

PRE-RENOVATION HAZARDOUS MATERIALS ASSESSMENT
FOR
ASBESTOS AND LEAD CONTAINING MATERIALS

County of Mendocino
Administration Center – South Wing Roof and HVAC Replacement
851 Low Gap Road
Ukiah, CA 95482

Prepared for:

Doug Anderson
Facilities Project Specialist
851 Low Gap Road
Ukiah, CA 95482

Prepared by:

MILLENNIUM CONSULTING ASSOCIATES

November 16, 2017

Project No. 3084.2002

Mr. Doug Anderson
Facilities Project Specialist,
County of Mendocino
851 Low Gap Road,
Ukiah, CA 95482

**RE: PRE-RENOVATION ASBESTOS AND LEAD HAZARDOUS MATERIALS SURVEY
REPORT: County of Mendocino – Administration Center – South Wing Roof and HVAC
Replacement Project**

Dear Mr. Anderson,

Millennium Consulting Associates (Millennium) is pleased to present the Asbestos and Lead Hazardous Materials Survey report for the referenced building.

Findings of the Survey are presented in this report. If you have comments or questions regarding this report, please do not hesitate to contact the undersigned at 925-808-6700. Millennium appreciates the opportunity to provide professional services for the County of Mendocino.

Sincerely,

Millennium Consulting Associates
A **MECA** Consulting Inc. Company



Jairus Vasquez
Staff Environmental Specialist
CAC # 16-5748, CDPH IA #26496

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ACRONYM GUIDE

ACCM	Asbestos-Containing Construction Material
ACM	Asbestos-Containing Material
Cal OSHA	California Occupational Safety and Health Administration
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CPSC	Consumer Product Safety Commission
CDPH	California Department of Public Health
EPA	Environmental Protection Agency
HSG	Homogeneous Sampling Group
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating Ventilation and Air Conditioning
LBP	Lead-Based Paint
NEA	Negative Exposure Assessment
NESHAP	National Emission Standards for Hazardous Air Pollutants
PLM	Polarized Light Microscopy
ppm	Parts per million
PQL	Practical Quantification Limit
RACM	Regulated Asbestos Containing Material
RFT	Resilient Floor Tile
TSI	Thermal System Insulation

EXECUTIVE SUMMARY

Millennium Consulting Associates (Millennium) was requested by the County of Mendocino (CLIENT) to perform a pre-renovation hazardous materials assessment for the property at 43001 Little River-Airport Road, Little River, CA 95456. The purpose of the survey was to determine and report the presence of hazardous materials, namely asbestos-containing materials (ACM) and lead-containing paint (LCP) materials that may be affected during this project. Millennium performed the survey on September 8, 2017. Millennium conducted a walkthrough to identify and collect information regarding all hazardous materials included in the scope of work. Millennium used the information to create a sampling strategy that would represent all suspect materials located in the entire facility. For the survey, Millennium collected twenty-five (25) bulk samples (not including all layers) of suspect asbestos-containing materials at the site. For the lead survey, a total of five (5) paint chip samples were collected from various painted surfaces. All samples were delivered to a certified laboratory under chain of custody.

According to the analytical results, the following materials contained >1% asbestos and were identified as Asbestos Containing Material (ACM):

- Grey Roof Parapet Flashing Mastic – 4% Chrysotile

According to the analytical results, the following materials were identified to have lead containing paints or coatings (LCP):

- White Interior Plaster Wall System – 1,100 ppm

1.0 INTRODUCTION

Millennium Consulting Associates was requested by the County of Mendocino to perform a hazardous materials assessment of the Administration Center at 851 Low Gap Road, Ukiah, CA 95482. The purpose of the survey was to determine and report the presence of asbestos and lead containing materials which could affect the proposed renovation. The scope of the survey included interior and exterior finishes and roofing systems. This report shall assist the County of Mendocino in generating specifications, scheduling, and costs regarding hazardous materials for the site prior to proposed renovation activities. Site access and any relevant information regarding the referenced building was provided by Doug Anderson. Based on Millennium's understanding of the client's needs, the following scope of services was conducted:

- Performed ACM survey of the subject property in accordance with the listed criteria in California Occupational Safety and Health Administration (Cal-OSHA) standard 8 California Code of Regulations (CCR) 1529, OSHA standard 29 Code of Federal Regulations (CFR) 1926.1101 and Environmental Protection Agency (EPA) standard 40 CFR Part 61.145 (a), including the analysis of bulk samples via polarized light microscopy (PLM) methodology.
- Performed a pre-construction lead containing paint survey utilizing paint chip sampling methodology.
- Provided a written report detailing the survey information including description of the samples and sample locations, analytical results in tabular form, condition of surfaces identified, interpretation of results, and possible recommendations for the future.

2.0 SITE DESCRIPTION

The Administration Center serves as the operating office for Mendocino County. The building is a single-story structure on a concrete foundation, stucco exterior walls, with a sprayed-on polyurethane mastic and foam insulation roofing system on top of bitumen roofing over a wood deck. Other observed exterior finishes in the subject areas include: perimeter roof flashing systems, parapet roof flashing systems, and various HVAC system tapes and mastic. Interior finishes include a white painted plaster wall system and unfinished drywall between the interior plaster and exterior stucco system.

3.0 ACM MATERIAL SURVEY

3.1 DOCUMENTS REVIEW

The following documents were referenced for the hazardous material survey to identify the specific areas of work and to determine associated building systems that may be indirectly impacted during the scope of work.

- Interactive Resources – Administration Center – South Wing Architectural Drawings – October 4, 2017

3.2 VISUAL INSPECTION

Asbestos survey activities were carried out by Jairus Vasquez, CAC #16-5748, as required by 1529 (b) of Title 8 of the California Code of Regulations (CCR).

Interior finishes observed include painted plaster wall systems, unpainted wood ceiling deck and unfinished drywall. After speaking with Mr. Anderson, the scope of interior disturbance includes ceiling and wall penetrations for the anticipated drain installation.

Exterior finishes observed include painted wood wall siding, painted wood trim, painted stucco, foam insulated roof system over a built-up roof system, grey parapet flashing mastic, white parapet flashing mastic, grey perimeter flashing mastic. The HVAC system was also observed with light grey, dark grey, and white HVAC tape.

Millennium's field observations noted the following:

SUSPECT MATERIAL:

- | | |
|------------------------------------|-----------------------------------|
| a. Black Tar Roofing System | f. Dark Grey (Old) HVAC Tape |
| b. Yellow Roof Insulation | g. Parapet Roof Flashing Mastic |
| c. White Roofing Patch Tape/Mastic | h. Perimeter Roof Flashing Mastic |
| d. White HVAC Tape | i. Parapet Roof Flashing Caulk |
| e. Light Grey (New) HVAC Tape | j. Beige Stucco |

3.3 BULK SAMPLE COLLECTION AND ANALYSIS

A preliminary walk-through of the subject property building was performed to familiarize the inspector with the structure and to identify suspect ACM.

The subject areas were assessed for suspect asbestos-containing surfacing materials, suspect asbestos-containing miscellaneous friable materials, suspect asbestos-containing Category I non-friable materials, and suspect asbestos-containing Category II non-friable materials. Friable materials are defined as those materials, when dry, that can be crumbled or reduced to powder by hand pressure. Category I non-friable materials are defined as packing, gaskets, asphalt roofing materials and resilient flooring materials and associated mastics in which the asbestos fibers are bound within a resinous matrix. Category II non-friable materials are defined as other non-friable materials such as transite in which the asbestos fibers are bound within a cement-like matrix.

During the walk-through, homogeneous sample groups (HSGs) were identified at the project site. Based on the identified HSG and analytical data, a bulk-sampling plan for suspect ACM was developed.

The asbestos survey consisted of discrete bulk sampling on room finishes in the subject areas where new installations were scheduled. Interior samples collected in areas behind doorways, in corners or in areas not readily observable. All friable suspect materials were wetted prior to sample collection using a handheld spray bottle. All samples were collected using manual methods, placed into individual plastic sample bags, and shipped to the laboratory under chain of custody for analysis. A total of twenty-five (25) bulk samples (not including all layers) were collected and submitted for analysis.

Bulk sampling was conducted in accordance with procedures outlined in the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos standard (40 CFR Part 61 Subpart M). The procedure requires the inspector(s) to select random sampling locations from homogeneous materials suspected to contain asbestos.

Twenty-five (25) suspect ACM bulk samples were collected throughout the interior, exterior, and roof. The samples were shipped under chain-of-custody procedures to EMSL Analytical, located in San Leandro, California. EMSL is accredited by the California Department of Health Services and National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program. The ACM bulk samples were analyzed using Polarized Light Microscopy (PLM) in accordance with the EPA Method for the Determination of Asbestos in Bulk Building Materials (Method 600/R-93/116).

3.4 REGULATIONS

3.4.1 BUILDING SURVEY

Sampling of suspect ACM was conducted on identified suspect materials regardless of their condition (i.e., friability) at the time of the survey. The assessment and sampling of suspect non-friable materials were included in the scope of work because their condition could change during renovation and/or demolition activities. Their change in condition could result in their reclassification from non-friable ACM to regulated ACM (RACM) that are subject to the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos standard (40 CFR Part 61, Subpart M). During the walk-through, homogeneous sample groups were identified in the building. Based on the identified sampling groups, a bulk-sampling plan for suspect ACM was developed.

3.4.2 WORKER PROTECTION

Construction materials containing greater than 1 percent of asbestos content are defined as an Asbestos Containing Material (ACM) and are regulated under both federal and state regulations. Construction materials containing asbestos greater than 0.1% are defined as an Asbestos Containing Construction Material (ACCM) and are regulated by the State of California. Cal/OSHA regulates the removal of both ACM and ACCM.

Please refer to Title 8§1529-Asbestos for the regulatory requirements associated with working with both ACM and ACCM. Additionally, refer to §1529(r)-Report of Use and Asbestos-related Work Registration for the registration requirement of contractors involved in asbestos-related work involving over 100 square feet of ACCM/ACM. In instances where a material contains asbestos in concentrations below the ACCM regulatory threshold, the employer is required to comply with Cal/OSHA 5194-Hazard Communication in addition to pertinent sections of §1529-Asbestos.

3.4.3 HAZARDOUS WASTE

In California, ACMs that are friable or will become friable during abatement are classified as a California-Hazardous Waste, and require additional special handling, packaging and disposal.

4.0 LEAD SURVEY

Lead survey activities were carried out by Jaius Vasquez, CDPH certified Lead Inspector Assessor (CDPH # 26496).

4.1 LEAD SURVEY OVERVIEW

A preliminary walk-through of the subject property building was performed to familiarize the inspector with the structure and to identify suspect lead-containing materials.

Five (5) paint chip samples, from impacted painted drywall systems were collected and submitted under chain of custody procedures to EMSL Analytical in San Leandro, California. EMSL is accredited under the California A2HA Environmental Laboratory Accreditation Program. The samples were analyzed by Flame Atomic Absorption for total lead content (EPA Method 3050B/7000B).

4.2 LEAD SURVEY RESULTS

The sample locations and results are presented in Table 2, attached to this report. The location of each sample is provided in Appendix A; the analytical laboratory report is provided in Appendix B.

Based on the observed material included in the scope of work, samples from the following materials were collected for lead content analysis.

- | | |
|-----------------------------------------|------------------------------------------------|
| a. White Paint – Interior Wall Plaster | d. Green Paint – Wood Roof Trim |
| b. Beige Paint - Roof Equipment Tent | e. Beige Paint – Roof and Exterior Wall Stucco |
| c. Beige Paint – Wood Roof Panel Siding | |

According to the analytical results, the foiling materials were identified to have lead containing paints or coatings (LCP):

- a. White Painted Interior Plaster

5.0 SURVY FINDINGS

According to the analytical results, the following materials contained >1% asbestos and were identified as Asbestos Containing Material (ACM):

- Grey Parapet Flashing Mastic

According to the analytical results, the foiling materials were identified to have lead containing paints or coatings (LCP):

- White Painted Interior Plaster

A summary of all ACM and LCP samples is provided in Table 1-2.

According to the analytical results, the following materials were found NOT TO CONTAIN asbestos in any detectable concentrations:

- | | |
|---------------------------------|----------------------------------|
| • White Interior Plaster | • Dark Grey HVAC Tape |
| • White Interior Drywall System | • White HVAC Tape |
| • White Roof Patch Tape/Mastic | • White Parapet Flashing Caulk |
| • Yellow Foam Insulated Roofing | • Grey Perimeter Flashing Mastic |
| • Black Built-Up Roof System | • Exterior Stucco |
| • Light Grey HVAC Tape | • Grey Parapet Flashing Mastic |

6.0 CONCLUSIONS AND RECOMMENDATIONS – ABATEMENT OPTIONS

Based on the analytical results the following materials have been identified as ACM and shall be removed as asbestos containing materials in accordance with Cal-OSHA and Mendocino Air Quality Management District regulations prior to disturbance in areas included in the scope of work:

- Grey Parapet Flashing Mastic

Based on the analytical results the following materials have been identified as LCP and shall be handled in accordance with CCR Title 8 Section 1532.1 Lead in Construction Standard.

- White Painted Interior Plaster

This conclusion is based on the initial scope of work as provided to Millennium Consulting Associate; if the scope of work changes, and building materials outside those identified and sampled for this report are to be disturbed, Millennium recommends further survey work before commencement of renovation activities.

TABLES

TABLE 1	ACM SURVEY RESULTS
TABLE 2	LEAD SURVEY RESULTS

Table 1 - Detailed Listing of ACM and non-ACM Samples
County of Mendocino
3084.2002 - Administration Center

Sample No.	Material	Sample Location	Color	Asbestos Content / Type	Point Count Result	EPA Category	Cal/OSHA Class	Comment
171111-14.01	Plaster	Interior Office - NW	White	None Detected		-	-	-
171111-14.02	Plaster	Interior Office - N. Wall	White	None Detected	-	-	-	-
171111-14.03	Drywall	Interior Office - Residual Ceiling Deck	White	None Detected	-	-	-	-
	Joint compound	Interior Office - Residual Ceiling Deck	White	None Detected	-	-	-	-
171003-14.04	Plater	Interior Office - NW	White	None Detected	-	-	-	-
171111-14.05	Tape	Roof - Far SW	White	None Detected	-	-	-	-
	Mastic	Roof - Far SW	Grey	None Detected	-	-	-	-
	Insulation	Roof - Far SW	Yellow	None Detected	-	-	-	-
171111-14.06	Tape	Roof - South Center	White	None Detected	-	-	-	-
	Mastic	Roof - South Center	Grey	None Detected	-	-	-	-
	Insulation	Roof - South Center	Yellow	None Detected	-	-	-	-
171111-14.07	Tar	Roof - Far SW	Black	None Detected	-	-	-	-
	Insulation	Roof - Far SW	Yellow	None Detected	-	-	-	-
171111-14.08	Tar	Roof - Access Ladder	Black	None Detected	-	-	-	-
	Insulation	Roof - Access Ladder	Yellow	None Detected	-	-	-	-
171111-14.09	Tar	Roof - South Center	Grey	None Detected	-	-	-	-
	Insulation	Roof - South Center	Grey	None Detected	-	-	-	-
171111-14.10	White HVAC Tape	HVAC Duct - Access Ladder	White	None Detected	-	-	-	-
	Mastic	HVAC Duct - Access Ladder	Brown/black	None Detected	-	-	-	-
17111-14.11	White HVAC Tape	HVAC Duct - Sout Center	White	None Detected	-	-	-	-
	Mastic	HVAC Duct - Sout Center	Brown/Black	None Detected	-	-	-	-
171111-14.12	White HVAC Tape	HVAC Handler - Middle SW	White	None Detected	-	-	-	-
171111-14.13	Dark Grey HVAC Tape	HVAC Duct - Access Ladder	Dark Grey (Old)	None Detected	-	-	-	-
171111-14.14	Dark Grey HVAC Tape	HVAC Duct - South Center	Dark Grey (Old)	None Detected	-	-	-	-
	Mastic	HVAC Duct - South Center	Brown/Black	None Detected	-	-	-	-
171111-14.15	Dark Grey HVAC Tape	HVAC Handler - Far SW	Dark Grey (Old)	None Detected	-	-	-	-
171111-14.16	Light Grey HVAC Tape	HVAC Duct - Access Ladder	Light Grey (New)	None Detected	-	-	-	-

Table 1 - Detailed Listing of ACM and non-ACM Samples
County of Mendocino
3084.2002 - Administration Center

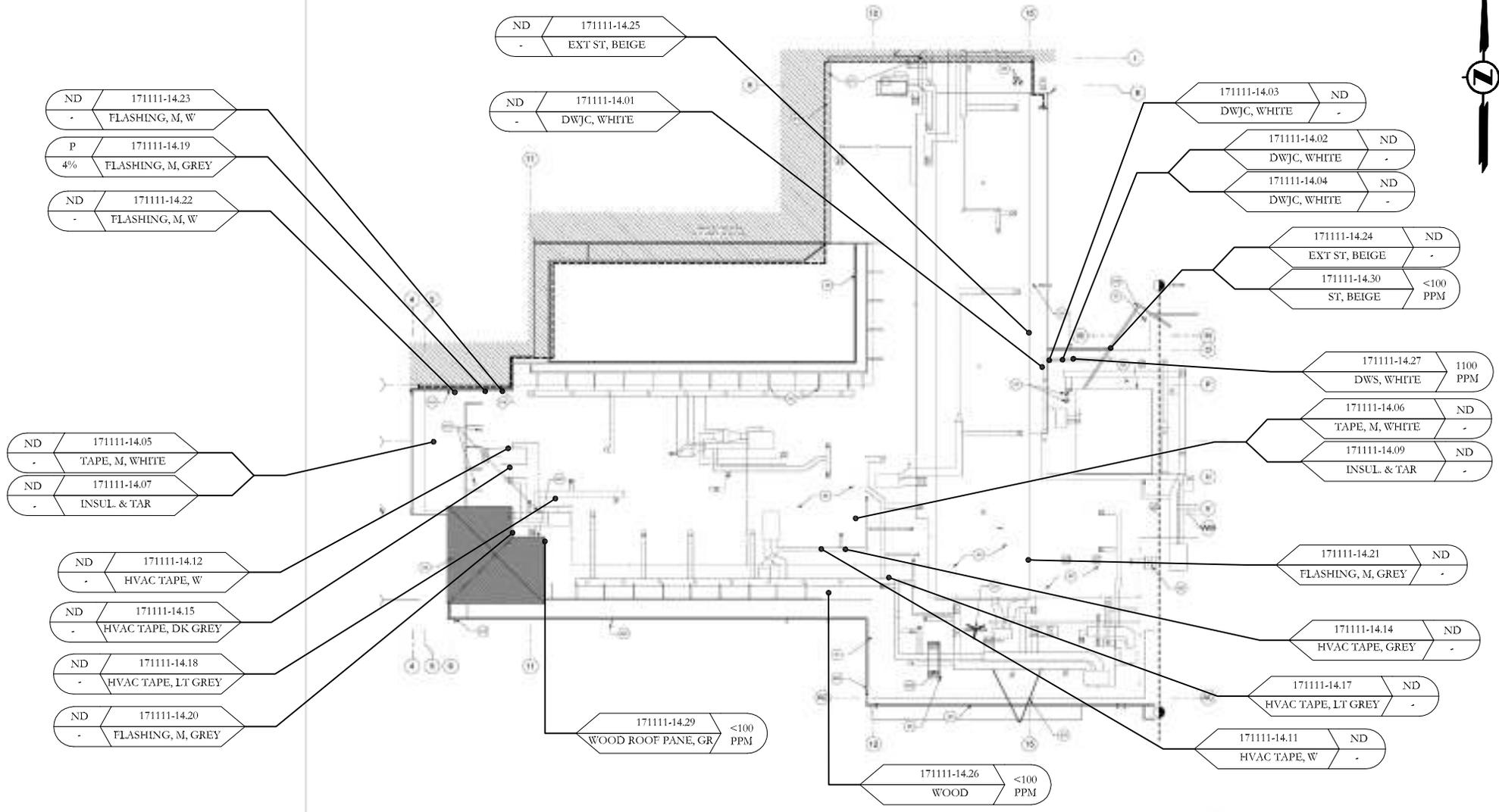
Sample No.	Material	Sample Location	Color	Asbestos Content / Type	Point Count Result	EPA Category	Cal/OSHA Class	Comment
171111-14.17	Light Grey HVAC Tape	HVAC Duct - South Center	Light Grey (New)	None Detected	-	-	-	-
	Mastic	HVAC Duct - South Center	Black/Brown	None Detected	-	-	-	-
171111-14.18	Light Grey HVAC Tape	HVAC Duct - Far SW	Light Grey (New)	None Detected	-	-	-	-
171111-14.19	Parapet Flashing Mastic	Roof Far - SW	Grey	4% Chrysotile	-	Category I - Nonfriable	Class II	-
171111-14.20	Perimeter Flashing Mastic	Roof Far - SW @ Equipment Room	Grey	None Detected	-	-	-	-
171111-14.21	Perimeter Flashing Mastic	Roof Far - SE	Grey	None Detected	-	-	-	-
171111-14.22	Parapet Flashing Caulk	Roof Far - SW	White	None Detected	-	-	-	-
	Parapet Mastic	Roof Far - SW	Grey	None Detected	-	-	-	-
171111-14.23	Parapet Flashing Caulk	Roof Far - SW	White	None Detected	-	-	-	-
171111-14.24	Stucco	North Entrance Exterior	Grey	None Detected	-	-	-	-
171111-14.25	Stucco	North Entrance Exterior	Grey	None Detected	-	-	-	-

**Table 2 - Detailed Listing of Lead Paint Survey
County of Mendocino
3084.2002 - Administration Center**

Sample No.	Material Description / Substrate	Location	Substrate Description	Condition	Lead Concentration (ppm)
171111-14.26	Beige Painted Roof Equipment Tent	Roof - South Center	Wood	Poor	<100
171111-14.27	White Plaster Wall	Interior Office - North Wall	Plaster	Intact	1,100 ppm
171111-14.28	Beige Painted Wood Paneling	Roof - South East	Wood	Intact	<100 ppm
171111-14.29	Green Wood Roof Trim	Roof - South East	Wood	Intact	<100 ppm
171111-14.30	Beige Exterior Stucco	North Entrance	Stucco	Intact	<100 ppm

APPENDIX A

SITE MAP AND SAMPLING LOCATIONS



ND 171111-14.25
- EXT ST, BEIGE

ND 171111-14.01
- DWJC, WHITE

ND 171111-14.23
- FLASHING, M, W

P 171111-14.19
4% FLASHING, M, GREY

ND 171111-14.22
- FLASHING, M, W

171111-14.03 ND
DWJC, WHITE -

171111-14.02 ND
DWJC, WHITE -

171111-14.04 ND
DWJC, WHITE -

171111-14.24 ND
EXT ST, BEIGE -

171111-14.30 <100
ST, BEIGE PPM

171111-14.27 1100
DWS, WHITE PPM

171111-14.06 ND
TAPE, M, WHITE -

171111-14.09 ND
INSUL. & TAR -

ND 171111-14.05
- TAPE, M, WHITE

ND 171111-14.07
- INSUL. & TAR

ND 171111-14.12
- HVAC TAPE, W

ND 171111-14.15
- HVAC TAPE, DK GREY

ND 171111-14.18
- HVAC TAPE, LT GREY

ND 171111-14.20
- FLASHING, M, GREY

171111-14.21 ND
FLASHING, M, GREY -

171111-14.14 ND
HVAC TAPE, GREY -

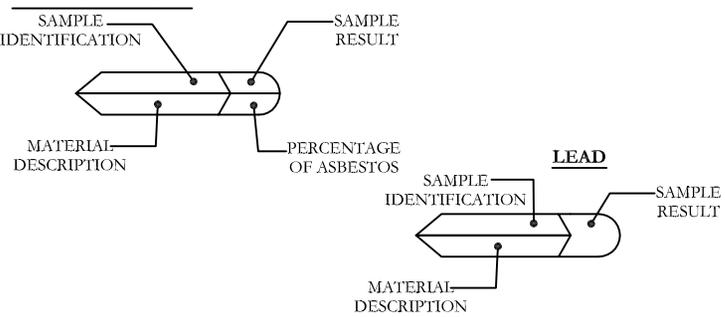
171111-14.17 ND
HVAC TAPE, LT GREY -

171111-14.11 ND
HVAC TAPE, W -

171111-14.29 <100
WOOD ROOF PANE, GR PPM

171111-14.26 <100
WOOD PPM

LEGEND



ND=NONE DETECTED
P =POSITIVE
GR=GREEN
LT=LIGHT

INSUL=INSULATION
DK =DARK
M =MASTIC
W =WHITE
DWS =DRY WALL SYSTEM
ST =STUCCO
DWJC =DRYWALL JOINT COMPOUND

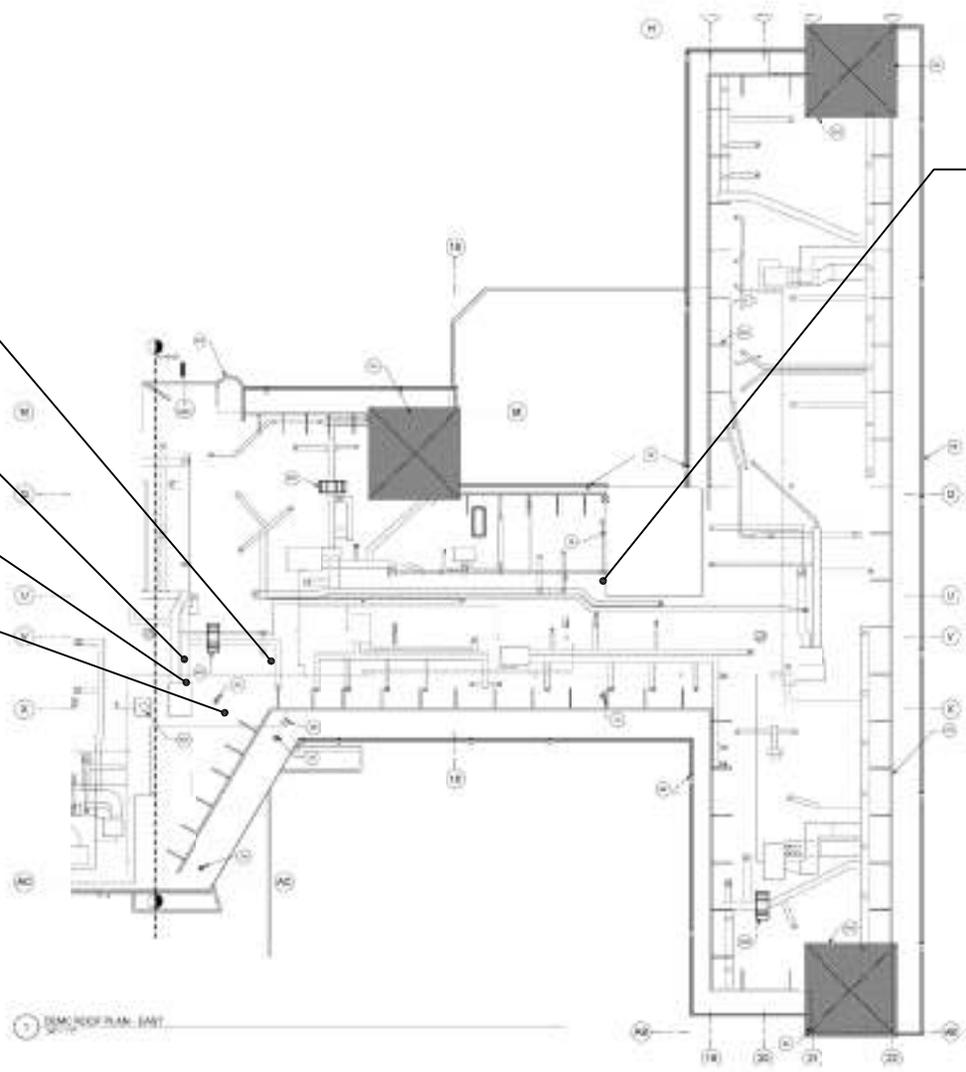
COUNTY OF MENDOCINO

MILLENNIUM CONSULTING ASSOCIATES
OAKLAND, CA

SCALE: N.T.S.	FOR	ADMINISTRATION CENTER- SOUTH WING ROOF AND HVAC REPLACEMENT
DATE: 11/16/17	TITLE	SAMPLE LOCATION PLAN
DRWN: BG	APPROVED:	JOB NO. 3084.2002
CHECKED: JV		DWG. NO. FIGURE-1

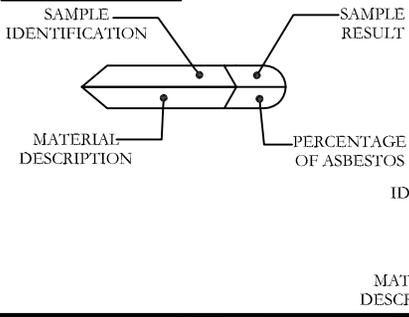


- ND 171111-14.10
- HVAC TAPE, W
- ND 171111-14.13
- HVAC TAPE, GREY
- ND 171111-14.16
- HVAC TAPE, LT GREY
- ND 171111-14.08
- INSUL. & TAR



171111-14.28
WOOD ROOF, BEIGE <100 PPM

LEGEND



ND=NONE DETECTED
 P =POSITIVE
 GR=GREEN
 LT=LIGHT
 INSUL=INSULATION
 DK =DARK
 M =MASTIC
 W =WHITE
 DWS =DRY WALL SYSTEM
 ST =STUCCO
 DWJC =DRYWALL JOINT COMPOUND

COUNTY OF MENDOCINO
MILLENNIUM CONSULTING ASSOCIATES
OAKLAND, CA

SCALE: N.T.S.	FOR	ADMINISTRATION CENTER- SOUTH WING ROOF AND HVAC REPLACEMENT
DATE: 11/16/17	TITLE	SAMPLE LOCATION PLAN
DRWN: BG	APPROVED:	JOB NO. 3084.2002
CHECKED: JV		DWG. NO. FIGURE-2

APPENDIX B

BULK SAMPLE ANALYTICAL LABORATORY REPORTS (ASBESTOS & LEAD)



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091721789

Customer ID: MECA62

Customer PO: 12982

Project ID:

Attention: Jairus Vasquez
Millennium Consulting Associates, Inc.
401 Roland Way
Suite 250
Oakland, CA 94621

Project: 12982 - 3084.2002 - ADMIN CENTER

Phone: (925) 808-6700

Fax: (925) 808-6708

Received Date: 11/13/2017 12:00 PM

Analysis Date: 11/13/2017

Collected Date: 11/11/2017

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
171111-14.01 <i>091721789-0001</i> <i>Sample is plaster not DW/JC</i>	Interior Office NW Wall Pl. - DWS + JC - Wall	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
171111-14.02 <i>091721789-0002</i> <i>Sample is plaster not DW/JC</i>	Interior Office N Wall @ Edge - DWS + JC - Wall	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
171111-14.03-Joint Compound <i>091721789-0003</i>	Interior Office @ Deck - DWS + JC - Residual Ext.	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
171111-14.03-Drywall <i>091721789-0003A</i>	Interior Office @ Deck - DWS + JC - Residual Ext.	White Non-Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected
171111-14.04 <i>091721789-0004</i> <i>Sample is plaster not DW/JC</i>	Interior Office @ Deck - DWS + JC - Residual Ext.	White Non-Fibrous Homogeneous		10% Quartz 25% Gypsum 65% Non-fibrous (Other)	None Detected
171111-14.05-Roof Tape <i>091721789-0005</i>	Roof - Far SW - White Roof Tape/Mastic + Insulation	White Non-Fibrous Homogeneous	5% Cellulose	70% Matrix 25% Non-fibrous (Other)	None Detected
171111-14.05-Mastic <i>091721789-0005A</i>	Roof - Far SW - White Roof Tape/Mastic + Insulation	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.05-Insulation <i>091721789-0005B</i>	Roof - Far SW - White Roof Tape/Mastic + Insulation	Yellow Non-Fibrous Homogeneous		100% Matrix	None Detected
171111-14.06-Roof Tape <i>091721789-0006</i>	Roof - S Center- White Roof Tape/Mastic + Insulation	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.06-Mastic <i>091721789-0006A</i>	Roof - S Center- White Roof Tape/Mastic + Insulation	Gray Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
171111-14.06-Insulation <i>091721789-0006B</i>	Roof - S Center- White Roof Tape/Mastic + Insulation	Yellow Non-Fibrous Homogeneous		100% Matrix	None Detected
171111-14.07-Tar <i>091721789-0007</i>	Roof - Far SW - Insulation + Tar	Black Non-Fibrous Homogeneous	5% Glass	25% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected
171111-14.07-Insulation <i>091721789-0007A</i>	Roof - Far SW - Insulation + Tar	White Non-Fibrous Homogeneous		100% Matrix	None Detected

Initial report from: 11/13/2017 16:15:09



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091721789
Customer ID: MECA62
Customer PO: 12982
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
171111-14.08-Tar <small>091721789-0008</small>	Roof @ Ladder - Insulation + Tar	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
171111-14.08-Insulation <small>091721789-0008A</small>	Roof @ Ladder - Insulation + Tar	Yellow Non-Fibrous Homogeneous		100% Matrix	None Detected
171111-14.09-Tar <small>091721789-0009</small>	Roof - S Center - Insulation + Tar	Black Non-Fibrous Homogeneous	5% Glass	20% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
171111-14.09-Insulation <small>091721789-0009A</small>	Roof - S Center - Insulation + Tar	Yellow Non-Fibrous Homogeneous		100% Matrix	None Detected
171111-14.10-Tape <small>091721789-0010</small>	HVAC Duct @ Ladder - White HVAC Tape/Mastic	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.10-Mastic <small>091721789-0010A</small>	HVAC Duct @ Ladder - White HVAC Tape/Mastic	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
171111-14.11-Tape <small>091721789-0011</small>	Roof HVAC Duct - S Center - White HVAC Tape + Mastic	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.11-Mastic <small>091721789-0011A</small>	Roof HVAC Duct - S Center - White HVAC Tape + Mastic	Brown Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.12-Tape <small>091721789-0012</small>	Roof - Mid SW Air Handler - White HVAC Tape + Mastic	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.12-Mastic <small>091721789-0012A</small>	Roof - Mid SW Air Handler - White HVAC Tape + Mastic				Insufficient Material
171111-14.13-Tape <small>091721789-0013</small>	Roof @ Ladder - Old/Dark Grey HVAC Tape/Mastic	Silver Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.13-Mastic <small>091721789-0013A</small>	Roof @ Ladder - Old/Dark Grey HVAC Tape/Mastic				Insufficient Material
171111-14.14-Tape <small>091721789-0014</small>	Roof - S Center - Old/Dark Grey HVAC Tape/Mastic	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.14-Mastic <small>091721789-0014A</small>	Roof - S Center - Old/Dark Grey HVAC Tape/Mastic	Brown Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.15-Tape <small>091721789-0015</small>	Roof - SW @ Handler - Old/Dark Grey HVAC Tape/Mastic	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.15-Mastic <small>091721789-0015A</small>	Roof - SW @ Handler - Old/Dark Grey HVAC Tape/Mastic				Insufficient Material
171111-14.16-Tape <small>091721789-0016</small>	Roof @ Ladder - New/Light Grey HVAC Tape/Mastic	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.16-Mastic <small>091721789-0016A</small>	Roof @ Ladder - New/Light Grey HVAC Tape/Mastic				Insufficient Material
171111-14.17-Tape <small>091721789-0017</small>	Roof - S Center - New/Light Grey HVAC Tape/Mastic	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected

Initial report from: 11/13/2017 16:15:09



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

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EMSL Order: 091721789
Customer ID: MECA62
Customer PO: 12982
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
171111-14.17-Mastic <small>091721789-0017A</small>	Roof - S Center - New/Light Grey HVAC Tape/Mastic	Brown Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.18-Tape <small>091721789-0018</small>	Roof - SW - New/Light Grey HVAC Tape/Mastic	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.18-Mastic <small>091721789-0018A</small>	Roof - SW - New/Light Grey HVAC Tape/Mastic				Insufficient Material
171111-14.19 <small>091721789-0019</small>	Roof - Far SW - Grey Flashing Mastic	Gray/Black Non-Fibrous Homogeneous		60% Matrix 36% Non-fibrous (Other)	4% Chrysotile
171111-14.20 <small>091721789-0020</small>	Roof @ NW Equip. Room - Grey Flashing Mastic	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.21 <small>091721789-0021</small>	Roof - Far SE - Grey Flashing Mastic	Gray/Black Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.22-Mastic <small>091721789-0022</small>	Far SW - White Flashing Mastic/Caulk	Gray Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.22-Caulk <small>091721789-0022A</small>	Far SW - White Flashing Mastic/Caulk	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.23-Mastic <small>091721789-0023</small>	Far SW - White Flashing Mastic/Caulk				Insufficient Material
171111-14.23-Caulk <small>091721789-0023A</small>	Far SW - White Flashing Mastic/Caulk	White Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
171111-14.24 <small>091721789-0024</small>	N Entrance - Beige Slab - Ext. Stucco	Gray Non-Fibrous Homogeneous		25% Quartz 15% Gypsum 60% Non-fibrous (Other)	None Detected
171111-14.25 <small>091721789-0025</small>	N Entrance - Red Slab - Ext. Stucco	Gray Non-Fibrous Homogeneous		25% Quartz 15% Gypsum 60% Non-fibrous (Other)	None Detected

Analyst(s)

Jared Martin (38)

Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This 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. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 11/13/2017 16:15:09



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

091721787

EMSL ANALYTICAL, INC.
464 McCormick Street
San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: Millennium Consulting Associates		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different		
Street: 401 Roland Way, Ste 250		If Bill to is Different note instructions in Comments**		
City: Oakland State/Province: CA		Third Party Billing requires written authorization from third party		
Report To (Name): JAIRUS VASQUEZ		Zip/Postal Code: 94621	Country:	
Email Address: jfeiner@mecaenviro.com		Telephone #: 925-808-6700		
Project Name/Number: 3084-2002 - ADMIN CENTER		Fax #:	Purchase Order: 12983	
U.S. State Samples Taken: 5		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		
		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt		
Turnaround Time (TAT) Options* - Please Check				
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week	
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide				
Matrix	Method	Instrument	Reporting Limit	Check
Chips <input type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input checked="" type="checkbox"/> ppm	SW846-7000B	Flame Atomic Absorption	0.01%	<input checked="" type="checkbox"/>
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter	<input type="checkbox"/>
Wipe* ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/> *if no box is checked, non-ASTM Wipe is assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1.0 µg/wipe	<input type="checkbox"/>
	SW846-7000B/7010	Graphite Furnace AA	0.075 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1131/SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-7010	Graphite Furnace AA	0.3 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)	<input type="checkbox"/>
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-AES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-AES	12 µg/filter	<input type="checkbox"/>
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	<input type="checkbox"/>
Other:				<input type="checkbox"/>
Name of Sampler: JAIRUS VASQUEZ		Signature of Sampler: <i>JV Vasquez</i>		
Sample #	Location	Volum/Area	Date/Time Sampled	
17111-14.26	ROOF S. CENTER - WOOD EQUIP. TENT	-	11-11-17	
-14.27	WHITE DWS - INTERIOR OFFICE	-	↓	
-14.28	BEIGE WOOD ROOF PANEL	-		
-14.29	GREEN WOOD ROOF TRIM	-		
-14.30	BEIGE STUCCO	-		
Client Sample #'s		Total # of Samples: 5		
Relinquished (Client): <i>JV Vasquez</i>	Date: 11-13-17	Time:		
Received (Lab): <i>TR</i>	Date: 11/13/17	Time: # 12:00PM W1		
Comments:				



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

0 9 1 7 2 1 7 8 9

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company : Millennium Consulting Associates		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 401 Roland Way Suite 250		<i>Third Party Billing requires written authorization from third party</i>	
City: Oakland	State/Province: CA	Zip/Postal Code: 94621	Country: US
Report To (Name): <u>JAIROS VASQUEZ</u>		Telephone #: (925) 808-6700	
Email Address: jfeiner@mecaenviro.com		Fax #: (925) 808-6708	Purchase Order: <u>12982</u>
Project Name/Number: <u>3084.2002 - ADMIN CENTER</u>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NY ELAP Method 198.1 (friable in NY) <input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY) <input type="checkbox"/> OSHA ID-191 Modified <input type="checkbox"/> Standard Addition Method	<input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1 <input type="checkbox"/> NY ELAP Method 198.4 (TEM) <input type="checkbox"/> Chatfield Protocol (semi-quantitative) <input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2 <input type="checkbox"/> TEM Qualitative via Filtration Prep Technique <input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
Other	
<input type="checkbox"/>	

Check For Positive Stop - Clearly Identify Homogenous Group Date Sampled: 11.11.17

Samplers Name: JAIROS VASQUEZ Samplers Signature: JCVasquez

Sample #	HA #	Sample Location	Material Description
<u>171111</u> <u>-14.01</u>	<u>1</u>	<u>INTERIOR OFFICE NW WALL DL</u>	<u>PWS + JL - WALL</u>
<u>-14.02</u>	<u>1</u>	<u>INTERIOR OFFICE N. WALL @ EDGE</u>	<u>- WALL</u>
<u>-14.03</u>	<u>2</u>	<u>INTERIOR OFFICE @ DECK</u>	<u>- RESIDUAL EXT.</u>
<u>-14.04</u>	<u>2</u>	<u>" " " "</u>	<u>RESIDUAL EXT</u>
<u>-14.05</u>	<u>3/4</u>	<u>ROOF - FAR SW</u>	<u>WHITE ROOF TAPE/MASTIK + INSULATION</u>
<u>-14.06</u>	<u>3/4</u>	<u>" " - S. CENTER</u>	<u>↓</u>
<u>-14.07</u>	<u>4/5</u>	<u>ROOF FAR S.W.</u>	<u>INSULATION + TAR</u>
<u>-14.08</u>	<u>4/5</u>	<u>ROOF @ LADDER</u>	<u>↓</u>
<u>-14.09</u>	<u>4/5</u>	<u>ROOF S. CENTER</u>	<u>↓</u>
<u>-14.10</u>	<u>6</u>	<u>HVAL DUCT @ LADDER</u>	<u>WHITE HVK TAPE/MASTIK</u>

Client Sample # (s): - Total # of Samples: 25

Relinquished (Client): JCVasquez Date: 11.13.17 Time:

Received (Lab): TR Date: 11/13/17 Time: 12:00PM

Comments/Special Instructions: W1



EMSL Analytical, Inc

464 McCormick Street, San Leandro, CA 94577

Phone/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com>

sanleandrolab@emsl.com

EMSL Order:	091721787
CustomerID:	MECA62
CustomerPO:	12983
ProjectID:	

Attn: **Jairus Vasquez**
Millennium Consulting Associates, Inc.
401 Roland Way
Suite 250
Oakland, CA 94621

Phone: (925) 808-6700
Fax: (925) 808-6708
Received: 11/13/17 12:00 PM
Collected: 11/11/2017

Project: 3084.2002-NOMIN CENTER

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Collected	Analyzed	RDL	Lead Concentration
171111-14.26 091721787-0001	11/11/2017	11/13/2017	100 ppm	<100 ppm
Site: ROOF S. CENTER-WOOD EQUIP TENT				
171111-14.27 091721787-0002	11/11/2017	11/13/2017	100 ppm	1100 ppm
Site: WHITE DWS-INTERIOR OFFICE				
171111-14.28 091721787-0003	11/11/2017	11/13/2017	100 ppm	<100 ppm
Site: BEIGE WOOD ROOF RANEL				
171111-14.29 091721787-0004	11/11/2017	11/13/2017	100 ppm	<100 ppm
Site: GREEN WOOD ROOF TRIM				
171111-14.30 091721787-0005	11/11/2017	11/13/2017	100 ppm	<100 ppm
Site: BEIGE STUCCO				

Julian Neagu, Lead Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 11/13/2017 16:00:53