



**ASBESTOS SURVEY AND ASSESSMENT
OF THE
VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232 DEMOLISH BUILDING 1, G ZONE
LOCATED AT**

**550 FOOTHILL DRIVE
SALT LAKE CITY, UTAH**

Prepared for:

**VCI
18300 East 71st Street
Suite 130
Denver, Colorado 80249**

Prepared by:

**Steven B. Smith
AHERA Inspector #R17-1465-AI-O-UT
State of Utah Inspector #ASB-3274**

Table of Contents

ASBESTOS

1.0	INTRODUCTION	1
2.0	EXECUTIVE SUMMARY	2
3.0	SAMPLING METHODS.....	5
4.0	SURVEY RESULTS	5
5.0	CONCLUSIONS.....	6
6.0	LIMITATIONS AND EXCLUSION OF WARRANTY	6

List of Appendices

Appendix A	Sample Log
Appendix B	Laboratory Report
Appendix C	Photo Log
Appendix D	Floorplans

1.0 INTRODUCTION

R & R Environmental, Inc. (R & R) was contacted to conduct an asbestos survey for the Veterans Administration Medical Center, 660-18-232, Building 1, G Zone. The survey consisted of a visual assessment of the building's interior floors and walls for suspect asbestos containing materials (ACM) and bulk sampling of the materials. The fieldwork component of this survey was conducted by Mr. Steve Smith who is a Utah Accredited Asbestos Building Inspector.

This report presents the conditions and observations noted on the visit dates.

The following general information is included in this survey report:

- Executive Summary (Section 2.0)
- Sampling Methods (Section 3.0)
- Analytical Results (Section 4.0)
- Conclusions (5.0)

2.0 EXECUTIVE SUMMARY

Asbestos-containing material (ACM) identified at the Veterans Administration Medical Center, 660-18-232 Demolish Building 1, G Zone is as follows:

Material	Location	Quantity	% Asbestos	Photo #	Condition
12" Vinyl Floor Tile – Off White/multi colored, tan adhesive, Black Mastic	Hallways	1,404 ft ²	None Detected 7-13% Chrysotile	1	Good
12" Vinyl Floor Tile – Light Brown/multi colored, Black Mastic	Copier Room, 1G-20/04.	253 ft ²	10-15% Chrysotile 10-15% Chrysotile	2	Good
9" Vinyl Floor Tile – Red/ multi colored with black mastic	1G01A	273 ft ²	10-18% Chrysotile 10-18% Chrysotile	3	Good
Tile Adhesive – Black Mastic	1G01, 1G02B, 1G07, 1G02A, 1G12, 1G15, 1G15A, 1G17G, 1G17D.	4,865 ft ²	4-12% Chrysotile	4	Good
Carpet Adhesive & Black Mastic	1G08, 1G17, 1G17D, 1G17F, 1G15, 1G11, 1G03, 1G07A.	4,097ft ²	2-10% Chrysotile	5	Good
Ceramic Tile & Grout Tan/Green Resinous Material	Hall Mechanical Room Tunnel Hatch	4 ft ²	None Detected 9% Chrysotile	6	Good
12" Vinyl Floor Tile – Tan/Multi colored Floor Tile and black Mastic	1G03A	255 ft ²	8-14% Chrysotile 8-14% Chrysotile	9	Good
12" Ceiling Tile Adhesive- (Above drop down ceiling)	Above Ceilings in Offices, and Library	270 LF	6-8% Chrysotile	20	Good
Drinking Fountain Putty	Hallway	1 Unit	8% Chrysotile	22	Good
HVAC Duct Sealant #1	Throughout	875 LF	7-12% Chrysotile	28	Good
TSI- Pipe Lagging (Air Cell)	1G17G	35 LF	70-80% Chrysotile	32	Good
TSI – Plaster Fittings	1G11, 1G09, 1G05, 1G03A, 1G03, 1G01, 1G01A, 1G02A, 1G02, 1G02B, 1G04, 1G08, 1G12, Bathrooms	85 Each	4-10% Chrysotile	33	Good
Roofing Material- Yellow Foam, Black Tar Mastic	Roof	9,250 ft ²	None Detected 3% Chrysotile	42	Good
9'X9' Vinyl tile- Green	1B47	150 ft ²	12-15 % Chrysotile	39	Good
Exterior Wall Black Tar	All Exterior Wall Cavities	7,250 ft ²	Assumed	42	Good

NOTES: NA

VETERANS ADMINISTRATION
DATE OF SURVEY: DECEMBER 19, 2017
NESHAP - REGULATED
ASBESTOS-CONTAINING MATERIALS (R-ACM)

1. Friable asbestos material (>1% asbestos and can be crumbled, pulverized or reduced to powder by hand pressure)
 - ☒ Thermal system insulation (TSI)*
 - ☐ Textured ceiling material (TCM)*
 - ☐ Spray-on insulation or fireproofing*
 - ☐ Blown-in insulation*
 - ☐ Ceiling tiles/panels*
 - ☒ Plaster, gypsum board, gypsum board joint compound*
 - ☐ Cloth materials*
 - ☐ Paper materials* (HVAC Paper Tape and Insulating Board)
 - ☐ Electrical wiring insulation*
 - ☐ Sink undercoating (loose)*
 - ☐ Other*
2. Category I ACM which has become friable
 - ☐ Packings
 - ☒ Gaskets (Boiler Rope Gasket)
 - ☐ Resilient floor coverings
 - ☐ Asphalt roofing products
3. Category I ACM that will be or has been subjected to sanding, grinding, cutting or abrading
 - ☐ Packings
 - ☐ Gaskets
 - ☐ Resilient floor coverings
 - ☐ Asphalt roofing products
4. Category II ACM that has a high probability of becoming or has become friable in the course of demolition or renovation operations
 - ☒ Asbestos cement materials (fiber cement ceiling panels)*
 - ☐ Asphalt, tar and rubber-base ACM products other than roofing products
 - ☐ Non-asphalt and non-paper roofing products*
 - ☐ Paint
 - ☐ Fire brick and/or mortar*
 - ☐ Stainless steel sink undercoating
 - ☐ Encapsulated TCM*
 - ☐ Encapsulated TSI*
 - ☐ Mastic for floor tile, ceiling tile, cove molding, etc.
 - ☒ Other (Exterior Caulk, Window Glaze)

VETERANS ADMINISTRATION
DATE OF SURVEY: DECEMBER 19, 2017
NESHAP NON-REGULATED
ASBESTOS-CONTAINING MATERIAL (N-R-ACM)

1. $\geq 1\%$ asbestos
2. Category I Non-friable (cannot be crumbled, pulverized, or reduced to powder by hand pressure) ACM with $>1\%$ asbestos by new PLM procedure
☐ Packings
☐ Gaskets
☐ Resilient floor coverings (floor tile)
☐ Asphalt roofing products
3. Category II Non-friable ACM with $>1\%$ asbestos by new PLM procedure (Category includes items meeting Category I definition but not specifically listed in that category)
☐ Asbestos cement materials (Transite)* (Fume hoods, counter tops, and window panels)
☐ Asphalt, tar and rubber-base ACM products other than roofing products*
☐ Non-asphalt and non-paper roofing products*
☐ Paint*
☐ Fire brick and/or mortar*
☐ Sink undercoating (solid)*
☒ Mastic for floor tile, ceiling tile, cove molding, etc.*
☐ Other* (Fire door)

Notes:

1. (*) denotes R & R's interpretation of materials included in this category.
2. New PLM procedure is outlined in Appendix A, Subpart F, 40 CFR, Part 783, Section 1, Polarized Light Microscopy.
3. The Environmental Protection Agency (EPA) National Emission Standard for Hazardous Air Pollutants (NESHAP) asbestos revision as outlined in 40 CFR, Part 61, became effective November 20, 1990. The asbestos classification system outlined in the revision and included in this section is dynamic in nature. Asbestos materials classified as "NON-REGULATED" at the time of the survey may become "REGULATED" due to ongoing or planned maintenance, renovation, or demolition actions, which can transform a material containing greater than 1% asbestos from a "non-friable" and NON-REGULATED to a friable and REGULATED condition. Classification of ACM in this section and in the executive summary of this report is, therefore, based on the observations of the surveyor at the time of the survey and may or may not be appropriate at later dates.
4. Maintenance, renovation, demolition, weathering, normal wear, water or other damage can alter the "NON-REGULATED" status of materials, and necessitate precautions required for handling them as "REGULATED" asbestos-materials.

3.0 SAMPLING METHODS

Survey procedures were based on those outlined in Title 40 Code of Federal Regulation (CFR) Part 763, USEPA Asbestos Hazard Emergency Response Act, and the Asbestos Model Accreditation Plan (effective April 4, 1994). The procedures included visual observation, physical inspection, bulk sample collection, and condition assessment of suspect ACM. The number of samples collected was based on the amount and accessibility of each homogeneous material, with consideration given for the type, age, and condition.

Three hundred thirty-four (334) samples were collected from the suspect materials to assess the presence of asbestos (or lack thereof) in building materials/systems. Each sample collected was placed into a sealable plastic bag or tub, marked with a unique sample identification code, and packaged for subsequent shipment to the laboratory for analysis. Individual sample identification consisted of a numeric code denoting the sampling media/location.

Subsequent to packaging and labeling, samples were submitted under proper chain-of-custody to Reservoirs Environmental, Inc., Denver, Colorado. The National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896 accredits Reservoirs for asbestos analysis. Samples were analyzed via Polarized Light Microscopy (PLM) utilizing EPA Method 600/M4-82-020. Please note that USEPA and OSHA regulations define an ACM as a material containing more than one (1) percent asbestos, by volume, as determined by PLM analysis. In the case of multi-layer systems (e.g., floor tile/mastic layers), the laboratory analyzed and reported each layer separately.

4.0 SURVEY RESULTS

Three hundred thirty-four (334) representative samples collected were submitted for analytical determination. A summary of analytical results for samples collected and analyzed for this survey are in Appendix B (Laboratory Results). Photographs illustrating representative asbestos containing media are included as Appendix C.

5.0 CONCLUSIONS

The building will be demolished. ACM was identified during the survey of the facility. See the Executive Summary for specific materials/locations. Friable materials or materials that may become friable during demolition must be removed prior to demolition. Non-friable materials which will not become friable during demolition may remain in the building for demolition. However, if materials remain in the building, OSHA regulations would still apply to these.

6.0 LIMITATIONS AND EXCLUSION OF WARRANTY

This asbestos survey and assessment was performed using procedures and a level of diligence typically exercised by professional consultants performing similar services. However, asbestos-containing material (ACM) can be present in a structure, but not identified using ordinary investigative procedures.

No asbestos survey can completely, eliminate uncertainty regarding the presence of ACM. R & R Environmental, Inc.'s level of diligence and investigative procedures are intended to reduce, but not eliminate, potential uncertainty regarding the presence of ACM. The procedures used for this survey attempt to establish a balance between the competing goals of limiting investigative costs, time, and building damage, and reducing the uncertainty about unknown conditions. Therefore, the determinations in this report should not be construed as a guarantee that all ACM present in the subject property has been included in this report.

This report presents R & R Environmental, Inc.'s professional determinations, which are dependent upon information obtained during performance of consulting services. R & R Environmental, Inc. assumes no responsibility for omissions or errors resulting from inaccurate information provided by sources outside of R & R Environmental, Inc.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions, or recommendations contained in this report. The limitations presented above supersede the requirements or provisions of all other contracts or scopes of work, implied, or otherwise, except stated or acknowledged herein.

**ASBESTOS SURVEY AND ASSESSMENT
OF THE
VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE**

During the month of December 2017, R & R Environmental, Inc. (R & R) of Sandy, Utah, conducted an asbestos survey and assessment for Veterans Administration Hospital Library. Bulk samples of suspect asbestos-containing materials were collected and analyzed. The condition of all friable and non-friable asbestos-containing materials were assessed. The following accredited inspector conducted the survey and assessment.

Inspected by:



January 5, 2018

Steven B. Smith
State of Utah, Inspector Certification Number: ASB-3274

Reviewed by:



January 5, 2018

Stephen S. Galley, CSP
State of Utah, Inspector Certification Number: ASB-0570
AHERA Inspector #160851
Certified Safety Professional #24733

Appendix A

Sample Log

SAMPLE LOG

Sample #	Material	Sample Location / Quantity	Lab Result (%/Type)	Photo #	Assumed ACM (Yes/No)	Assessment
VAHL-12-19-17-01 To VAHL-12-19-17-15	12" Vinyl Floor Tile – Off White/multi colored, tan adhesive. Black Mastic.	Hallways / 1,404 ft ²	None Detected None Detected 7-13% Chrysotile	1	No	Good
VAHL-12-19-17-16 To VAHL-12-19-17-18	12" Vinyl Floor Tile – Light Brown/multi colored, Black Mastic.	Copier Room, 1G-20/04. / 253 ft ²	10-15% Chrysotile 10-15% Chrysotile	2	No	Good
VAHL-12-19-17-16 To VAHL-12-19-17-21	9" Vinyl Floor Tile – Red/ multi colored with black mastic	1G01A / 273 ft ²	10-18% Chrysotile 10-18% Chrysotile	3	No	Good
VAHL-12-19-17-22 To VAHL-12-19-17-30	Tile Adhesive – Black Mastic	1G01, 1G02B, 1G07, 1G02A, 1G12, 1G15, 1G15A, 1G17G, 1G17D. / 4,865 ft ²	4-12% Chrysotile	4	No	Good
VAHL-12-19-17-31 To VAHL-12-19-17-39	Carpet Adhesive & Black Mastic	1G08, 1G17, 1G17D, 1G17F, 1G15, 1G11, 1G03, 1G07A.	2-10% Chrysotile	5	No	Good
VAHL-12-19-17-40 To VAHL-12-19-17-48	Ceramic Tile & Grout Tan/Green Resinous Material	Hall Mechanical Room Tunnel Hatch / 4 ft ²	None Detected 9% Chrysotile	6	No	Good
VAHL-12-19-17-49 To VAHL-12-19-17-57	Vinyl Cove Base – Tan with Black Mastic	1G03A / 255 ft ²	None Detected None Detected	7	No	Good
VAHL-12-19-17-58 To VAHL-12-19-17-60	Vinyl Cove Base – Brown with Black Mastic	Copier Room,	None Detected None Detected	8	No	Good
VAHL-12-19-17-61 To VAHL-12-19-17-66	12" Vinyl Floor Tile – Tan/Multi colored Floor Tile and black Mastic	G-106-3A	8-14% Chrysotile 8-14% Chrysotile	9	No	Good

Sample #	Material	Sample Location / Quantity	Lab Result (%/Type)	Photo #	Assumed ACM (Yes/No)	Assessment
VAHL-12-19-17-67 To VAHL-12-19-17-75	Cove Base Adhesive-Brown	1G17E, 1G17D, 1G17G, 1G15, 1G17C, 1G17B, 1G17A, 1G17, 1G17.6/ 658 ft²	None Detected	10	No	Good
VAHL-12-19-17-76 To VAHL-12-19-17-84	Wall System –	1G17E, 1G11, 1G03, 1G02B, 1G16, 1G17A, 1G15, 1G01C, 1B47/ 10,968 ft²	None Detected	11	No	Good
VAHL-12-19-17-85 To VAHL-12-19-17-93	Plaster Surfacing	Hallways, 1G03, 1G09, 1G15, 1G17E, 1G06, 1G02, 1G12/ 6,240 ft²	None Detected	12	No	Good
VAHL-12-19-17-94 To VAHL-12-19-17-102	Concrete Deck Patch/ Filler Material-	Hallways, 1G17, 1G17D, 1G13/ 908 LF	None Detected	13	No	Good
VAHL-12-19-17-103 To VAHL-12-19-17-105	Black Construction Adhesive-	1G17.06/ 7 ft²	None Detected	14	No	Good
VAHL-12-19-17-106 To VAHL-12-19-17-114	Fire Door Insulation	Throughout/ 15 units	None Detected	15	No	Good
VAHL-12-19-17-115 To VAHL-12-19-17-117	Fire Door Frame Material	Throughout/ 5 units	None Detected	16	No	Good
VAHL-12-19-17-118 To VAHL-12-19-17-126	2'X2' Ceiling Panel #1	1G01A, 1G02, 1G03A, 1G08, 1G11, 1G12, 1G00B, 1G15, 1G17/ 8,120 ft²	None Detected	17	No	Good
VAHL-12-19-17-127 To VAHL-12-19-17-135	2'X2' Ceiling Panel #2	1G01A, 1G02, 1G03A, 1G08, 1G11, 1G12, 1G00B, 1G15, 1G17/ 560 ft²	None Detected	18	No	Good
VAHL-12-19-17-136 To VAHL-12-19-17-144	12" Ceiling Tile - (above drop down ceiling)	1G17, 1G17C, 1G11, 1G07, 1G03A, 1G03, 1G01A/ 270 LF	None Detected	19	No	Good

Sample #	Material	Sample Location / Quantity	Lab Result (%/Type)	Photo #	Assumed ACM (Yes/No)	Assessment
VAHL-12-19-17-145 To VAHL-12-19-17-153	12" Ceiling Tile Adhesive- (above drop down ceiling)	1G17, 1G17C, 1G11, 1G07, 1G03A, 1G03, 1G01A/ 270 LF	6-8% Chrysotile	20	No	Good
VAHL-12-19-17-154 To VAHL-12-19-17-162	Radiator Shield Board	1G17D, 1G17, 1G13, 1G12, 1G15, 1G02, 1G01/ 54 units (1,100 ft ²)	None Detected	21	No	Good
VAHL-12-19-17-163	Drinking Fountain Putty	Hallway/ 1 unit	8% Chrysotile	22	No	Good
VAHL-12-19-17-164 To VAHL-12-19-17-166	Dark Red Fire Putty	1G20, 1G17/ Less than 20 ft ²	None Detected	23	No	Good
VAHL-12-19-17-167 To VAHL-12-19-17-169	Light Red Fire Putty	1G20, 1G17/ Less than 20 ft ²	None Detected	24	No	Good
VAHL-12-19-17-170 To VAHL-12-19-17-172	Green Fire Putty	1G20, 1G17/ Less than 20 ft ²	None Detected	25	No	Good
VAHL-12-19-17-173 To VAHL-12-19-17-175	White Fire Putty	1G20, 1G17, Room Hallways/ Less than 20 ft ²	None Detected	26	No	Good
VAHL-12-19-17-176 To VAHL-12-19-17-184	Plumbers Putty	Throughout/ 889 LF	None Detected	27	No	Good
VAHL-12-19-17-185 To VAHL-12-19-17-193	HVAC Duct Sealant #1	1G17, 1G17D, Hallways, 1G05, 1G03A, 1G01, 1G02, 1G08/ 875 LF	7-12% Chrysotile	28	No	Good
VAHL-12-19-17-194 To VAHL-12-19-17-202	HVAC Duct Sealant #2	1G17, 1G17D, Hallways, 1G05, 1G03A, 1G01, 1G02, 1G08/ 875 LF	None Detected	29	No	Good

Sample #	Material	Sample Location / Quantity	Lab Result (%/Type)	Photo #	Assumed ACM (Yes/No)	Assessment
VAHL-12-19-17-212 To VAHL-12-19-17-220	Duct Insulation Adhesive- Yellow	1G17, 1G17D, Hallways, 1G05, 1G03A, 1G01, 1G02, 1G08/ 875 LF	None Detected	30	No	Good
VAHL-12-19-17-221 To VAHL-12-19-17-229	Duct Insulation -	1G17, 1G17D, Hallways, 1G05, 1G03A, 1G01, 1G02, 1G08/ 875 LF	None Detected	31	No	Good
VAHL-12-19-17-230 To VAHL-12-19-17-238	TSI- Pipe Lagging (Air Cell)	1G17G/ 35 LF	70-80% Chrysotile	32	No	Good
VAHL-12-19-17-239 To VAHL-12-19-17-247	TSI – Plaster Fittings	1G11, 1G09, 1G05, 1G03A, 1G01, 1G02, 1G04/ 85 each	4-10% Chrysotile	33	No	Good
VAHL-12-19-17-254 To VAHL-12-19-17-256	TSI – End Sealant	1G11, 1G09, 1G05, 1G03A, 1G01, 1G02, 1G04/ NA	None Detected	NA	No	Good
VAHL-12-19-17-257 To VAHL-12-19-17-265	HVAC Vibrator Isolator	1G11, 1G09, 1G05, 1G03A, 1G01, 1G02, 1G04/ 12 units	None Detected	34	No	Good
VAHL-12-19-17-274	Bathroom Panel	Women's Bathroom/ 8 ft²	None Detected	35	No	Good
VAHL-12-19-17-275 To VAHL-12-19-17-283	Window Caulk	Exterior Windows/ 954 LF	None Detected	36	No	Good
VAHL-12-19-17-284	Sink Undercoating #1	1G01C/ 1 unit	None Detected	37	No	Good
VAHL-12-19-17-285	Sink Undercoating #2	1G17B/ 1 unit	None Detected	38	No	Good
VAHL-12-19-17-286 To VAHL-12-19-17-294	Roofing Material- Yellow Foam, Black Tar Mastic	Roof/ 9,250 ft²	None Detected 3% Chrysotile	43	No	Good

Sample #	Material	Sample Location / Quantity	Lab Result (%/Type)	Photo #	Assumed ACM (Yes/No)	Assessment
VAHL-12-19-17-295 To VAHL-12-19-17-297	HVAC Vibration Isolator	Roof Mechanical Room/ 2 units	None Detected	NA	No	Good
VAHL-12-19-17-307 To VAHL-12-19-17-309	Duct Tape	Roof Mechanical Room/ 20 LF	None Detected	NA	No	Good
VAHL-12-19-17-310	Wall Covering #1	1B47/ 720 ft ²	None Detected	NA	No	Good
VAHL-12-19-17-311 To VAHL-12-19-17-313	9'X9' Vinyl tile- Green	1B47/ 150 ft ²	12-15 % Chrysotile	39	No	Good
VAHL-12-19-17-314 To VAHL-12-19-17-316	Adhesive on Wall	1B47/ 720 ft ²	None Detected	44	No	Good
VAHL-12-19-17-317 To VAHL-12-19-17-325	Roof Penetration Sealant	Roof/ 50 ft ²	None Detected	40	No	Good
VAHL-12-19-17-326 To VAHL-12-19-17-334	Wall Covering #2-5	1B47/ 8,780 ft ²	None Detected	41	No	Good
NA	Exterior Wall Black Tar	1B47/ 7,250 ft ²	NA	42	YES	Good

Appendix B

Laboratory Report



December 28, 2017

Subcontract Number: NA
Laboratory Report: RES 396979-1
Project # / P.O. # None Given
Project Description: VA Library

Chris Reynolds
R & R Environmental
47 West 9000 South #2
Sandy UT 84070

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 396979-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,


Nicole Castillo for

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 396979-1**
 Client: **R & R Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **VA Library**
 Date Samples Received: **December 19, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **December 28, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-01	EM 1992040	A	Tan adhesive	1		ND	0	100
		B	White compound	39		ND	0	100
		C	Off white/multi-colored floor tile	60		ND	0	100
VA-1-G-02	EM 1992041	A	Tan adhesive	2		ND	0	100
		B	Off white/multi-colored floor tile	98		ND	0	100
VA-1-G-03	EM 1992042	A	Tan adhesive	1		ND	0	100
		B	White compound	14		ND	0	100
		C	Off white/multi-colored floor tile	85		ND	0	100
VA-1-G-04	EM 1992043	A	Tan adhesive	1		ND	0	100
		B	White compound	29		ND	0	100
		C	Off white/multi-colored floor tile	70		ND	0	100
VA-1-G-05	EM 1992044	A	Tan adhesive	1		ND	0	100
		B	White compound	9		ND	0	100
		C	Off white/multi-colored floor tile	90		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 396979-1**
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 Date Samples Analyzed: **December 28, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-06	EM 1992045	A	Tan adhesive	1		ND	0	100
		B	White compound	39		ND	0	100
		C	Off white/multi-colored floor tile	60		ND	0	100
VA-1-G-07	EM 1992046	A	Tan adhesive	2		ND	0	100
		B	White compound	28		ND	0	100
		C	Off white/multi-colored floor tile	70		ND	0	100
VA-1-G-08	EM 1992047	A	Tan adhesive	TR		ND	0	100
		B	White compound	15		ND	0	100
		C	Off white/multi-colored floor tile	85		ND	0	100
VA-1-G-09	EM 1992048	A	Tan adhesive	1		ND	0	100
		B	White compound	5		ND	0	100
		C	Off white/multi-colored floor tile	94		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 396979-1**
 Client: **R & R Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **VA Library**
 Date Samples Received: **December 19, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **December 28, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-10	EM 1992049	A	Gray leveling compound	2	Chrysotile	ND	0	100
		B	Tan adhesive	2		ND	0	100
		C	Black mastic	6		10	0	90
		D	Off white/multi-colored floor tile	90		ND	0	100
VA-1-G-11	EM 1992050	A	Tan adhesive	1	Chrysotile	ND	0	100
		B	Black mastic	3		12	0	88
		C	Off white/multi-colored floor tile	96		ND	0	100
VA-1-G-12	EM 1992051	A	Tan adhesive	1		ND	0	100
		B	Gray leveling compound	1		ND	0	100
		C	Off white/multi-colored floor tile	98		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

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					Mineral	Visual Estimate (%)		
VA-1-G-13	EM 1992052	A	Off white adhesive	1		ND	0	100
		B	Gray leveling compound	1		ND	0	100
		C	Black mastic	2	Chrysotile	8	0	92
		D	Black mastic	2	Chrysotile	10	0	90
		E	Tan adhesive	9		ND	0	100
		F	Off white/multi-colored floor tile	85		ND	3	97
VA-1-G-14	EM 1992053	A	Tan adhesive	TR		ND	0	100
		B	Black mastic	TR	Chrysotile	7	0	93
		C	Black mastic	1	Chrysotile	13	0	87
		D	Tan adhesive	2		ND	0	100
		E	Off white/multi-colored floor tile	97		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-15	EM 1992054	A	Tan adhesive	2		ND	0	100
		B	Black mastic	3	Chrysotile	13	0	87
		C	Tan adhesive	5		ND	0	100
		D	Off white/multi-colored floor tile	90	Chrysotile	2	3	95
VA-1-G-16	EM 1992055	A	Black mastic	3	Chrysotile	10	0	90
		B	Light brown/multi-colored floor tile	97	Chrysotile	13	0	87
VA-1-G-17	EM 1992056	A	Black mastic	4	Chrysotile	18	0	82
		B	Light brown/multi-colored floor tile	96	Chrysotile	15	8	77
VA-1-G-18	EM 1992057	A	Black mastic	3	Chrysotile	15	0	85
		B	Light brown/multi-colored floor tile	97	Chrysotile	13	10	77
VA-1-G-19	EM 1992058	A	Black mastic	3	Chrysotile	13	0	87
		B	Red/multi-colored floor tile	97	Chrysotile	10	8	82

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-20	EM 1992059	A	Black mastic	4	Chrysotile	12	0	88
		B	Red/multi-colored floor tile	96	Chrysotile	10	10	80
VA-1-G-21	EM 1992060	A	Black mastic	3	Chrysotile	15	0	85
		B	Red/multi-colored floor tile	97	Chrysotile	13	8	79
VA-1-G-22	EM 1992061	A	Black/tan mastic	100	Chrysotile	5	0	95
VA-1-G-23	EM 1992062	A	Black/tan mastic	100	Chrysotile	5	0	95
VA-1-G-24	EM 1992063	A	Gray resinous material	50		ND	4	96
		B	Black/tan mastic	50	Chrysotile	4	0	96
VA-1-G-25	EM 1992064	A	Black mastic	30	Chrysotile	10	0	90
		B	Beige/white resinous material	70		ND	0	100
VA-1-G-26	EM 1992065	A	Black/tan mastic	100	Chrysotile	10	0	90
VA-1-G-27	EM 1992066	A	Black/tan mastic	100	Chrysotile	8	0	92
VA-1-G-28	EM 1992067	A	Black/tan mastic	100	Chrysotile	12	0	88

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					Mineral	Visual Estimate (%)		
VA-1-G-29	EM 1992068	A	Black/tan mastic w/ gray foam	100	Chrysotile	5	0	95
VA-1-G-30	EM 1992069	A	Black/tan mastic	100	Chrysotile	12	0	88
VA-1-G-31	EM 1992070	A	Tan/black mastic	100	Chrysotile	2	0	98
VA-1-G-32	EM 1992071	A	Black mastic	2	Chrysotile	7	0	93
		B	Tan adhesive	5		ND	0	100
		C	White compound	93		ND	0	100
VA-1-G-33	EM 1992072	A	White compound w/ tan adhesive	100		ND	0	100
VA-1-G-34	EM 1992073	A	Black mastic	TR	Chrysotile	8	0	92
		B	Tan adhesive	10		ND	0	100
		C	White compound	90		ND	0	100
VA-1-G-35	EM 1992074	A	Black mastic	1	Chrysotile	9	0	91
		B	White compound	5		ND	0	100
		C	Tan adhesive	14		ND	0	100
		D	White compound	80		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-36	EM 1992075	A	Tan/black mastic	100	Chrysotile	4	0	96
VA-1-G-37	EM 1992076	A	Black/multi-colored mastic	100	Chrysotile	2	TR	98
VA-1-G-38	EM 1992077	A	Tan adhesive/black mastic	100	Chrysotile	2	2	96
VA-1-G-39	EM 1992078	A	Gray cementitious material	1		ND	0	100
		B	Black mastic	2	Chrysotile	10	0	90
		C	Tan adhesive	7		ND	0	100
		D	White compound	90		ND	0	100
VA-1-G-40	EM 1992079	A	Tan adhesive	5		ND	0	100
		B	Gray granular cementitious material	35		ND	0	100
		C	Reddish brown/multi-colored ceramic material	60		ND	0	100
VA-1-G-41	EM 1992080	A	Off white grout	2		ND	0	100
		B	Off white adhesive	5		ND	0	100
		C	Gray leveling compound	5		ND	0	100
		D	Off white ceramic tile	88		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-42	EM 1992081	A	Off white granular material w/ gray paint	40		ND	0	100
		B	Gray granular material	60		ND	0	100
VA-1-G-43	EM 1992082	A	Tan/green resinous material	2	Chrysotile	9	0	91
		B	Beige resinous material	6		ND	0	100
		C	Gray granular material	10		ND	0	100
		D	Gray granular material	13		ND	0	100
		E	Green tile	69		ND	0	100
VA-1-G-44	EM 1992083	A	Green tile	5		ND	0	100
		B	Gray leveling compound	20		ND	0	100
		C	Gray granular material	75		ND	0	100
VA-1-G-45	EM 1992084	A	White grout	2		ND	0	100
		B	Gray granular material	2		ND	0	100
		C	White compound	3		ND	0	100
		D	White/off white ceramic tile	93		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-46	EM 1992085	A	Tan adhesive	TR		ND	0	100
		B	Gray granular material	5		ND	0	100
		C	Gray granular material	5		ND	0	100
		D	Tan paper	5		ND	90	10
		E	Blue tile	85		ND	0	100
VA-1-G-47	EM 1992086	A	Tan adhesive	1		ND	0	100
		B	Gray leveling compound	2		ND	0	100
		C	Gray granular cementitious material	17		ND	0	100
		D	Reddish brown/multi-colored ceramic material	80		ND	0	100
VA-1-G-48	EM 1992087	A	Gray granular material	5		ND	0	100
		B	Gray granular material	5		ND	0	100
		C	Reddish brown/multi-colored ceramic material	90		ND	0	100
VA-1-G-49	EM 1992088	A	Colorless/yellow adhesive	3		ND	0	100
		B	Tan cove base	97		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-50	EM 1992089	A	Black mastic	TR	Chrysotile	2	0	98
		B	Off white adhesive w/ white/blue resinous material	5		ND	0	100
		C	Tan cove base	95		ND	0	100
VA-1-G-51	EM 1992090	A	White paint w/ white compound	3		ND	0	100
		B	Off white adhesive	5		ND	0	100
		C	Tan cove base	92		ND	0	100
VA-1-G-52	EM 1992091	A	Brown/off white ceramic material	5		ND	0	100
		B	Tan cove base	5		ND	0	100
		C	Off white adhesive w/ blue/white resinous material	90		ND	0	100
VA-1-G-53	EM 1992092	A	Off white adhesive w/ off white/multi-colored resinous material	5		ND	0	100
		B	Tan cove base	95		ND	0	100
VA-1-G-54	EM 1992093	A	Off white adhesive w/ white/blue resinous material	3		ND	0	100
		B	Tan cove base	97		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-55	EM 1992094	A	Off white adhesive w/ white/blue resinous material	4		ND	0	100
		B	Tan cove base	96		ND	0	100
VA-1-G-56	EM 1992095	A	Tan/off white adhesive	3		ND	0	100
		B	Tan cove base	97		ND	0	100
VA-1-G-57	EM 1992096	A	Brown adhesive w/ white paint	3		ND	3	97
		B	Off white adhesive w/ off white paint	6		ND	0	100
		C	Tan cove base	91		ND	0	100
VA-1-G-58	EM 1992097	A	White paint w/ white compound	4		ND	0	100
		B	Off white adhesive	4		ND	0	100
		C	Brown cove base	92		ND	0	100
VA-1-G-59	EM 1992098	A	Tan paper	5		ND	90	10
		B	Off white adhesive w/ white resinous material	5		ND	0	100
		C	Brown cove base	90		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-60	EM 1992099	A	Tan paper	5		ND	90	10
		B	Off white adhesive w/ white resinous material	5		ND	0	100
		C	Brown cove base	90		ND	0	100
VA-1-G-61	EM 1992100	A	Black mastic	5	Chrysotile	10	0	90
		B	Tan/multi-colored floor tile	95	Chrysotile	12	8	80
VA-1-G-62	EM 1992101	A	Black mastic	4	Chrysotile	8	0	92
		B	Tan/multi-colored floor tile	96	Chrysotile	10	10	80
VA-1-G-63	EM 1992102	A	Black mastic	5	Chrysotile	12	0	88
		B	Tan/multi-colored floor tile	95	Chrysotile	10	10	80
VA-1-G-64	EM 1992103	A	Black mastic	5	Chrysotile	8	0	92
		B	Tan/multi-colored floor tile	95	Chrysotile	13	10	77
VA-1-G-65	EM 1992104	A	Black mastic	4	Chrysotile	10	0	90
		B	Tan/multi-colored floor tile	96	Chrysotile	14	8	78

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					Mineral	Visual Estimate (%)		
VA-1-G-66	EM 1992105	A	Black mastic	4	Chrysotile	10	0	90
		B	Tan/multi-colored floor tile	96	Chrysotile	12	8	80
VA-1-G-67	EM 1992106	A	Off white adhesive	20		ND	0	100
		B	Brown adhesive	80		ND	3	97
VA-1-G-68	EM 1992107	A	Brown adhesive	100		ND	2	98
VA-1-G-69	EM 1992108	A	Brown adhesive	100		ND	2	98
VA-1-G-70	EM 1992109	A	Tan adhesive	15		ND	0	100
		B	Brown adhesive	85		ND	4	96
VA-1-G-71	EM 1992110	A	Tan adhesive	15		ND	0	100
		B	Brown adhesive	85		ND	2	98
VA-1-G-72	EM 1992111	A	Tan adhesive	5		ND	0	100
		B	Brown adhesive	40		ND	0	100
		C	Brown adhesive w/ off white paint	55		ND	3	97

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VA-1-G-73	EM 1992112	A	Tan adhesive	5		ND	0	100
		B	Brown adhesive w/ off white paint	30		ND	0	100
		C	Brown adhesive	65		ND	2	98
VA-1-G-74	EM 1992113	A	Tan adhesive	3		ND	0	100
		B	Brown adhesive	97		ND	2	98
VA-1-G-75	EM 1992114	A	Tan adhesive	5		ND	0	100
		B	Gray foam	30		ND	0	100
		C	Brown adhesive	65		ND	3	97
VA-1-G-76	EM 1992115	A	Off white paint w/ white compound	3		ND	0	100
		B	White joint compound	5		ND	0	100
		C	White tape	22		ND	95	5
		D	White/tan drywall	70		ND	20	80

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					Mineral	Visual Estimate (%)		
VA-1-G-77	EM 1992116	A	White joint compound	5		ND	0	100
		B	White compound w/ beige paint	15		ND	0	100
		C	White tape	15		ND	95	5
		D	White/tan drywall	65		ND	15	85
VA-1-G-78	EM 1992117	A	White joint compound	3		ND	0	100
		B	White compound w/ beige/multi-colored paint	5		ND	0	100
		C	White compound w/ white paint	5		ND	0	100
		D	White/tan drywall	37		ND	35	65
		E	White tape	50		ND	95	5

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NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 396979-1**
 Client: **R & R Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **VA Library**
 Date Samples Received: **December 19, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **December 28, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-79	EM 1992118	A	White compound w/ white paint	5		ND	0	100
		B	White joint compound	10		ND	0	100
		C	White tape	10		ND	95	5
		D	White compound w/ off white/multi-colored paint	15		ND	0	100
		E	White/tan drywall	25		ND	25	75
		F	Off white perlitic plaster	35		ND	0	100
VA-1-G-80	EM 1992119	A	White tape	30		ND	95	5
		B	White compound w/ off white paint	35		ND	0	100
		C	White joint compound	35		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-81	EM 1992120	A	Tan fibrous material w/ off white adhesive	5		ND	85	15
		B	White plaster w/ green paint	10		ND	0	100
		C	White compound w/ grayish green/white paint	10		ND	0	100
		D	White joint compound	10		ND	0	100
		E	White tape	15		ND	95	5
		F	Gray plaster	50		ND	0	100
VA-1-G-82	EM 1992121	A	White joint compound	5		ND	0	100
		B	White compound w/ white paint	5		ND	0	100
		C	White compound w/ off white paint	10		ND	0	100
		D	White tape	15		ND	95	5
		E	Off white/tan drywall	65		ND	15	85

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-83	EM 1992122	A	White joint compound	5		ND	0	100
		B	White compound	5		ND	0	100
		C	White resinous material w/ gray paint	10		ND	0	100
		D	White tape	15		ND	95	5
		E	Off white/tan drywall	65		ND	15	85
VA-1-G-84	EM 1992123	A	White compound w/ blue/multi-colored paint	5		ND	0	100
		B	White joint compound	5		ND	0	100
		C	White tape	15		ND	95	5
		D	White/tan drywall	75		ND	15	85
VA-1-G-85	EM 1992124	A	White compound w/ off white/multi-colored paint	100		ND	0	100
VA-1-G-86	EM 1992125	A	White compound w/ off white/multi-colored paint	100		ND	0	100
VA-1-G-87	EM 1992126	A	White compound w/ off white/multi-colored paint	100		ND	0	100
VA-1-G-88	EM 1992127	A	Cream ceramic material w/ beige paint	100		ND	0	100

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-89	EM 1992128	A	Cream ceramic material w/ beige paint	100		ND	0	100
VA-1-G-90	EM 1992129	A	Cream ceramic material w/ beige paint	100		ND	0	100
VA-1-G-91	EM 1992130	A	White plaster w/ white/multi-colored paint	5		ND	0	100
		B	Gray granular plaster	95		ND	TR	100
VA-1-G-92	EM 1992131	A	White plaster w/ white/multi-colored paint	5		ND	0	100
		B	Gray granular plaster	95		ND	TR	100
VA-1-G-93	EM 1992132	A	White plaster w/ white/multi-colored paint	5		ND	0	100
		B	Gray granular plaster	95		ND	TR	100
VA-1-G-94	EM 1992133	A	Gray granular material w/ white perlitic material	100		ND	TR	100
VA-1-G-95	EM 1992134	A	Gray granular material w/ white perlitic material	100		ND	TR	100
VA-1-G-96	EM 1992135	A	Gray granular material w/ white perlitic material	100		ND	TR	100
VA-1-G-97	EM 1992136	A	Gray granular material w/ white perlitic material	100		ND	TR	100
VA-1-G-98	EM 1992137	A	Gray granular material w/ white perlitic material	100		ND	0	100
VA-1-G-99	EM 1992138	A	Gray granular material w/ white perlitic material	100		ND	0	100

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-100	EM 1992139	A	White perlitic material w/ gray granular material	100		ND	0	100
VA-1-G-101	EM 1992140	A	White perlitic material w/ gray granular material	100		ND	TR	100
VA-1-G-102	EM 1992141	A	White perlitic material w/ gray granular material	100		ND	TR	100
VA-1-G-103	EM 1992142	A	White compound w/ off white paint	40		ND	0	100
		B	Black resinous material w/ tan wood	60		ND	5	95
VA-1-G-104	EM 1992143	A	White compound w/ off white paint	10		ND	0	100
		B	Black resinous material w/ tan wood	90		ND	2	98
VA-1-G-105	EM 1992144	A	Black resinous material w/ tan fibrous material	100		ND	5	95
VA-1-G-106	EM 1992145	A	Off white fireproofing	100		ND	2	98
VA-1-G-107	EM 1992146	A	Off white fireproofing	100		ND	20	80
VA-1-G-108	EM 1992147	A	Off white fireproofing	100		ND	22	78
VA-1-G-109	EM 1992148	A	Off white fireproofing	100		ND	20	80
VA-1-G-110	EM 1992149	A	Off white fireproofing w/ brown/tan wood	100		ND	40	60
VA-1-G-111	EM 1992150	A	Off white fireproofing w/ brown/tan wood	100		ND	30	70

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-112	EM 1992151	A	Off white fireproofing	100		ND	20	80
VA-1-G-113	EM 1992152	A	Off white fireproofing	100		ND	22	78
VA-1-G-114	EM 1992153	A	Off white fireproofing w/ tan wood	100		ND	30	70
VA-1-G-115	EM 1992154	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-116	EM 1992155	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-117	EM 1992156	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-118	EM 1992157	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-119	EM 1992158	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-120	EM 1992159	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-121	EM 1992160	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-122	EM 1992161	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-123	EM 1992162	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-124	EM 1992163	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-125	EM 1992164	A	White/gray ceiling tile	100		ND	55	45

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					Mineral	Visual Estimate (%)		
VA-1-G-126	EM 1992165	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-127	EM 1992166	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-128	EM 1992167	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-129	EM 1992168	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-130	EM 1992169	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-131	EM 1992170	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-132	EM 1992171	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-133	EM 1992172	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-134	EM 1992173	A	White/gray ceiling tile	100		ND	60	40
VA-1-G-135	EM 1992174	A	White/gray ceiling tile	100		ND	55	45
VA-1-G-136	EM 1992175	A	White/tan ceiling tile	100		ND	85	15
VA-1-G-137	EM 1992176	A	White/tan ceiling tile	100		ND	85	15
VA-1-G-138	EM 1992177	A	White/tan ceiling tile	100		ND	75	25
VA-1-G-139	EM 1992178	A	White/tan ceiling tile	100		ND	90	10

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					Mineral	Visual Estimate (%)		
VA-1-G-140	EM 1992179	A	White/tan ceiling tile	100		ND	85	15
VA-1-G-141	EM 1992180	A	White/tan ceiling tile	100		ND	90	10
VA-1-G-142	EM 1992181	A	White/tan ceiling tile	100		ND	50	50
VA-1-G-143	EM 1992182	A	White/tan ceiling tile	100		ND	65	35
VA-1-G-144	EM 1992183	A	White/tan ceiling tile	100		ND	60	40
VA-1-G-145	EM 1992184	A	White granular material	TR		ND	0	100
		B	Yellow fibrous material	2		ND	80	20
		C	Brown adhesive	98	Chrysotile	7	TR	93
VA-1-G-146	EM 1992185	A	Brown adhesive	100	Chrysotile	6	TR	94
VA-1-G-147	EM 1992186	A	Yellow fibrous material	1		ND	80	20
		B	Brown adhesive	99	Chrysotile	8	TR	92
VA-1-G-148	EM 1992187	A	Yellow fibrous material	22		ND	85	15
		B	Brown adhesive	78		ND	TR	100

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					Mineral	Visual Estimate (%)		
VA-1-G-149	EM 1992188	A	Yellow fibrous material	15		ND	85	15
		B	Brown adhesive	85		ND	TR	100
VA-1-G-150	EM 1992189	A	Yellow fibrous material	20		ND	85	15
		B	Brown adhesive	80		ND	TR	100
VA-1-G-151	EM 1992190	A	Yellow fibrous material	35		ND	80	20
		B	Brown adhesive	65		ND	TR	100
VA-1-G-152	EM 1992191	A	Yellow fibrous material	6		ND	80	20
		B	Brown adhesive	94		ND	TR	100
VA-1-G-153	EM 1992192	A	Yellow fibrous material	10		ND	80	20
		B	Brown adhesive	90		ND	TR	100
VA-1-G-154	EM 1992193	A	Tan fiberboard w/ white paint	100		ND	80	20
VA-1-G-155	EM 1992194	A	Tan fiberboard w/ white paint	100		ND	80	20
VA-1-G-156	EM 1992195	A	Tan fiberboard w/ light gray paint	100		ND	80	20

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					Mineral	Visual Estimate (%)		
VA-1-G-157	EM 1992196	A	Tan fiberboard w/ gray paint	100	Chrysotile	ND	90	10
VA-1-G-158	EM 1992197	A	Tan fiberboard w/ off white paint	100		ND	85	15
VA-1-G-159	EM 1992198	A	Tan fiberboard w/ off white paint	100		ND	70	30
VA-1-G-160	EM 1992199	A	Tan fiberboard w/ gray/white paint	100		ND	80	20
VA-1-G-161	EM 1992200	A	Tan fiberboard w/ off white paint	100		ND	85	15
VA-1-G-162	EM 1992201	A	Tan fiberboard w/ off white paint	100		ND	90	10
VA-1-G-163	EM 1992202	A	Gray resinous material	100		8	0	92
VA-1-G-164	EM 1992203	A	Red/black resinous material	100		ND	6	94
VA-1-G-165	EM 1992204	A	Red/black resinous material	100		ND	4	96
VA-1-G-166	EM 1992205	A	Red/black resinous material	100		ND	5	95
VA-1-G-167	EM 1992206	A	Red/black resinous material w/ off white paint	100		ND	8	92
VA-1-G-168	EM 1992207	A	Red/black resinous material w/ off white paint	100		ND	12	88
VA-1-G-169	EM 1992208	A	Red/black resinous material w/ off white paint	100		ND	9	91
VA-1-G-170	EM 1992209	A	Light blue resinous material	100		ND	TR	100

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					Mineral	Visual Estimate (%)		
VA-1-G-171	EM 1992210	A	Light blue resinous material	100		ND	TR	100
VA-1-G-172	EM 1992211	A	Light blue resinous material	100		ND	1	99
VA-1-G-173	EM 1992212	A	White compound	100		ND	0	100
VA-1-G-174	EM 1992213	A	White compound	100		ND	0	100
VA-1-G-175	EM 1992214	A	White compound	100		ND	0	100
VA-1-G-176	EM 1992215	A	Off white/gray resinous material	100		ND	3	97
VA-1-G-177	EM 1992216	A	Off white/light gray resinous material	100		ND	5	95
VA-1-G-178	EM 1992217	A	Off white/gray resinous material	100		ND	4	96
VA-1-G-179	EM 1992218	A	Off white/gray resinous material	100		ND	3	97
VA-1-G-180	EM 1992219	A	Off white/gray resinous material	100		ND	5	95
VA-1-G-181	EM 1992220	A	Off white/gray resinous material	100		ND	5	95
VA-1-G-182	EM 1992221	A	Off white/gray resinous material	100		ND	5	95
VA-1-G-183	EM 1992222	A	Off white/gray resinous material	100		ND	5	95
VA-1-G-184	EM 1992223	A	Light tan resinous material	100		ND	6	94

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					Mineral	Visual Estimate (%)		
VA-1-G-185	EM 1992224	A	Gray resinous material	100	Chrysotile	8	0	92
VA-1-G-186	EM 1992225	A	Gray resinous material	100	Chrysotile	8	0	92
VA-1-G-187	EM 1992226	A	Gray resinous material	100	Chrysotile	12	0	88
VA-1-G-188	EM 1992227	A	Gray resinous material	100	Chrysotile	9	0	91
VA-1-G-189	EM 1992228	A	Gray resinous material	100	Chrysotile	8	0	92
VA-1-G-190	EM 1992229	A	Gray resinous material	100	Chrysotile	9	0	91
VA-1-G-191	EM 1992230	A	Gray resinous material	100	Chrysotile	7	0	93
VA-1-G-192	EM 1992231	A	Gray resinous material	100	Chrysotile	7	0	93
VA-1-G-193	EM 1992232	A	Gray resinous material	100	Chrysotile	7	0	93
VA-1-G-194	EM 1992233	A	Off white resinous material	100		ND	0	100
VA-1-G-195	EM 1992234	A	Off white resinous material	100		ND	0	100
VA-1-G-196	EM 1992235	A	Off white resinous material	100		ND	0	100
VA-1-G-197	EM 1992236	A	Off white resinous material	100		ND	0	100
VA-1-G-198	EM 1992237	A	Off white resinous material	100		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-199	EM 1992238	A	Off white resinous material	100		ND	0	100
VA-1-G-200	EM 1992239	A	Off white resinous material	100		ND	0	100
VA-1-G-201	EM 1992240	A	Off white resinous material	100		ND	0	100
VA-1-G-202	EM 1992241	A	Off white resinous material	100		ND	0	100
VA-1-G-203	EM 1992242		Sample Not Received.					
VA-1-G-204	EM 1992243		Sample Not Received.					
VA-1-G-205	EM 1992244		Sample Not Received.					
VA-1-G-206	EM 1992245		Sample Not Received.					
VA-1-G-207	EM 1992246		Sample Not Received.					
VA-1-G-208	EM 1992247		Sample Not Received.					
VA-1-G-209	EM 1992248		Sample Not Received.					
VA-1-G-210	EM 1992249		Sample Not Received.					
VA-1-G-211	EM 1992250		Sample Not Received.					
VA-1-G-212	EM 1992251	A	Yellow insulation w/ yellow resinous material	100		ND	90	10

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RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

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 Turnaround: **3-5 Day**
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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-213	EM 1992252	A	Yellow/gray insulation w/ yellow resinous material	100		ND	90	10
VA-1-G-214	EM 1992253	A	Yellow/gray insulation w/ yellow resinous material	100		ND	90	10
VA-1-G-215	EM 1992254	A	Yellow/gray insulation w/ yellow resinous material	100		ND	85	15
VA-1-G-216	EM 1992255	A	Yellow/gray insulation w/ yellow resinous material	100		ND	85	15
VA-1-G-217	EM 1992256	A	Yellow/gray insulation w/ yellow resinous material	100		ND	85	15
VA-1-G-218	EM 1992257	A	Yellow insulation w/ yellow resinous material	100		ND	85	15
VA-1-G-219	EM 1992258	A	Yellow/gray insulation w/ yellow resinous material	100		ND	90	10
VA-1-G-220	EM 1992259	A	Yellow/gray insulation w/ yellow resinous material	100		ND	85	15
VA-1-G-221	EM 1992260	A	Tan/silver wrap	5		ND	50	50
		B	Yellow/gray insulation w/ yellow resinous material	95		ND	90	10
VA-1-G-222	EM 1992261	A	Silver/tan wrap	25		ND	45	55
		B	Yellow insulation	75		ND	90	10
VA-1-G-223	EM 1992262	A	Silver/tan wrap	35		ND	45	55
		B	Yellow insulation	65		ND	90	10

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					Mineral	Visual Estimate (%)		
VA-1-G-224	EM 1992263	A	Yellow insulation	50		ND	90	10
		B	Silver/tan wrap	50		ND	45	55
VA-1-G-225	EM 1992264	A	Silver/tan wrap	25		ND	50	50
		B	Yellow insulation	75		ND	90	10
VA-1-G-226	EM 1992265	A	Silver/tan wrap	50		ND	45	55
		B	Yellow insulation	50		ND	90	10
VA-1-G-227	EM 1992266	A	Yellow insulation	50		ND	90	10
		B	Silver/tan wrap	50		ND	50	50
VA-1-G-228	EM 1992267	A	Yellow insulation	40		ND	90	10
		B	Silver/tan wrap	60		ND	50	50
VA-1-G-229	EM 1992268	A	Yellow insulation	40		ND	90	10
		B	Silver/tan wrap	60		ND	45	55
VA-1-G-230	EM 1992269	A	Gray/multi-colored multi-layered fibrous material	100	Chrysotile	80	0	20

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NVLAP Lab Code 101896-0

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-231	EM 1992270	A	Gray/multi-colored multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	75	5	20
VA-1-G-232	EM 1992271	A	Gray/multi-colored multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	72	8	20
VA-1-G-233	EM 1992272	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	75	5	20
VA-1-G-234	EM 1992273	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	75	5	20
VA-1-G-235	EM 1992274	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	75	5	20
VA-1-G-236	EM 1992275	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	70	10	20
VA-1-G-237	EM 1992276	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	72	8	20

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					Mineral	Visual Estimate (%)		
VA-1-G-238	EM 1992277	A	Gray multi-layered fibrous material w/ gray fibrous woven material	100	Chrysotile	75	5	20
VA-1-G-239	EM 1992278	A	Gray fibrous plaster	100	Chrysotile	10	15	75
VA-1-G-240	EM 1992279	A	Gray fibrous plaster w/ off white fibrous woven material	100	Chrysotile	4	55	41
VA-1-G-241	EM 1992280	A	Gray fibrous plaster w/ off white fibrous woven material	100	Chrysotile	6	35	59
VA-1-G-242	EM 1992281	A	Green resinous material	5		ND	0	100
		B	Gray fibrous plaster w/ off white fibrous woven material	95	Chrysotile	6	35	59
VA-1-G-243	EM 1992282	A	White paint	5		ND	0	100
		B	Gray fibrous plaster w/ off white fibrous woven material	95	Chrysotile	5	40	55
VA-1-G-244	EM 1992283	A	Gray fibrous plaster w/ off white fibrous woven material	100	Chrysotile	8	35	57
VA-1-G-245	EM 1992284	A	Gray fibrous plaster w/ off white fibrous woven material	100	Chrysotile	6	30	64
VA-1-G-246	EM 1992285	A	Gray fibrous plaster w/ off white fibrous woven material	100	Chrysotile	6	35	59

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					Mineral	Visual Estimate (%)		
VA-1-G-247	EM 1992286	A	White paint	5	Chrysotile	ND	0	100
		B	Gray fibrous insulation w/ off white fibrous woven material	95		5	40	55
VA-1-G-254	EM 1992287	A	White resinous material w/ white fibrous woven material	100		ND	45	55
VA-1-G-255	EM 1992288	A	White resinous material w/ white fibrous woven material	100		ND	45	55
VA-1-G-256	EM 1992289	A	White resinous material w/ white fibrous woven material	100		ND	50	50
VA-1-G-257	EM 1992290	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-258	EM 1992291	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-259	EM 1992292	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-260	EM 1992293	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-261	EM 1992294	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-262	EM 1992295	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-263	EM 1992296	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-264	EM 1992297	A	Brown fibrous woven material	100		ND	85	15

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non- Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-265	EM 1992298	A	Brown fibrous woven material	100		ND	85	15
VA-1-G-274	EM 1992299	A	Off white/tan drywall w/ off white paint	100		ND	18	82
VA-1-G-275	EM 1992300	A	Gray resinous material	100		ND	0	100
VA-1-G-276	EM 1992301	A	Gray resinous material	100		ND	0	100
VA-1-G-277	EM 1992302	A	Gray resinous material	100		ND	0	100
VA-1-G-278	EM 1992303	A	Gray resinous material	100		ND	0	100
VA-1-G-279	EM 1992304	A	Gray resinous material	100		ND	0	100
VA-1-G-280	EM 1992305	A	Gray resinous material	100		ND	2	98
VA-1-G-281	EM 1992306	A	Gray resinous material	100		ND	2	98
VA-1-G-282	EM 1992307	A	Gray resinous material	100		ND	2	98
VA-1-G-283	EM 1992308	A	Gray resinous material	100		ND	2	98
VA-1-G-284	EM 1992309	A	Off white sink undercoating	100		ND	5	95
VA-1-G-285	EM 1992310	A	Tan sink undercoating	100		ND	0	100

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					Mineral	Visual Estimate (%)		
VA-1-G-286	EM 1992311	A	Gray felt	10		ND	65	35
		B	Black/white material	20		ND	0	100
		C	Black tar	30		ND	TR	100
		D	Yellow foam	40		ND	0	100
VA-1-G-287	EM 1992312	A	Black/white resinous material	8		ND	0	100
		B	Gray felt	10		ND	70	30
		C	Gray felt w/ colorless resinous material	10		ND	60	40
		D	Black tar	12		ND	TR	100
		E	Yellow foam	60		ND	0	100
VA-1-G-288	EM 1992313	A	Gray felt	10		ND	75	25
		B	Yellow foam	20		ND	0	100
		C	Black/white material	35		ND	10	90
		D	Black tar	35		ND	3	97

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-289	EM 1992314	A	Gray felt	10		ND	65	35
		B	Black tar	20		ND	TR	100
		C	White/black resinous material	30		ND	8	92
		D	White foam	40		ND	0	100
VA-1-G-290	EM 1992315	A	Gray felt	10		ND	70	30
		B	White/black resinous material	10		ND	5	95
		C	Black tar w/ black felt	20		ND	30	70
		D	Yellow foam	60		ND	0	100
VA-1-G-291	EM 1992316	A	White/black resinous material	5		ND	8	92
		B	Gray felt	5		ND	70	30
		C	Black tar w/ black felt	10		ND	15	85
		D	Yellow foam	80		ND	0	100
VA-1-G-292	EM 1992317	A	Black tar mastic	3	Chrysotile	3	0	97
		B	White/black multi-layered resinous material	97		ND	8	92

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					Mineral	Visual Estimate (%)		
VA-1-G-293	EM 1992318	A	Gray felt	10		ND	75	25
		B	White/black resinous material	15		ND	8	92
		C	Black tar	20		ND	0	100
		D	Yellow foam	55		ND	0	100
VA-1-G-294	EM 1992319	A	White/black resinous material	15		ND	8	92
		B	Black tar	25		ND	TR	100
		C	Gray felt	25		ND	70	30
		D	Yellow foam	35		ND	0	100
VA-1-G-295	EM 1992320	A	Black resinous material w/ white fibrous material	100		ND	18	82
VA-1-G-296	EM 1992321	A	Black resinous material w/ white fibrous material	100		ND	20	80
VA-1-G-297	EM 1992322	A	Black resinous material w/ white fibrous material	100		ND	20	80
VA-1-G-298	EM 1992323		Sample Not Received.					
VA-1-G-299	EM 1992324		Sample Not Received.					
VA-1-G-300	EM 1992325		Sample Not Received.					

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					Mineral	Visual Estimate (%)		
VA-1-G-301	EM 1992326		Sample Not Received.					
VA-1-G-302	EM 1992327		Sample Not Received.					
VA-1-G-303	EM 1992328		Sample Not Received.					
VA-1-G-304	EM 1992329		Sample Not Received.					
VA-1-G-305	EM 1992330		Sample Not Received.					
VA-1-G-306	EM 1992331		Sample Not Received.					
VA-1-G-307	EM 1992332	A	Off white resinous material w/ white fibrous woven material	100		ND	45	55
VA-1-G-308	EM 1992333	A	Off white resinous material w/ white fibrous woven material	100		ND	35	65
VA-1-G-309	EM 1992334	A	Off white resinous material w/ white fibrous woven material	100		ND	35	65
VA-1-G-310	EM 1992335	A	Cream/multi-colored wall covering w/ light blue paint	15		ND	35	65
		B	Off white/multi-colored wall covering	85		ND	25	75

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					Mineral	Visual Estimate (%)		
VA-1-G-311	EM 1992336	A	Black mastic	3	Chrysotile	12	0	88
		B	Green/off white floor tile	97	Chrysotile	14	10	76
VA-1-G-312	EM 1992337	A	Black mastic	3	Chrysotile	12	0	88
		B	Green/off white floor tile	97	Chrysotile	15	10	75
VA-1-G-313	EM 1992338	A	Black mastic	2	Chrysotile	12	0	88
		B	Green/off white floor tile	98	Chrysotile	15	8	77
VA-1-G-314	EM 1992339	A	Off white/multi-colored paint w/ white plaster	45		ND	0	100
		B	Tan adhesive	55		ND	0	100
VA-1-G-315	EM 1992340	A	Tan adhesive	50		ND	0	100
		B	Off white/multi-colored paint w/ white plaster	50		ND	0	100
VA-1-G-316	EM 1992341	A	Off white/multi-colored paint w/ white plaster	30		ND	0	100
		B	Tan adhesive	70		ND	0	100
VA-1-G-317	EM 1992342	A	White resinous material	100		ND	0	100
VA-1-G-318	EM 1992343	A	White resinous material	100		ND	0	100

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VA-1-G-319	EM 1992344	A	White resinous material	100		ND	0	100
VA-1-G-320	EM 1992345	A	White resinous material	100		ND	0	100
VA-1-G-321	EM 1992346	A	Off white/black resinous material	100		ND	0	100
VA-1-G-322	EM 1992347	A	White resinous material	100		ND	0	100
VA-1-G-323	EM 1992348	A	White resinous material	5		ND	0	100
		B	Silver foil w/ colorless adhesive	95		ND	0	100
VA-1-G-324	EM 1992349	A	Silver foil w/ colorless adhesive	100		ND	0	100
VA-1-G-325	EM 1992350	A	Silver foil w/ colorless adhesive	100		ND	0	100
VA-1-G-326	EM 1992351	A	Tan/off white wall covering	100		ND	25	75
VA-1-G-327	EM 1992352	A	White paint w/ white compound	5		ND	0	100
		B	Tan wall covering	95		ND	25	75
VA-1-G-328	EM 1992353	A	Gray/multi-colored wall covering	100		ND	25	75
VA-1-G-329	EM 1992354	A	Gray/multi-colored wall covering	100		ND	25	75
VA-1-G-330	EM 1992355	A	Beige/multi-colored wall covering	100		ND	20	80

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 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
VA-1-G-331	EM 1992356	A	Beige/multi-colored wall covering	100		ND	20	80
VA-1-G-332	EM 1992357	A	Off white resinous material	2		ND	0	100
		B	Off white/red ceramic material	98		ND	0	100
VA-1-G-333	EM 1992358	A	Brown/multi-colored wall covering	100		ND	50	50
VA-1-G-334	EM 1992359	A	Off white wall covering	100		ND	80	20
VA-1-G-71 (Duplicate Sample ID)	EM 1992400	A	Brown/tan adhesive	100		ND	4	96

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.


 Brianne Neumann

Analyst


 Michael Scales

Analyst / Data QA

Due Date: 12-22-20

REILAB Reservoirs Environmental, Inc.

RES 396979

INVOICE TO: (IF DIFFERENT)

Company: RIR Environmental
Address: 47 West 9000 South Sandy, UT 84000
Project Number and/or P.O. #: 6021 VA Library
Project Description/Location: 6021 VA Library
Contact: CHRIS REYNOLDS
Phone: 801-234-4037
Fax:
Cell/pager:
Final Data Deliverable Email Address: chris@reenviro.com

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm
PLM/PCM/TEM RUSH (Same Day) PRIORITY (Next Day) STANDARD (3-5 Day)
(Rush PCM = 2hr, TEM = 6hr.)
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm
Metal(s) / Dust: RUSH 24 hr. 3-5 Day
RCRA 8 / Metals & Welding RUSH (3 Day) 5 Day 10 Day
Fume Scan / TCLP: RUSH 24 hr. 3 day 5 Day
Organics 24 hr. 3 day 5 Day
MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm
E.coli and/or Coliforms: 24-48 Hour Other:
Pathogens: 24-48 Hour
Microbial Growth: 5-10 Day
Legionella 10 Day
Mold RUSH 24 Hr 48 Hr 3 Day 5 Day
Special Instructions: See Sample Log for all PLM standards (Sample ID's must be unique)

Client sample ID number	PLM	PCM	TEM	Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	Pathogens: Aerobic Plate Count, Salmonella, E. coli	Quantification	E. coli and/or Coliforms: +/- or Quantification	State Water (Please Circle One) Yes / No	Microbial Growth: Aerobic Plate Count ID, Y & M or	Legionella: +/- or Quantification	Mold: Spore Trap or Bulk: +/-, Identification, Quantification, Viable or Non-Viable	SAMPLER'S INITIALS OR OTHER NOTES:	VALID MATRIX CODES	LAB NOTES:
1	See Sample Log														Air = A Bulk = B	
2															Dust = D Paint = P	
3															Soil = S Wipe = W	
4															Swab = SW F = Food	
5															Drinking Water = DW Waste Water = WW	
6															O = Other	
7															**ASTM E1792 approved wipe media only**	
8																
9																
10																

Number of samples received: 334 (Additional samples shall be listed on attached long form.)
NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: [Signature]
Laboratory Use Only
Received By: [Signature]
Data Entry: [Signature]
QA: [Signature]
Contact: [Signature]
Phone: [Signature]
Email: [Signature]
Fax: [Signature]
Date: [Signature]
Time: [Signature]
Initials: [Signature]
Date: [Signature]
Time: [Signature]
Initials: [Signature]
Sample Condition: On Ice Yes / No Sealed Yes / No Intact Yes / No
Temp. (F°) [Signature]

Sample #	Material Description	Sample Location	Quantity	Notes
VA-1-G-01	12" Vinyl Floor Tile (White)	Hallways		1993248
VA-1-G-02	12" Vinyl Floor Tile (White)	Hallways		1
VA-1-G-03	12" Vinyl Floor Tile (White)	Hallways		2
VA-1-G-04	12" Vinyl Floor Tile (White)	Hallways		3
VA-1-G-05	12" Vinyl Floor Tile (White)	Hallways		4
VA-1-G-06	12" Vinyl Floor Tile (White)	Hallways		5
VA-1-G-07	12" Vinyl Floor Tile (White)	Hallways		6
VA-1-G-08	12" Vinyl Floor Tile (White)	Hallways		7
VA-1-G-09	12" Vinyl Floor Tile (White)	Hallways		8
VA-1-G-10	12" Vinyl Floor Tile (Tan)	Copier Room		9
VA-1-G-11	12" Vinyl Floor Tile (Tan)	Copier Room		50
VA-1-G-12	12" Vinyl Floor Tile (Tan)	1-G-20		1
VA-1-G-13	12" Vinyl Floor Tile (Tan with Brown Stripes)	1-G-04		2
VA-1-G-14	12" Vinyl Floor Tile (Tan with Brown Stripes)	1-G-04		3
VA-1-G-15	12" Vinyl Floor Tile (Tan with Brown Stripes)	1-G-04		4
VA-1-G-16	9" Vinyl Floor Tile Tan	1-G-01A		5
VA-1-G-17	9" Vinyl Floor Tile Tan	1-G-01A		6
VA-1-G-18	9" Vinyl Floor Tile Tan	1-G-01A		7
VA-1-G-19	9" Vinyl Floor Tile Red	1-G-01A		8
VA-1-G-20	9" Vinyl Floor Tile Red	1-G-01A		9
VA-1-G-21	9" Vinyl Floor Tile Red	1-G-01A		46
VA-1-G-22	Black Flooring Mastic	1-G-01		1
VA-1-G-23	Black Flooring Mastic	1-G02B		2
VA-1-G-24	Black Flooring Mastic	1-G-07		3
VA-1-G-25	Black Flooring Mastic	1-G-02A		4
VA-1-G-26	Black Flooring Mastic	1-G-12		5
VA-1-G-27	Black Flooring Mastic	1-G-15		6
VA-1-G-28	Black Flooring Mastic	1-G-15A		7
VA-1-G-29	Black Flooring Mastic	1-G-17G		8
VA-1-G-30	Black Flooring Mastic	1-G-17D		9

VA-1-G-31	Carpet Adhesive	1-G-08				1592670
VA-1-G-32	Carpet Adhesive	1-G-17				1
VA-1-G-33	Carpet Adhesive	1-G-17D				2
VA-1-G-34	Carpet Adhesive	1-G-17F				3
VA-1-G-35	Carpet Adhesive	1-G-15				4
VA-1-G-36	Carpet Adhesive	1-G-11				5
VA-1-G-37	Carpet Adhesive	1-G-03				6
VA-1-G-38	Carpet Adhesive	1-G-07A				7
VA-1-G-39	Carpet Adhesive	1-G-15				8
VA-1-G-40	Ceramic Tile & Grout	1-G01-C				9
VA-1-G-41	Ceramic Tile & Grout	Womens Hall Bathroom				10
VA-1-G-42	Ceramic Tile & Grout	Men's Hall Bathroom				11
VA-1-G-43	Ceramic Tile & Grout	1-G-20				12
VA-1-G-44	Ceramic Tile & Grout	1-G-20				13
VA-1-G-45	Ceramic Tile & Grout	1-G-17B				14
VA-1-G-46	Ceramic Tile & Grout	1-G-17B				15
VA-1-G-47	Ceramic Tile & Grout	1-G-17G				16
VA-1-G-48	Ceramic Tile & Grout	1-G-17B				17
VA-1-G-49	Tan Vinyl Cove Base & Mastic	Hallways				18
VA-1-G-50	Tan Vinyl Cove Base & Mastic	Hallways				19
VA-1-G-51	Tan Vinyl Cove Base & Mastic	1-G-20				20
VA-1-G-52	Tan Vinyl Cove Base & Mastic	Hallways				21
VA-1-G-53	Tan Vinyl Cove Base & Mastic	Hallways				22
VA-1-G-54	Tan Vinyl Cove Base & Mastic	Hallways				23
VA-1-G-55	Tan Vinyl Cove Base & Mastic	Hallways				24
VA-1-G-56	Tan Vinyl Cove Base & Mastic	Hallways				25
VA-1-G-57	Tan Vinyl Cove Base & Mastic	Hallways				26
VA-1-G-58	Brown Vinyl Cove Base & Mastic	Copier Room				27
VA-1-G-59	Brown Vinyl Cove Base & Mastic	Copier Room				28
VA-1-G-60	Brown Vinyl Cove Base & Mastic	Copier Room				29
VA-1-G-61	Brown Vinyl Tile with Black Stripes	G-106-3A				30

VA-1-G-62	Brown Vinyl Tile with Black Stripes	G-106-3A				1942101
VA-1-G-63	Brown Vinyl Tile with Black Stripes	G-106-3A				2
VA-1-G-64	Light Brown Vinyl Tile with Red	G-106-3A				3
VA-1-G-65	Light Brown Vinyl Tile with Red	G-106-3A				4
VA-1-G-66	Light Brown Vinyl Tile with Red	G-106-3A				5
VA-1-G-67	Brown Cove Base Adhesive					6
VA-1-G-68	Brown Cove Base Adhesive					7
VA-1-G-69	Brown Cove Base Adhesive					8
VA-1-G-70	Brown Cove Base Adhesive					9
VA-1-G-71	Brown Cove Base Adhesive					10
VA-1-G-72	Brown Cove Base Adhesive					11
VA-1-G-73	Brown Cove Base Adhesive					12
VA-1-G-74	Brown Cove Base Adhesive					13
VA-1-G-75	Brown Cove Base Adhesive					14
VA-1-G-76	Wall System					15
VA-1-G-77	Wall System					16
VA-1-G-78	Wall System					17
VA-1-G-79	Wall System					18
VA-1-G-80	Wall System					19
VA-1-G-81	Wall System					20
VA-1-G-82	Wall System					21
VA-1-G-83	Wall System					22
VA-1-G-84	Wall System					23
VA-1-G-85	Plaster Surfacing					24
VA-1-G-86	Plaster Surfacing					25
VA-1-G-87	Plaster Surfacing					26
VA-1-G-88	Plaster Surfacing					27
VA-1-G-89	Plaster Surfacing					28
VA-1-G-90	Plaster Surfacing					29
VA-1-G-91	Plaster Surfacing					30
VA-1-G-92	Plaster Surfacing					31

VA-1-G-93	Plaster Surfacing					1942132
VA-1-G-94	Concrete Deck Patch / Filler Material					3
VA-1-G-95	Concrete Deck Patch / Filler Material					J
VA-1-G-96	Concrete Deck Patch / Filler Material					n
VA-1-G-97	Concrete Deck Patch / Filler Material					n
VA-1-G-98	Concrete Deck Patch / Filler Material					n
VA-1-G-99	Concrete Deck Patch / Filler Material					n
VA-1-G-100	Concrete Deck Patch / Filler Material					n
VA-1-G-101	Concrete Deck Patch / Filler Material					n
VA-1-G-102	Concrete Deck Patch / Filler Material					n
VA-1-G-103	Black Construction Adhesive					n
VA-1-G-104	Black Construction Adhesive					n
VA-1-G-105	Black Construction Adhesive					n
VA-1-G-106	Fire Door Insulation					n
VA-1-G-107	Fire Door Insulation					n
VA-1-G-108	Fire Door Insulation					n
VA-1-G-109	Fire Door Insulation					n
VA-1-G-110	Fire Door Insulation					n
VA-1-G-111	Fire Door Insulation					n
VA-1-G-112	Fire Door Insulation					n
VA-1-G-113	Fire Door Insulation					n
VA-1-G-114	Fire Door Insulation					n
VA-1-G-115	Fire Door Frame Material					n
VA-1-G-116	Fire Door Frame Material					n
VA-1-G-117	Fire Door Frame Material					n
VA-1-G-118	2' x 2' Ceiling Panel #1					n
VA-1-G-119	2' x 2' Ceiling Panel #1					n
VA-1-G-120	2' x 2' Ceiling Panel #1					n
VA-1-G-121	2' x 2' Ceiling Panel #1					n
VA-1-G-122	2' x 2' Ceiling Panel #1					n
VA-1-G-123	2' x 2' Ceiling Panel #1					n

VA-1-G-124	2' x 2' Ceiling Panel #1					1552163
VA-1-G-125	2' x 2' Ceiling Panel #1					J
VA-1-G-126	2' x 2' Ceiling Panel #1					5
VA-1-G-127	2' x 2' Ceiling Panel #2					6
VA-1-G-128	2' x 2' Ceiling Panel #2					T
VA-1-G-129	2' x 2' Ceiling Panel #2					W
VA-1-G-130	2' x 2' Ceiling Panel #2					G
VA-1-G-131	2' x 2' Ceiling Panel #2					70
VA-1-G-132	2' x 2' Ceiling Panel #2					-
VA-1-G-133	2' x 2' Ceiling Panel #2					2
VA-1-G-134	2' x 2' Ceiling Panel #2					M
VA-1-G-135	2' x 2' Ceiling Panel #2					J
VA-1-G-136	12" Ceiling Tile (above ceiling)					5
VA-1-G-137	12" Ceiling Tile (above ceiling)					2
VA-1-G-138	12" Ceiling Tile (above ceiling)					70
VA-1-G-139	12" Ceiling Tile (above ceiling)					5
VA-1-G-140	12" Ceiling Tile (above ceiling)					20
VA-1-G-141	12" Ceiling Tile (above ceiling)					5
VA-1-G-142	12" Ceiling Tile (above ceiling)					20
VA-1-G-143	12" Ceiling Tile (above ceiling)					-
VA-1-G-144	12" Ceiling Tile (above ceiling)					2
VA-1-G-145	Ceiling Tile Adhesive					M
VA-1-G-146	Ceiling Tile Adhesive					J
VA-1-G-147	Ceiling Tile Adhesive					5
VA-1-G-148	Ceiling Tile Adhesive					2
VA-1-G-149	Ceiling Tile Adhesive					T
VA-1-G-150	Ceiling Tile Adhesive					W
VA-1-G-151	Ceiling Tile Adhesive					G
VA-1-G-152	Ceiling Tile Adhesive					70
VA-1-G-153	Ceiling Tile Adhesive					-
VA-1-G-154	Radiator Shield Board					2
						3

VA-1-G-155	Radiator Shield Board					1992154
VA-1-G-156	Radiator Shield Board					5
VA-1-G-157	Radiator Shield Board					2
VA-1-G-158	Radiator Shield Board					7
VA-1-G-159	Radiator Shield Board					200
VA-1-G-160	Radiator Shield Board					200
VA-1-G-161	Radiator Shield Board					200
VA-1-G-162	Radiator Shield Board					200
VA-1-G-163	Drinking Fountain Putty					200
VA-1-G-164	Dark Red Fire Putty					200
VA-1-G-165	Dark Red Fire Putty					200
VA-1-G-166	Dark Red Fire Putty					200
VA-1-G-167	Light Red Fire Putty					200
VA-1-G-168	Light Red Fire Putty					200
VA-1-G-169	Light Red Fire Putty					200
VA-1-G-170	Green Fire Putty					200
VA-1-G-171	Green Fire Putty					200
VA-1-G-172	Green Fire Putty					200
VA-1-G-173	White Fire Putty					200
VA-1-G-174	White Fire Putty					200
VA-1-G-175	White Fire Putty					200
VA-1-G-176	Plumbers Putty					200
VA-1-G-177	Plumbers Putty					200
VA-1-G-178	Plumbers Putty					200
VA-1-G-179	Plumbers Putty					200
VA-1-G-180	Plumbers Putty					200
VA-1-G-181	Plumbers Putty					200
VA-1-G-182	Plumbers Putty					200
VA-1-G-183	Plumbers Putty					200
VA-1-G-184	Plumbers Putty					200
VA-1-G-185	HVAC Duct Sealant Type 1					200

VA-1-G-186	HVAC Duct Sealant Type 1				195776
VA-1-G-187	HVAC Duct Sealant Type 1				67
VA-1-G-188	HVAC Duct Sealant Type 1				60
VA-1-G-189	HVAC Duct Sealant Type 1				30
VA-1-G-190	HVAC Duct Sealant Type 1				1
VA-1-G-191	HVAC Duct Sealant Type 1				2
VA-1-G-192	HVAC Duct Sealant Type 1				3
VA-1-G-193	HVAC Duct Sealant Type 1				4
VA-1-G-194	HVAC Duct Sealant Type 2				5
VA-1-G-195	HVAC Duct Sealant Type 2				6
VA-1-G-196	HVAC Duct Sealant Type 2				7
VA-1-G-197	HVAC Duct Sealant Type 2				8
VA-1-G-198	HVAC Duct Sealant Type 2				9
VA-1-G-199	HVAC Duct Sealant Type 2				10
VA-1-G-200	HVAC Duct Sealant Type 2				11
VA-1-G-201	HVAC Duct Sealant Type 2				12
VA-1-G-202	HVAC Duct Sealant Type 2				13
VA-1-G-203	HVAC Duct Sealant Type 3				14
VA-1-G-204	HVAC Duct Sealant Type 3				15
VA-1-G-205	HVAC Duct Sealant Type 3				16
VA-1-G-206	HVAC Duct Sealant Type 3				17
VA-1-G-207	HVAC Duct Sealant Type 3				18
VA-1-G-208	HVAC Duct Sealant Type 3				19
VA-1-G-209	HVAC Duct Sealant Type 3				20
VA-1-G-210	HVAC Duct Sealant Type 3				21
VA-1-G-211	HVAC Duct Sealant Type 3				22
VA-1-G-212	Yellow Duct Adhesive				23
VA-1-G-213	Yellow Duct Adhesive				24
VA-1-G-214	Yellow Duct Adhesive				25
VA-1-G-215	Yellow Duct Adhesive				26
VA-1-G-216	Yellow Duct Adhesive				27

samples not
recovered

EM 1992242

EM 1992243

FM 1992244

EM 1992245

EM 1992246

EM 1992247

EM 1992248

EM 1992249

EM 1992250

VA-1-G-217	Yellow Duct Adhesive					1997556
VA-1-G-218	Yellow Duct Adhesive					7
VA-1-G-219	Yellow Duct Adhesive					6
VA-1-G-220	Yellow Duct Adhesive					6
VA-1-G-221	Duct Insulation					60-2mJ
VA-1-G-222	Duct Insulation					5
VA-1-G-223	Duct Insulation					5
VA-1-G-224	Duct Insulation					5
VA-1-G-225	Duct Insulation					5
VA-1-G-226	Duct Insulation					5
VA-1-G-227	Duct Insulation					5
VA-1-G-228	Duct Insulation					5
VA-1-G-229	Duct Insulation					5
VA-1-G-230	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-231	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-232	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-233	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-234	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-235	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-236	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-237	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-238	TSI-Pipe Lagging (Air Cell)					5
VA-1-G-239	TSI - Plaster Fittings					5
VA-1-G-240	TSI - Plaster Fittings					5
VA-1-G-241	TSI - Plaster Fittings					5
VA-1-G-242	TSI - Plaster Fittings					5
VA-1-G-243	TSI - Plaster Fittings					5
VA-1-G-244	TSI - Plaster Fittings					5
VA-1-G-245	TSI - Plaster Fittings					5
VA-1-G-246	TSI - Plaster Fittings					5
VA-1-G-247	TSI - Plaster Fittings					5

VA-1-G-254	TSI - End Sealant					1952383
VA-1-G-255	TSI - End Sealant					5
VA-1-G-256	TSI - End Sealant					2
VA-1-G-257	HVAC Vibration Isolator					2
VA-1-G-258	HVAC Vibration Isolator					2
VA-1-G-259	HVAC Vibration Isolator					2
VA-1-G-260	HVAC Vibration Isolator					2
VA-1-G-261	HVAC Vibration Isolator					2
VA-1-G-262	HVAC Vibration Isolator					2
VA-1-G-263	HVAC Vibration Isolator					2
VA-1-G-264	HVAC Vibration Isolator					2
VA-1-G-265	HVAC Vibration Isolator					2
VA-1-G-274	Bathroom Panel					2
VA-1-G-275	Window Caulk					2
VA-1-G-276	Window Caulk					2
VA-1-G-277	Window Caulk					2
VA-1-G-278	Window Caulk					2
VA-1-G-279	Window Caulk					2
VA-1-G-280	Window Caulk					2
VA-1-G-281	Window Caulk					2
VA-1-G-282	Window Caulk					2
VA-1-G-283	Window Caulk					2
VA-1-G-284	Sink Undercoating T1					2
VA-1-G-285	Sink Undercoating T2					2
VA-1-G-286	Roofing Material					2
VA-1-G-287	Roofing Material					2
VA-1-G-288	Roofing Material					2
VA-1-G-289	Roofing Material					2
VA-1-G-290	Roofing Material					2
VA-1-G-291	Roofing Material					2
VA-1-G-292	Roofing Material					2

09/09/00

09/09/00

VA-1-G-293	Roofing Material					1992328
VA-1-G-294	Roofing Material					4
VA-1-G-295	HVAC Vibration Isolator					20
VA-1-G-296	HVAC Vibration Isolator					1
VA-1-G-297	HVAC Vibration Isolator					7
VA-1-G-298	Wall Insulation					
VA-1-G-299	Wall Insulation					
VA-1-G-300	Wall Insulation					
VA-1-G-301	Wall Insulation					
VA-1-G-302	Wall Insulation					
VA-1-G-303	Wall Insulation					
VA-1-G-304	Wall Insulation					
VA-1-G-305	Wall Insulation					
VA-1-G-306	Wall Insulation					
VA-1-G-307	Duct Tape					
VA-1-G-308	Duct Tape					
VA-1-G-309	Duct Tape					
VA-1-G-310	wall covering					
VA-1-G-311	Green 9X9 tile					
VA-1-G-312	Green 9X9 tile					
VA-1-G-313	Green 9X9 tile					
VA-1-G-314	Adhesive on wall					
VA-1-G-315	Adhesive on wall					
VA-1-G-316	Adhesive on wall					
VA-1-G-317	Roof Penetration sealant					
VA-1-G-318	Roof Penetration sealant					
VA-1-G-319	Roof Penetration sealant					
VA-1-G-320	Roof Penetration sealant					
VA-1-G-321	Roof Penetration sealant					
VA-1-G-322	Roof Penetration sealant					
VA-1-G-323	Roof Penetration sealant					

EM 1992328

EM 1992329

EM 1992330

EM 1992331

EM 1992324

EM 1992325

EM 1992326

EM 1992327

samples
not
retrieved

VA-1-G-324	Roof Penetration sealant					199739
VA-1-G-325	Roof Penetration sealant					50
VA-1-G-326	Wall Covering					1
VA-1-G-327	Wall Covering					2
VA-1-G-328	Wall Covering					3
VA-1-G-329	Wall Covering					5
VA-1-G-330	Wall Covering					5
VA-1-G-331	Wall Covering					5
VA-1-G-332	Wall Covering					5
VA-1-G-333	Wall Covering					5
VA-1-G-334	Wall Covering					5

199739

VA-1-G-71 - Duplicate

1000

Appendix C

Photo Log



PHOTO 1: 12" Vinyl Floor Tile

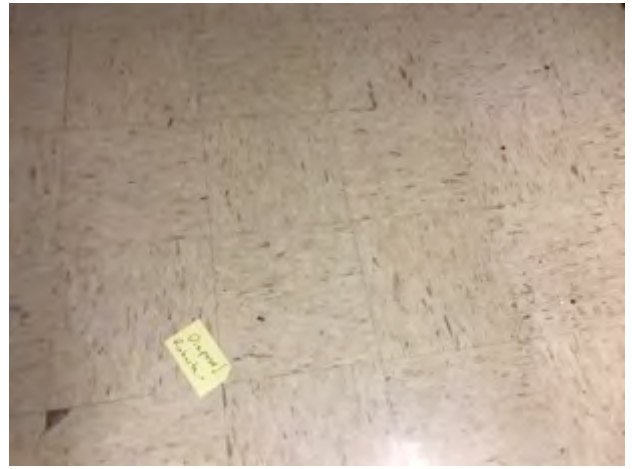


PHOTO 2: 12" Vinyl Floor Tile

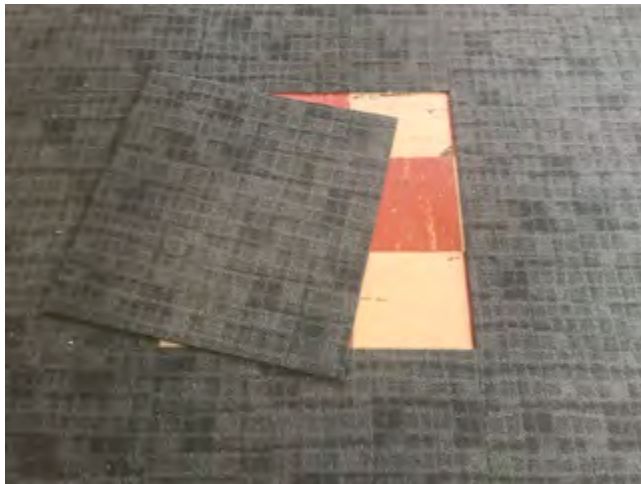


PHOTO 3: 9" Floor Tile



PHOTO 4: Tile Adhesive Black Mastic

R & R Environmental, Inc.

47 West 9000 South, Suite #2, Sandy, Utah 84070
(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:

VAMC-ACM-121417

DESIGNED BY:

CR

SCALE:

NA

REVIEWED BY:

S2G

DRAWN BY:

SBS

DATE:

2018

FILE:

NA

SITE PHOTOGRAPHS

AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 5: Carpet Adhesive & Black Mastic



PHOTO 6: Ceramic Tile & Grout/Tan Green Resinous Material



PHOTO 7: Vinyl Cove Base Tile



PHOTO 8: Vinyl Cove Base Black

R & R Environmental, Inc.

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(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:
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SBS

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FILE:
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**VETERANS ADMINISTRATION MEDICAL CENTER
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550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 9: 12" Vinyl Floor Tile



PHOTO 10: Cove Base Adhesive

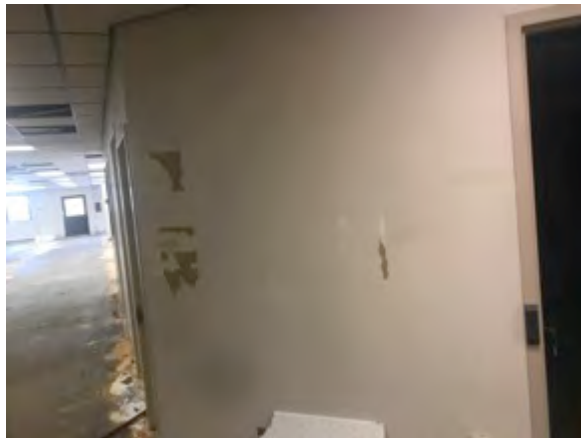


PHOTO 11: Wall System

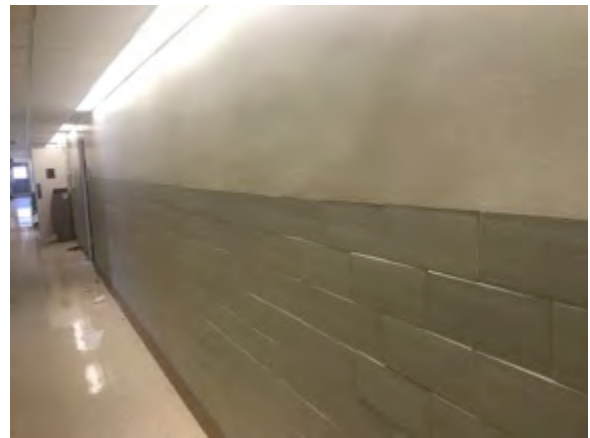


PHOTO 12: Plaster Surfacing

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PROJECT NO:

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AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 13: Concrete Deck Patch/Filler Material



PHOTO 14: Black Construction Adhesive



PHOTO 15: Fire Door Insulation

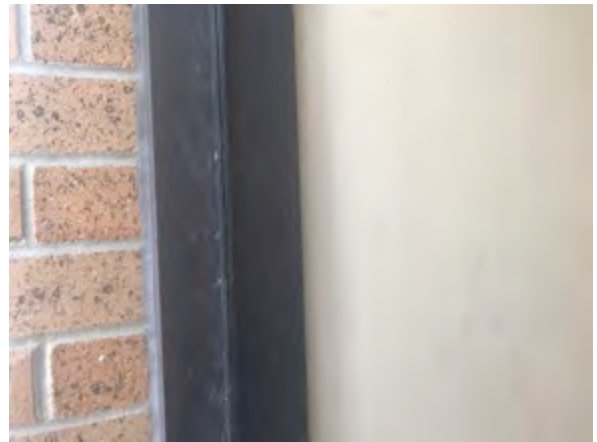


PHOTO 16: Fire Door Frame Material

R & R Environmental, Inc.

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(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:

VAMC-ACM-121417

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S2G

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SITE PHOTOGRAPHS

AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 17: Ceiling Panel #1



PHOTO 18: Ceiling Panel #2



PHOTO 19: 12" Ceiling Tile (Above Drop Down Ceiling)



PHOTO 20: 12" Ceiling Tile Adhesive

R & R Environmental, Inc.

47 West 9000 South, Suite #2, Sandy, Utah 84070
(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:

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DATE:

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FILE:

NA

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AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 21: Radiator Shield Board



PHOTO 22: Drinking Fountain Putty



PHOTO 23: Dark Red Fire Putty



PHOTO 24: Light Red Fire Putty

R & R Environmental, Inc.

47 West 9000 South, Suite #2, Sandy, Utah 84070
(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:

VAMC-ACM-121417

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CR

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DRAWN BY:

SBS

DATE:

2018

FILE:

NA

SITE PHOTOGRAPHS

AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 25: Green Fire Putty



PHOTO 26: White Fire Putty



PHOTO 27: Plumber's Putty



PHOTO 28: HVAC Duct Sealant #1

R & R Environmental, Inc.

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PROJECT NO:
VAMC-ACM-121417

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SCALE:
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DATE:
2018

FILE:
NA

SITE PHOTOGRAPHS

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**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 29: HVAC Duct Sealant #2



PHOTO 30: Duct Insulation Adhesive Yellow



PHOTO 31: Duct Insulation



PHOTO 32:n TSI Pipe Ligging

R & R Environmental, Inc.

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PROJECT NO:

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**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 33: Plaster Fittings



PHOTO 34: HVAC Vibrator Isolator

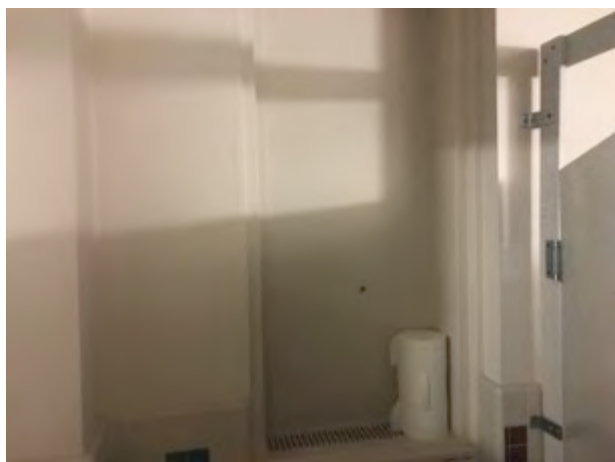


PHOTO 35: Bathroom Panel



PHOTO 36: Window Caulking

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660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 37: Sink Undercoating #1



PHOTO 38: Sink Undercoating #2



PHOTO 39: 9"X9" Green Tile



PHOTO 40: Roof Penetration Sealant

R & R Environmental, Inc.

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(801) 352-2380 • Fax: (801) 352-2381

PROJECT NO:

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DRAWN BY:

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DATE:

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FILE:

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SITE PHOTOGRAPHS

AN ASBESTOS SURVEY AND ASSESSMENT

**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**



PHOTO 41: Wall Coverings



PHOTO 42: Exterior Wall Tar



PHOTO 43: Roof



PHOTO 40: Adhesive On Wall

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PROJECT NO:
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FILE:
NA

SITE PHOTOGRAPHS

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**VETERANS ADMINISTRATION MEDICAL CENTER
660-18-232, DEMOLISH BUILDING 1, G ZONE
550 FOOTILL DRIVE
SALT LAKE CITY, UTAH**

Appendix D

Floor Plan



VETERANS HOSPITAL LIBRARY NON-FLOORING ACM MATERIALS

VETERANS HOSPITAL LIBRARY
500 FOOTHILL DRIVE
SALT LAKE CITY, UTAH

DEC 19, 2017



R & R
ENVIRONMENTAL, INC.
ASBESTOS • LEAD • INDUSTRIAL HYGIENE
47 West 9000 South, Suite #2 Sandy, Utah 84070
(801) 352-2380 : Office (801) 352-2381 : Fax

VETERANS HOSPITAL LIBRARY FLOORING ACM MATERIALS

VETERANS HOSPITAL LIBRARY
500 FOOTHILL DRIVE
SALT LAKE CITY, UTAH
DEC 19, 2017



GEORGE E. WAHLEN
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER
Salt Lake City Health Care System
500 Foothill Drive
Salt Lake City, UT 84148

December 21, 2016

In Reply Refer To: 660/00QS
Re. Asbestos Survey review

Shayne Brown
MSC Constructors
2755 Industrial Drive Ste. 1
Ogden, Utah 84401

Mr. Brown:

A review of the existing asbestos survey conducted by IHI Environmental, dated July 15, 2013 was requested due to the planned demolition operations of G zone, building 1 as part of the new Urgent Care project (660-332).

The Utah Department of Environmental Quality (UDEQ) regulates asbestos-related activities in the State of Utah. The UDEQ requires that a licensed Asbestos Inspector conduct an asbestos survey.

The Environmental Protection Agency (EPA) regulation National Emission Standards for Hazardous Air Pollutants (NESHAP), prohibits the release of asbestos fibers to the atmosphere during demolition activities. The asbestos NESHAP requires that prior to the commencement of demolition, that the facility or part of the facility affected be thoroughly inspected for the presence of both Friable (Regulated Asbestos-Containing Building Materials), and Non-Friable (Category I & II Asbestos-Containing Materials).

George E. Wahlen Department of Veterans Affairs Medical Center representatives conducted a visual assessment of the G zone, building 1 to identify materials suspected of containing asbestos (suspect ACM) such as thermal system insulation, surfacing materials, and miscellaneous materials (e.g. mastic). Samples of suspect ACM were collected for laboratory analysis. Bulk sample collection was conducted in accordance with the protocols outlined by EPA.

The survey was conducted by UDEQ licensed and EPA accredited asbestos inspectors employed by the Department of Veterans Affairs. Copies of the asbestos inspector's licenses are attached. A summary of survey activities is provided below.

Survey activities began with visual observation of the suspect building components to identify homogeneous areas of potential ACM. A homogeneous area consists of building materials that appear similar throughout in terms of color, texture

and date of application. Building materials identified as concrete, glass, masonry, metal or rubber were not considered potential ACM.

A physical assessment of each homogeneous area of potential ACM was conducted to determine the classification. A friable material is defined by the EPA as a material when dry may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure. Friability was assessed by physically touching suspect materials.

Based on results of the visual observation, bulk samples of potential ACM were collected. Random samples of potential materials were collected in each homogeneous area. Samples were placed in sealable containers and labeled with unique sample numbers using barcodes.

Bulk samples were submitted under chain of custody to Dixon Information Inc., a National Voluntary Laboratory Accreditation Program (NVLAP) accredited and UDEQ licensed laboratory utilizing Polarized Light Microscopy (PLM) analysis protocol. The percentage of asbestos, where applicable, was determined by microscopical visual estimation.

The following is a summary of the results of the analysis conducted by Dixon Information, Inc. of bulk samples taken in three separate homogeneous areas:

Sample #:	Location	Description	Results
660 EE78666	1G17D-1	Interior block wall black mastic	5% chrysotile
660 EE78667	1G17D-1	Interior block wall black mastic	5% chrysotile
660 EE78668	1G17D-1	Interior block wall black mastic	5% chrysotile
660 EE78669	1G17D-1	Exterior brick wall black mastic	5% chrysotile
660 EE78670	1G17D-1	Exterior brick wall black mastic	5% chrysotile
660 EE79008	1G17D-1	Exterior roof black mastic	None detected
660 EE79009	1G17D-1	Exterior roof black mastic	None detected

The asbestos NESHAP regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos. Friable ACM, Category I and Category II non-friable ACM which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated demolition activities are considered regulated ACM (RACM).

The UDEQ requires that any asbestos-related activity conducted in a public building be performed by personnel licensed by the UDEQ. Asbestos abatement must be performed by UDEQ licensed Asbestos Abatement Contractors in accordance with a Project Design prepared by a UDEQ licensed Asbestos Consultant. Third-party air

monitoring must be conducted during the abatement activities. MSC Constructors must provide the UDEQ with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities.

This letter has been completed based on visual and physical observations available at the time of the site visits, as well as a review of the most recent third party (IHI) site survey dated July 15, 2013. This letter and attachments, prepared for the exclusive use of the Department of Veterans Affairs (VA) for use in an environmental evaluation of the George E. Wahlen VA Medical Center, building 1, G zone, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied or relied upon without prior written permission from the VA, except that this report may be conveyed in its entirety to parties associated with the VA for this environmental evaluation.

In conclusion, this letter certifies that to the best of my knowledge, the attached documentation is correct and reflective of the current state of known and presumed ACM in G zone, building 1. Any additional data obtained by further review must be reviewed by the VA and the conclusions presented herein may be modified accordingly.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Treasure", is written over a circular stamp. The signature is fluid and cursive.

BRIAN TREASURE

Occupational Safety & Health Specialist
UAI# 161063



UNIVERSITY OF UTAH
SCHOOL OF MEDICINE

Rocky Mountain Center for
Occupational & Environmental Health

Department of Family & Preventive Medicine
391 Chipeta Way, Suite C
Salt Lake City UT 84108
Phone: (801) 581-4055
Fax: (801) 585-5275

THIS CERTIFIES THAT

Brian Treasure

*HAS COMPLETED THE REQUISITE TRAINING FOR
ASBESTOS ACCREDITATION UNDER TSCA TITLE II*

PRACTICES AND PROCEDURES IN
ASBESTOS ABATEMENT

Asbestos Inspector/Management Planner Training

DATE: December 5-9, 2016
EXAM: December 9, 2016
NUMBER: **161063**
EXPIRES: December 9, 2017
CREDITS: 4.0 CEUs / 6.68 ABIH CM Points

A handwritten signature in cursive script that reads "Connie Crandall".

Connie Crandall, MBA, MA
Continuing Education Director



UNIVERSITY OF UTAH
SCHOOL OF MEDICINE

Rocky Mountain Center for
Occupational & Environmental Health

Department of Family & Preventive Medicine
391 Chipeta Way, Suite C
Salt Lake City UT 84108
Phone: (801) 581-4055
Fax: (801) 585-5275

THIS CERTIFIES THAT

Joe Oberender

*HAS COMPLETED THE REQUISITE TRAINING FOR
ASBESTOS ACCREDITATION UNDER TSCA TITLE II*

PRACTICES AND PROCEDURES IN
ASBESTOS ABATEMENT

Asbestos Inspector/Management Planner Training

DATE: December 5-9, 2016
EXAM: December 9, 2016
NUMBER: 161060
EXPIRES: December 9, 2017
CREDITS: 4.0 CEUs / 6.68 ABIH CM Points

A handwritten signature in cursive script that reads "Connie Crandall".

Connie Crandall, MBA, MA
Continuing Education Director

DIXON INFORMATION INC.

MICROSCOPY. ASBESTOS ANALYSIS & CONSULTING

A.I.H.A ACCREDITED LABORATORY # 101579

NVLAP LAB CODE 101012-0

December 19, 2016

Mr. Brian Treasure
GEORGE E WHALEN VA MEDICAL CENTER
500 Foothill Dr
SLC, UT 84148

Ref: Batch # 140257, Lab # A49634 - A49640
Received December 19, 2016
Test report, Page 1 of 3
GEORGE E WHALEN VA MEDICAL CENTER
500 Foothill Dr, SLC, UT 84148
PO #: 660-Q72012
Sampled by Brian Treasure UT Accreditation #161063, 12/19/2016

Dear Mr. Treasure:

Samples A49634 through A49640 have been analyzed by visual estimation based on EPA-600/M4-82-020 December 1982 optical microscopy test method, with guidance from the EPA/600/R-93/116 July 1993 and OSHA ID 191 methods. Appendix "A" contains statements which an accredited laboratory must make to meet the requirements of accrediting agencies. It also contains additional information about the method of analysis. Appendix "A" must be included as an essential part of this test report. This analysis is accredited under NVLAP Lab Code: 101012-0. It does not contain data or calibrations for tests performed under the AIHA program under lab code 101579.

This report may be reproduced but all reproduction must be in full unless written approval is received from the laboratory for partial reproduction. The results of analysis are as follows:

Lab A49634, Field 660 EE78666 1G17D-1 Interior block wall black mastic

This sample contains two types of material: The first type is **5% chrysotile asbestos** in black tar; the second type is tan sandy cement with vermiculite and cinders. This sample is non-homogeneous.

The first type is 2% of the sample. The second type is 98% of the sample.

Lab A49635, Field 660 EE78667 1G17D-1 Interior block wall black mastic

This sample contains two types of material: The first type is **5% chrysotile asbestos** in black tar; the second type is tan sandy plaster with vermiculite and cinders. This sample is non-homogeneous.

The first type is 1% of the sample. The second type is 99% of the sample.

78 WEST 2400 SOUTH | SOUTH SALE LAKE, UTAH 84115-3013

PHONE 801-486-0800 | FAX 801-486-0849 | RES 801-571-7695

Batch #140257

Lab #A49634-A49640

Page 2 of 3

Lab A49636, Field 660 EE78668 1G17D-1 Interior block wall black mastic

This sample contains two types of material: The first type is **5% chrysotile asbestos** in black tar; the second type is tan sandy plaster with vermiculite and cinders. This sample is non-homogeneous.

The first type is 2% of the sample. The second type is 98% of the sample.

Lab A49637, Field 660 EE78669 1G17D-1 exterior brick wall black mastic

This is **5% chrysotile asbestos** in black tar with a trace of tan plaster debris.

Lab A49638, Field 660 EE78670 1G17D-1 exterior brick wall black mastic

This is **5% chrysotile asbestos** in black tar.

Lab A49639, Field 660 EE79008 1G17D-1 exterior roof black mastic

This sample contains four types of material: The first type is tan mineral wool debris; the second type is glossy black tar layers; the third type is 40% plant fiber in black tar felt; the fourth type is yellow foam plastic. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 3% of the sample. The second type is 65% of the sample. The third type is 30% of the sample. The fourth type is 2% of the sample.

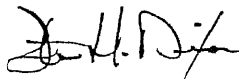
Lab A49640, Field 660 EE79009 1G17D-1 exterior roof black mastic

This sample contains four types of material: The first type is tan mineral wool debris; the second type is glossy black tar layers; the third type is 40% plant fiber in black tar felt; the fourth type is yellow foam plastic. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 4% of the sample. The second type is 65% of the sample. The third type is 30% of the sample. The fourth type is 1% of the sample.

In order to be sure reagents and tools used for analysis are not contaminated with asbestos, blanks are tested. Asbestos was none detected in the blanks tested with this bulk sample set.

Very truly yours,



Steve H. Dixon, President

Analyst: Alex Kachel



Date Analyzed: December 19, 2016

Appendix "A"

"This report relates only to the items tested. This report must not be used to claim product endorsement by NVLAP or AIHA"

NVLAP and AIHA requires laboratories to state the condition of the samples received for testing. These samples are in acceptable condition for analysis unless there is a statement in the report of analysis that a test item has some characteristics or condition that precludes analysis or requires a modification of standard analytical methodology. If a test item is not acceptable, the reasons for non-acceptability will be given under the laboratory number for that particular test item. The reported percentages of each material type are based on the sample received by the laboratory and may not be representative of the parent material. Orientation of top and bottom may not be specified due to uncertainty of orientation.

Methods of Analysis and Limit of Detection.

In air count analysis, the results may be biased when interferences are noted.

The accuracy of asbestos analysis in bulk samples increases with increasing concentration of asbestos. Pigments, binders, small sample size, and multiple layers may affect the analysis sensitivity.

There are two methods for analysis of asbestos in a bulk test sample. Visual estimation is the most sensitive method. If an analyst makes a patient search, 0.1% or less asbestos can be detected in a bulk sample.

The second method of analysis is a statistical approach called point counting. EPA will not accept visual estimation if a laboratory detects a trace of asbestos in a sample i.e. anything less than 1% asbestos. Government agencies regulate asbestos containing materials (ACM) whenever the ACM is more than 1%. OSHA requirements apply on samples containing any amount of asbestos.

Due to higher charge for a point count analysis, Dixon Information Inc. does not perform a point count unless authorized to do so by the customer. If a sample is point counted, when possible, various chemical and/or physical means may be used to concentrate the asbestos in the sample. This is permitted by the EPA method and it increases the accuracy of the analysis.

Dixon Information Inc.
78 West 2400 South
South Salt Lake, Utah 84115
Phone: (801) 486-0800 Fax: (801) 486-0849

BULK ANALYTICAL REQUEST FORM

RUSH

Turnaround Time - Check One

Batch Number 14-0257

☒ Same Day Rush (12 Hours \$35.⁰⁰ per sample)

☐ 24 Hour Rush (24 Hours \$25.⁰⁰ per sample)

☐ Non-rush (5 Working Days \$17.⁰⁰ per sample)

Name of location sample was taken at George E Whalen VA Medical Center

Street address sample was taken at 500 Foothill Dr, SLC UT 84148

Sampled by: Brian Treasure UT Accreditation #161063

Sampled Date 12/19/2016

☐ Project # ☐ Work Order # ☒ Purchase Order # 660-Q72012

Job # _____

Report to be sent to: Brian Treasure

Company: George E Whalen VA Medical Center (00Q)

Address: 500 Foothill Dr.

City: SLC State: UT

Zip Code: 84148

Telephone #: 801.582.1565 x4450

Fax #: 360-205-0108

E-mail: Brian.Treasure@va.gov

Billing to be sent to: Barry G Kesler

Company: George E Whalen VA Medical Center (138)

Address: 500 Foothill Dr.

City: SLC State: UT

Zip Code: 84148

Telephone #: 801.582.1565 x4596

Additional Instructions: Please provide a copy of report

to Barry G Kesler with invoice. Barry.Kesler@va.gov

RECEIPT #

Samples Collected

Field #	Description of Sample	Date	Time	Lab #
660 EE78666	1G17D-1 interior block wall black mastic	12/19/2016	10:25	49134
660 EE78667	1G17D-1 interior block wall black mastic	12/19/2016	10:28	49135
660 EE78668	1G17D-1 interior block wall black mastic	12/19/2016	10:30	49136
660 EE78669	1G17D-1 exterior brick wall black mastic	12/19/2016	10:32	49137
660 EE78670	1G17D-1 exterior brick wall black mastic	12/19/2016	10:35	49138
660 EE79008	1G17D-1 exterior roof black mastic	12/19/2016	11:00	49139
660 EE79009	1G17D-1 exterior roof black mastic	12/19/2016	11:02	49140

Chain of Custody

Submission of asbestos samples for analysis and/or signing a chain of custody is the equivalent of submission of a purchase order and constitutes an agreement to pay for services provided at Dixon Information Incorporated standard schedule of fees for services.

Submitted by: Brian Treasure #161063

Date: 12/19/2016

Time: _____

Received by Lab: _____

Date: 12-19-16

Time: 1250

Received by Analyst: _____

Date: _____

Time: _____

Returned by Lab: _____

Date: _____

Time: _____