	A	Exterior	Door Trim	Blue	Intact	Metal	Negative	0.00	mg / cm ²
100	A	Exterior	Column	Blue	Intact	Wood	Negative	0.05	mg / cm ²
101	A	Exterior	Soffit	White	Intact	Wood	Positive	9.30	mg / cm ²
102	A	Exterior	Soffit	White	Intact	Wood	Positive	8.10	mg / cm ²
103	B	Exterior	Wall	Tan	Intact	Stucco	Negative	0.00	mg / cm ²
104	B	Exterior	Door	Blue	Intact	Metal	Negative	0.00	mg / cm ²
105	B	Exterior	Door Trim	Blue	Intact	Wood	Negative	0.00	mg / cm ²
106	C	Exterior	Door Trim	Blue	Intact	Metal	Negative	0.00	mg / cm ²
107	C	Exterior	Door	Blue	Intact	Metal	Negative	0.00	mg / cm ²
108	C	Exterior	Column	Blue	Intact	Metal	Negative	0.00	mg / cm ²
109	C	Exterior	Railing	Blue	Intact	Wood	Negative	0.04	mg / cm ²
110	C	Exterior	Wall	Tan	Intact	Stucco	Negative	0.00	mg / cm ²
111	C	Exterior	Soffit	White	Intact	Wood	Negative	0.01	mg / cm ²
112	C	Exterior	Small Soffit	White	Intact	Wood	Positive	8.50	mg / cm ²
113	D	Exterior	Wall	Tan	Intact	Stucco	Negative	0.00	mg / cm ²
114	D	Exterior	Fence	Green	Intact	Metal	Negative	0.17	mg / cm ²
115		Calibration						1.00	mg / cm ²
116		Calibration						1.10	mg / cm ²
117		Calibration						1.10	mg / cm ²
118		Calibration						1.10	mg / cm ²

APPENDIX C

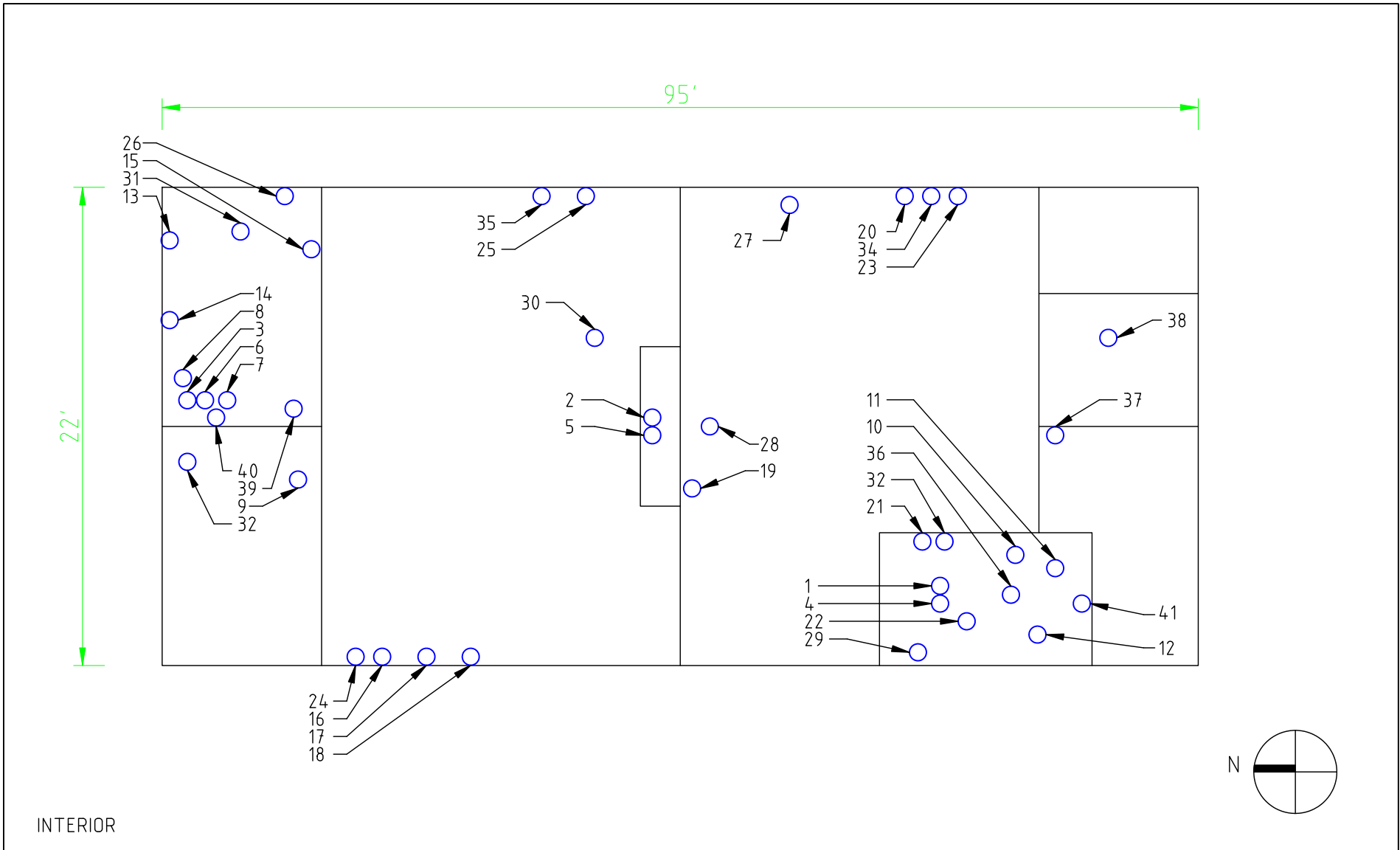
SAMPLE LOCATION DRAWING



FLOOR PLAN

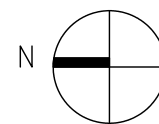
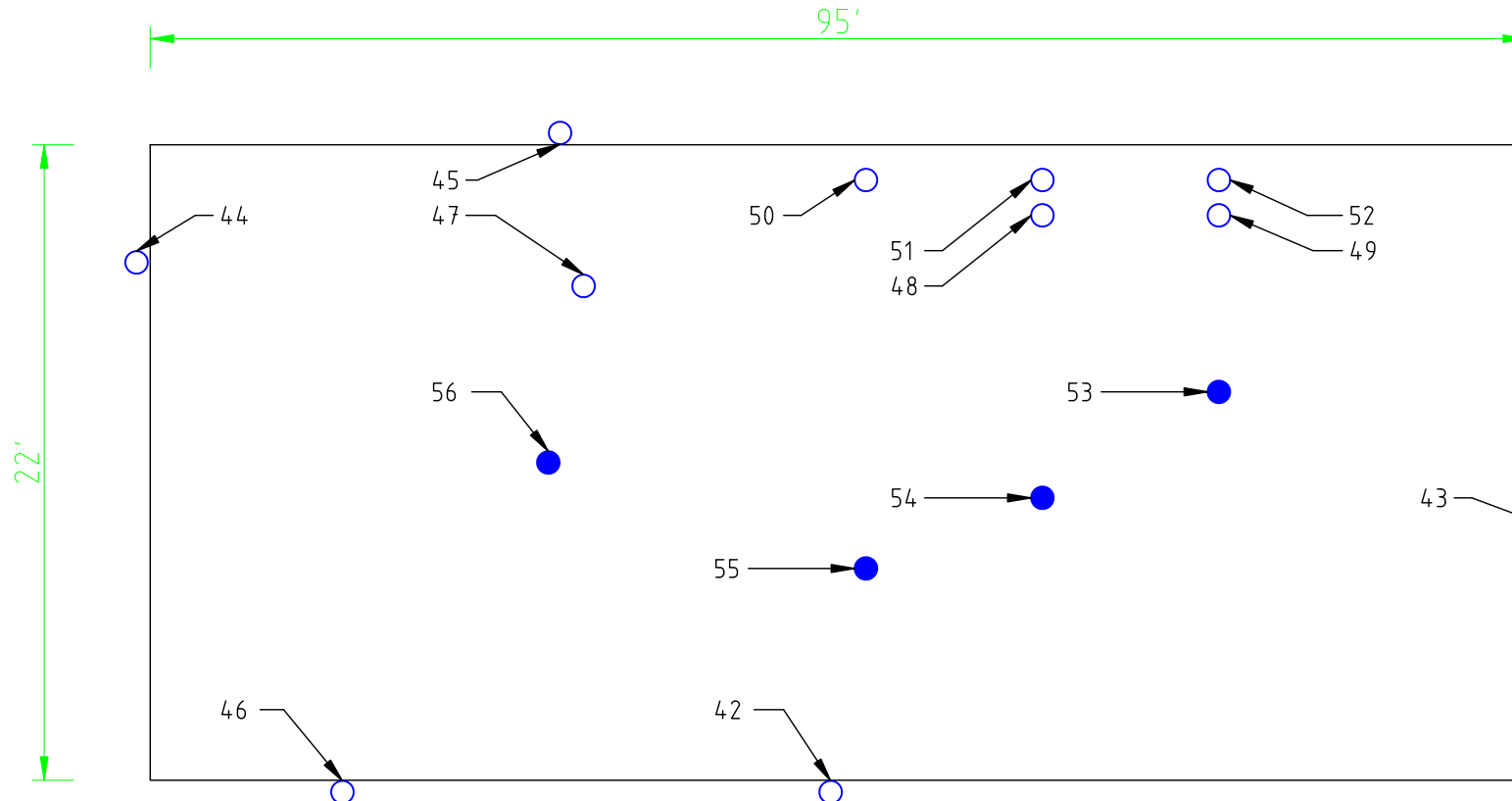
KEY	
 NEGATIVE ASBESTOS SAMPLE	 POSITIVE ASBESTOS SAMPLE
Positive asbestos containing material in California is greater than 0.1% asbestos.	

502 W Route 66, Ste 22 Glendora, CA 91740 (o) 626-507-7161		 B2 ENVIRONMENTAL B2Environmental.com		DRAWING TITLE El Segundo USD Madsen House Building 640 Virginia Street El Segundo, CA 90245	
JOB NUMBER 40086.0001	DRAWN BY NG	DATE 02/19/18	CAD FILE Madsen_House.dxf	SCALE NONE	SHEET 1



KEY	
 NEGATIVE ASBESTOS SAMPLE	 POSITIVE ASBESTOS SAMPLE
Positive asbestos containing material in California is greater than 0.1% asbestos.	

502 W Route 66, Ste 22 Glendora, CA 91740 (o) 626-507-7161			 B2 ENVIRONMENTAL B2Environmental.com		DRAWING TITLE El Segundo USD Madsen House Building 640 Virginia Street El Segundo, CA 90245	
JOB NUMBER 40086.0001	DRAWN BY NG	DATE 02/19/18	CAD FILE Madsen House.dxf	SCALE NONE	SHEET 2	



EXTERIOR/ROOF

KEY

 NEGATIVE ASBESTOS SAMPLE
  POSITIVE ASBESTOS SAMPLE

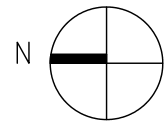
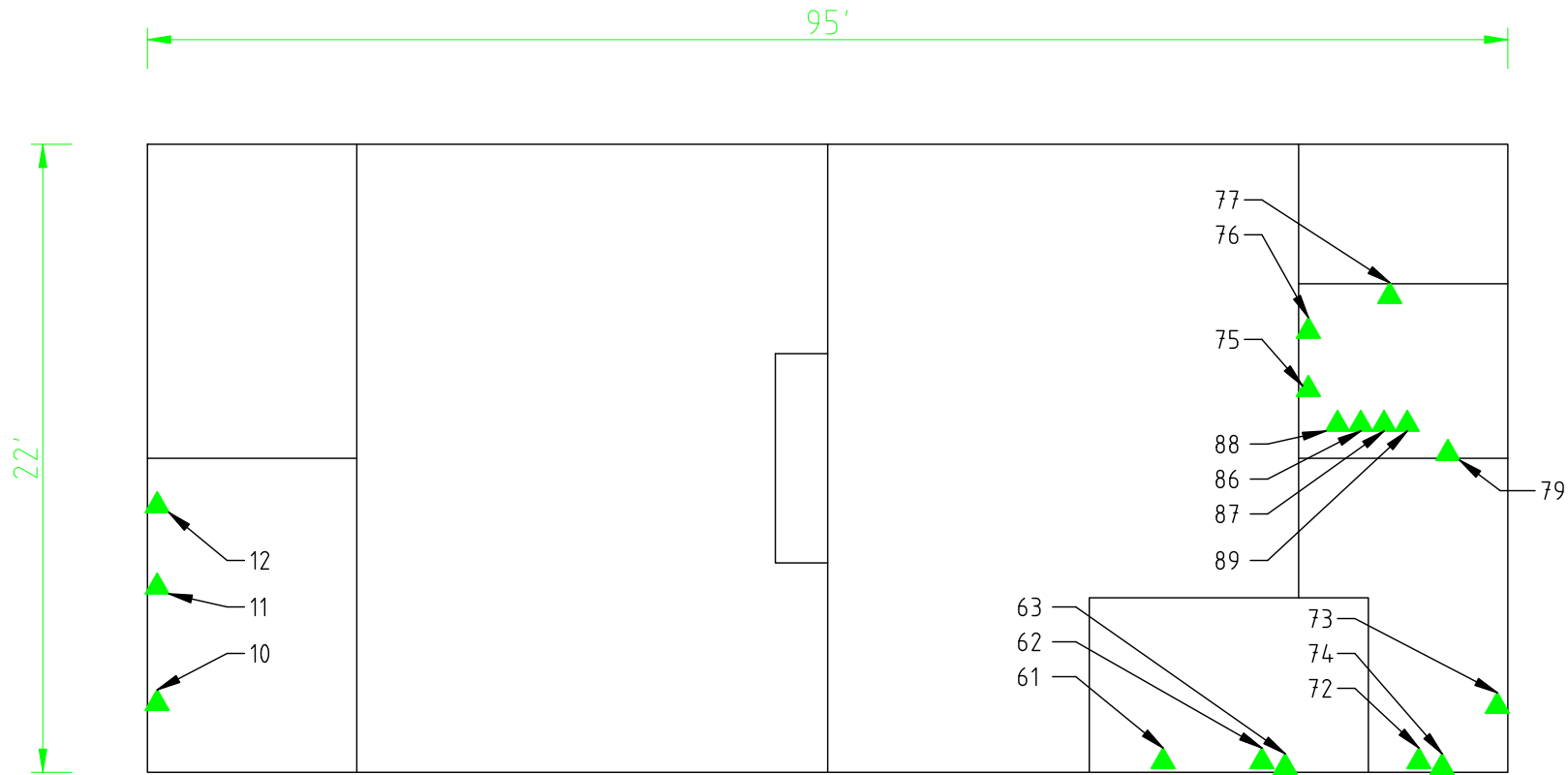
Positive asbestos containing material in California is greater than 0.1% asbestos.

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El Segundo USD
Madsen House Building
640 Virginia Street
El Segundo, CA 90245

JOB NUMBER 40086.0001	DRAWN BY NG	DATE 02/19/18	CAD FILE Madsen House.dxf	SCALE NONE	SHEET 3
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INTERIOR

KEY



NEGATIVE LEAD SAMPLE



POSITIVE LEAD SAMPLE

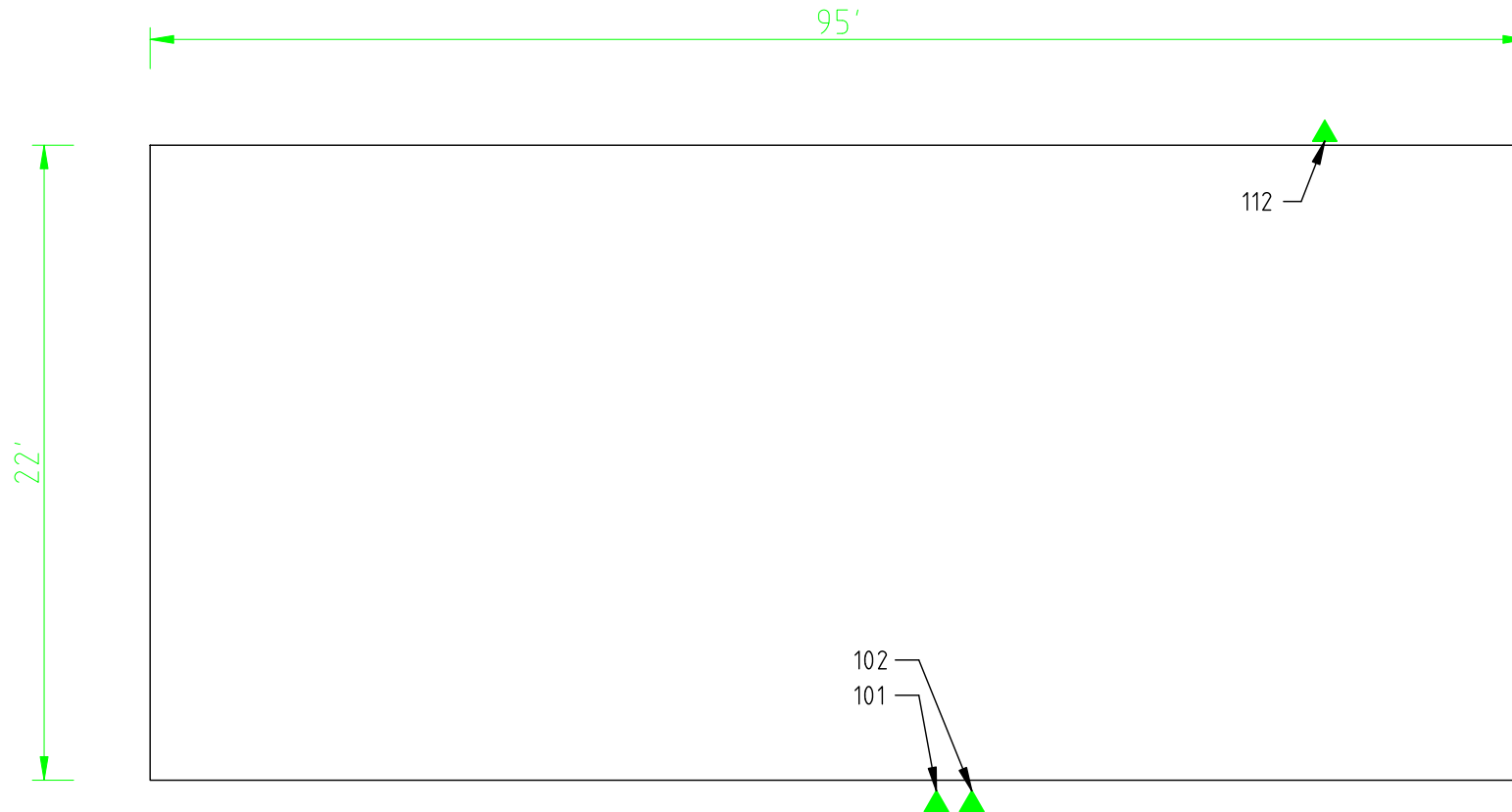
Positive lead containing material is classified as being greater than 1.0 mg/cm²

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Madsen House Building
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El Segundo, CA 90245

JOB NUMBER	DRAWN BY	DATE	CAD FILE	SCALE	SHEET
40086.0001	NG	02/19/18	Madsen House.dxf	NONE	4



EXTERIOR/ROOF

KEY



NEGATIVE LEAD SAMPLE



POSITIVE LEAD SAMPLE

Positive lead containing material is classified as being greater than 1.0 mg/cm²

502 W Route 66, Ste 22
Glendora, CA 91740
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El Segundo, CA 90245

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40086.0001

DRAWN BY
NG

DATE
02/19/18

CAD FILE
Madsen House.dxf

SCALE
NONE

SHEET
5

APPENDIX D

QUALIFICATIONS

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

Nathan C Guericke



Name

Certification No. **17-6097**

Expires on **01/17/19**

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	12/16/2018

Samuel T. Hill ID #: 21265

