



February 14, 2023

Project 211.06085.006

Mr. Steven Marshall, RRC, CDT, LEED AP Gale Associates, Inc. 6 Bedford Farms Drive, Suite 101 Bedford, New Hampshire 03110

RE: Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof 6 Elkins Lane Augusta, Maine

Ransom Consulting, LLC (Ransom) has prepared this report presenting the results of the Limited Hazardous Building Materials Inventory (HBMI) performed at the property identified as the Central Building (the Site building), located at 6 Elkins Lane in Augusta, Maine (the Site). The Site location is shown on Figure 1. This Limited HBMI was focused exclusively on the roofing system of the Site building. The work was completed for Gale Associates, Inc. (Gale), in accordance with our Proposed Scope of Work, dated October 25, 2022. The investigation included sampling the roof materials of the Central Building for asbestos-containing materials (ACM) and an assessment of polychlorinated biphenyls (PCBs) in building materials.

FACILITY DESCRIPTION

The Site is located at 6 Elkins Lane in Augusta, Maine, and is currently improved with a three-story masonry structure with a full basement historically operated as part of the Augusta Mental Health Institute (AMHI) facility. Records from the Augusta Assessor indicate that the building was constructed in 1840. The total Site building occupies an approximate ground footprint of approximately 24,500 square feet and is constructed on a masonry foundation. The roofing materials consist of a mix of rolled asphalt roofing and rubber membrane roofing.

Generalized plans for the roof of the Site building, including the locations of samples collected for asbestos and PCB analysis, are provided in Figures 2 and 3. A photograph log documenting our key findings is included as Attachment A.

LIMITATIONS

This Limited HBMI is subject to certain limitations, which must be considered when interpreting the results. The information presented in this report is based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. Conclusions represent the professional judgment of Ransom based on the data obtained from the work and the site conditions encountered at the time the work was performed and are not to be construed as legal advice.

In addition to these general stipulations, additional site-specific limitations are as follows:

- 1. The scope of this Limited HBMI was limited exclusively to the roofing system of the Central Building. The HBMI inspection was performed in conjunction with a building envelope study being conducted by Gale. Kevin W. Smith & Son, Inc., a commercial roofing contractor, was responsible for roof cuts and repairs.
- 2. Our inspection was conducted utilizing limited destructive assessment and sampling techniques. Additional suspect materials may be present in concealed or inaccessible spaces which may be disturbed as part of the future renovations.
- 3. Our inspection was limited to Roof Areas A, B, and E as depicted on Figures 2 and 3. Roof areas C and D were excluded from this assessment at the request of Gale.
- 4. Our inspection was conducted on behalf of Gale and is representative of conditions observed at the time of this report. No reliance shall be made by other users, for additional purposes, or for future demolition/renovation projects at the Site.
- 5. The roof areas inspected as part of this HBMI were covered with snow at the time of the assessment. Additional materials requiring testing may be present beneath snow cover.

HISTORICAL DOCUMENTATION

Ransom was not provided copies of previous asbestos report(s) or other information regarding previous inspections and/or abatement of hazardous materials at the Site building.

ASBESTOS-CONTAINING MATERIALS

Ransom conducted an inspection of the Site building roof for the presence of ACM on December 21, 2022. The scope of the limited ACM inspection included the identification, quantification, and sampling of accessible suspect building materials on the building roof which would be impacted by the proposed renovations. The inspection was conducted by Wesley Harden of Ransom, who is certified by Maine and accredited by the United States Environmental Protection Agency (U.S. EPA) as an asbestos inspector. Copies of Mr. Harden's most recent training certificates and state asbestos inspector certifications are provided in Attachment B.

In the State of Maine, the Occupational Safety and Health Administration (OSHA), the U.S. EPA, and the Maine Department of Environmental Protection (MEDEP) are responsible for regulating the release of asbestos into the environment and protecting workers from exposure to airborne asbestos fibers. OSHA defines ACM as "any material containing more than one percent asbestos." MEDEP defines ACM as "any material containing asbestos in quantities greater than or equal to one percent by volume as determined by weight, visual evaluation, and/or point count analysis." Bulk samples of friable miscellaneous materials (e.g., drywall, joint compound, pressed fiber ceiling tile) were analyzed using the *Method for the Determination of Asbestos in Bulk Building Materials*, EPA/600/R-93/116 (1993) via polarized light microscopy (PLM) visual estimation. Non-friable organically bound (NOB) materials (e.g., floor tiles, roofing materials, mastics) were analyzed using PLM NOB–EPA 600/R-93/116 using the gravimetric reduction method (GRM).



Samples were analyzed by Optimum Analytical and Consulting, LLC (Optimum) of Salem, New Hampshire. Optimum is a Maine-licensed asbestos analytical laboratory and is also certified to perform bulk sample analysis by the National Voluntary Laboratory Accreditation Program (NVLAP). Copies of Optimum's relevant certifications are provided in Attachment B.

Laboratory analysis of bulk samples identified ACM on the roof of the Site building. The following is a brief discussion of each ACM identified.

1. **Roof sealant (Sample set 008):** An asbestos-containing black roofing sealant was identified along the building/roof interface and on various patches across the rubber membrane on Roof Area B. Due to the presence of this material in various locations across the roof, the entire rubber membrane should be considered asbestos-containing and be abated as such.

No additional ACM was identified in connection with the Central Building roofing system. The MEDEP requires consultants to advise the building owner or owner's agent whenever the asbestos analytical laboratory has reported suspect ACM below ten percent asbestos. The owner or owner's agent may either elect to treat these materials as positive for asbestos or have the samples re-analyzed using an alternate method as listed below:

- 1. PLM EPA/600R-93/116 Point Count (friable ACM); or
- 2. Transmission Electron Microscopy (TEM):
 - 1. U.S. EPA NOB EPA/600/R-93/116b §2.5; or
 - 2. TEM Chatfield Method.

Re-analysis of samples testing negative for asbestos is not required.

The black roof sealant identified during Ransom's investigation falls within the 1%-10% range. Based on the nature of the materials identified and the concentrations of asbestos fiber detected, re-analysis is not recommended at this time.

A listing of all samples collected, analytical results, and estimated quantities of confirmed ACM can be found in Table 1. A copy of the laboratory analytical report can be found in Attachment C.

Asbestos fibers present potential health hazards when they become airborne. Federal regulations suggest that ACM may be managed in place, as long as it remains intact, undamaged, and in good condition. Current regulations require that asbestos-containing building materials be removed, if they will be disturbed by demolition, renovation, or other building maintenance activities. ACM identified at the Site that will be impacted by the proposed renovations will require removal, prior to the initiation of these activities. ACM abatement should be performed using approved methods in accordance with applicable federal and state regulations. ACM should be removed by a licensed asbestos abatement contractor and in accordance with a project design prepared by a certified asbestos abatement project designer, except where exempt from applicable rules.



Asbestos-containing asphalt-based roofing materials, as well as exterior caulks, glazings, and sealants are exempt from MEDEP asbestos abatement regulations, provided that these materials are removed wholly intact and are not sawed, sanded, grinded, cut, or drilled during demolition or renovation. This is still considered OSHA classified asbestos work, and it is generally recommended that licensed asbestos abatement contractors conduct the removal of all ACM identified. Please note that this HBMI was limited to the roofing materials of the Site building.

POLYCHLORINATED BIPHENYLS

PCBs may be present in building materials (including caulking, glazing, adhesives, and paints) in buildings constructed between 1950 and 1978, particularly in schools and other institutional buildings. Buildings constructed prior to 1950 may also have PCB-containing building products as a result of renovation projects that may have occurred between 1950 and 1978. PCB-containing building products are considered *PCB bulk product waste* by the U.S. EPA under the Toxic Substances Control Act (TSCA) if the concentration of PCBs in the material is greater than or equal to 50 milligrams per kilogram (mg/kg). Building materials with PCB concentrations ≥ 50 mg/kg are not authorized for use under *Part 761—Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* and must be managed accordingly.

The definition of PCB bulk product waste also includes building materials that have been coated or serviced with PCBs. Masonry, wood, metals, and other building materials that are purposely coated with PCB-containing products are regulated as PCB bulk product waste if the product coating the building materials contains PCBs at concentrations \geq 50 mg/kg and subsequently the building materials have concentrations \geq 50 mg/kg as a result of PCBs leaching into the substrate.

To evaluate the potential presence of PCBs in building materials associated with the central building roofing system, Ransom collected three bulk samples of caulking materials ("Area A", "Area B", and "Area E") observed at each roof area (refer to Figures 2 and 3).

The bulk PCB samples were placed in laboratory-supplied glassware, placed in a cooler with ice, and delivered under chain-of-custody to Alpha Analytical, Inc. (Alpha) of Westborough, Massachusetts for PCB analysis via U.S. EPA Method 8082A using the Soxhlet extraction method, U.S. EPA Method 3540C.

Laboratory analytical results did not identify PCBs at concentrations above the laboratory reporting limit in the caulk samples submitted for analysis. Therefore, TSCA regulations regarding handling and disposal of *PCB bulk product waste* do not apply.

Laboratory results from PCB testing are provided in Table 2, and the laboratory analytical reports are provided as Attachment C.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this Limited HBMI, Ransom makes the following conclusions and recommendations.



- 1. Asbestos-containing roofing sealant was identified in connection with the rubber membrane roof on "Area B". Due to the presence of this material at various locations across the roof, the entire rubber membrane of roof Area B should be considered contaminated with asbestos and handled as such. Although exterior caulks such as the identified roofing sealant may be considered exempt from MEDEP asbestos abatement regulations, the removal of the roofing sealant is still considered OSHA classified asbestos work. It is generally recommended that licensed asbestos abatement contractors conduct the removal and disposal of all ACM that would be impacted by future renovation or demolition work at the Site building.
- 2. PCBs were not identified above the laboratory detection limit in the roofing materials sampled as part of this investigation.

Ransom appreciates the opportunity to assist Gale with this Limited HBMI. Please contact us if you have questions regarding any of the information provided in this report.

Sincerely,

RANSOM CONSULTING, LLC

Wesley Harden, L.G.

Hazardous Materials Specialist

Nicholas O. Sabatine, P.G.

Vice President/Senior Project Manager

WEH/EPP/NOS:mes

Attachments

Eile Phenox

Eriksen P. Phenix, L.G.

Project Manager

TABLE 1: SUMMARY OF ASBESTOS TESTING RESULTS

Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof

6 Elkins Lane Augusta, Maine

Material	Sample Number	Asbestos Quantity and Type ^[2,4]	Estimated Quantity ^[3]		
ROOF AREA A					
Rubber roof membrane	001ABC	NAD			
Foam insulation, yellow	002ABC	NAD			
Paper on foam insulation, gray	003ABC	NAD			
Flashing caulking, gray	004ABC	NAD			
Roof sealant, black	005ABC	NAD			
Asphalt coating on deck	006ABC	NAD			
	ROOF AREA	В			
Flashing caulking, gray	007ABC	NAD			
	008A	NAD			
⁶ Roof sealant, black	008B	5.73% Chrysotile	8,100 SF		
	008C	NA/PS			
Rubber roof membrane	009ABC	NAD			
Foam insulation, yellow	010ABC	NAD			
Insulation paper, gray	011ABC	NAD			
Asphalt coating on deck	012ABC	NAD			
	ROOF AREA	E			
Flashing caulking, gray	013ABC	NAD			
Asphalt roofing, black	014ABC	NAD			
Fiber board, brown	015ABC	NAD			
Foam insulation, yellow (asphalt roof)	016ABC	NAD			
Insulation paper, gray (asphalt roof)	017ABC	NAD			
Rubber roof membrane	018ABC	NAD			
Foam insulation, yellow (rubber roof)	019ABC	NAD			
Insulation paper, tan (rubber roof)	020ABC	NAD			
Roof sealant, black	021ABC	NAD			

NOTES:

- 1. Samples were collected on December 21, 2022 by Ransom Consulting, LLC., and were analyzed by Optimum Analytical and Consulting, LLC of Salem, NH.
- 2. NA/PS = not analyzed/positive stop. Sample sets are analyzed until asbestos is identified in an amount greater than one percent.
- 3. CF = Cubic Feet. SF = Square Feet. LF = Linear Feet. EA = Each. NA = Not Applicable.
- 4. NAD = No asbestos detected; ACM = Asbestos Containing Material; PACM = Presumed Asbestos Containing Material.
- 5. Sample locations are shown on Figures 1 and 2.



TABLE 2: SUMMARY OF PCB TESTING RESULTS

Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof 6 Elkins Lane Augusta, Maine

Sample Identification	Sample Description	Sample Location	Sample Matrix	Total PCBs (milligrams per kilogram [mg/kg])
AREA A	Caulk	Roof Area A	Caulk	BRL (0.134)
AREA B	Caulk	Roof Area B	Caulk	BRL (0.129)
AREA E	Caulk	Roof Area E	Caulk	BRL (0.160)

Notes:

- 1. Samples were collected on December 21, 2022 by Ransom Consulting, LLC and were analyzed by Alpha Analytical of Westborough, Massachusetts.
- 2. BRL () = below reporting limit indicated in parentheses.
- 3. Values in **boldface** type indicate PCB concentrations which exceed a concentration of 50 mg/kg, constituting an "unauthorized use" of PCBs and would be considered PCB Bulk Product Waste if removed.







Legend & Notes



Site Boundary

Notes:

- Plan based on measurements and observations made by Ransom Consulting, LLC,
- Some features are approximate in location and scale.
- This plan has been prepared for Gale Associates Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, LLC.

Scale and Orientation

1 inch = 60 feet



Prepared For

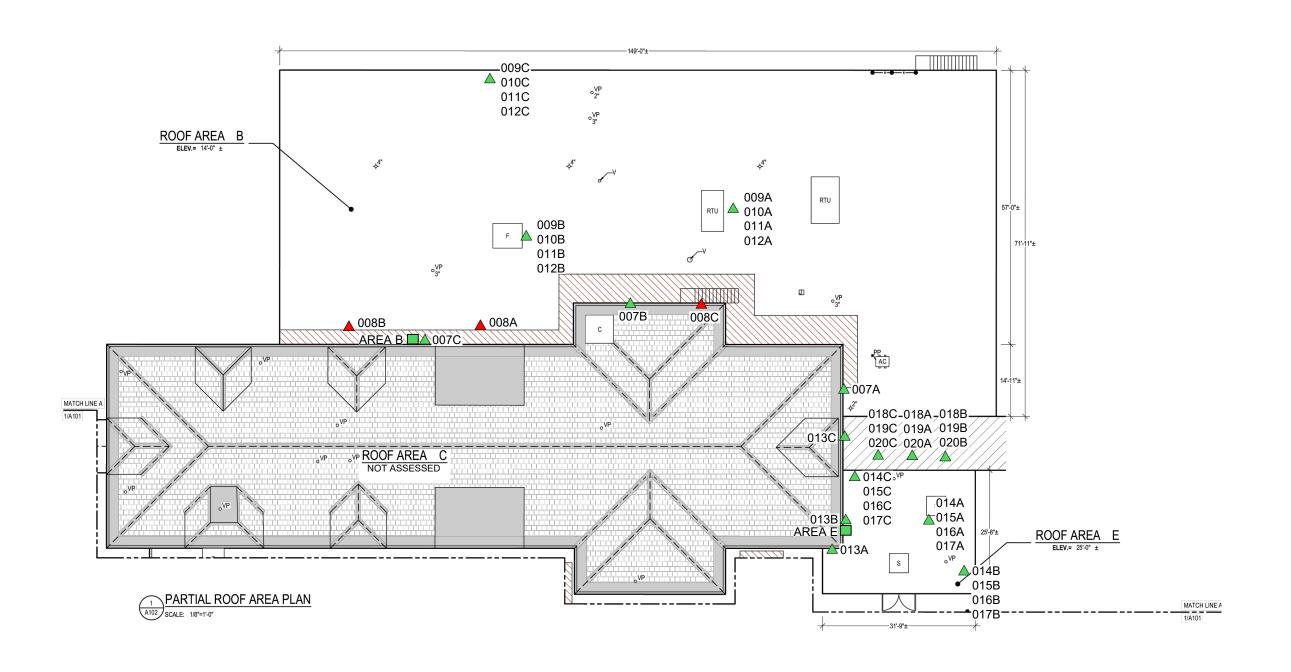
Gale Associates Inc. 6 Bedford Farms Drive Bedford, New Hampshire

Site Address

HBMI - Central Building Roof 6 Elkins Lane, Augusta, Maine

211.06085 Feb 2023

Figure 1
Site Location Map





Legend & Notes

Asbestos Sample Location



Sample Testing Positive for Asbestos

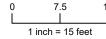


PCB Sample Location

Notes:

- Plan based on measurements and observations made by Ransom Consulting, LLC.
- 2. Some features are approximate in location and scale.
- This plan has been prepared for Gale Associates Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, LLC.

Scale and Orientation



Prepared For

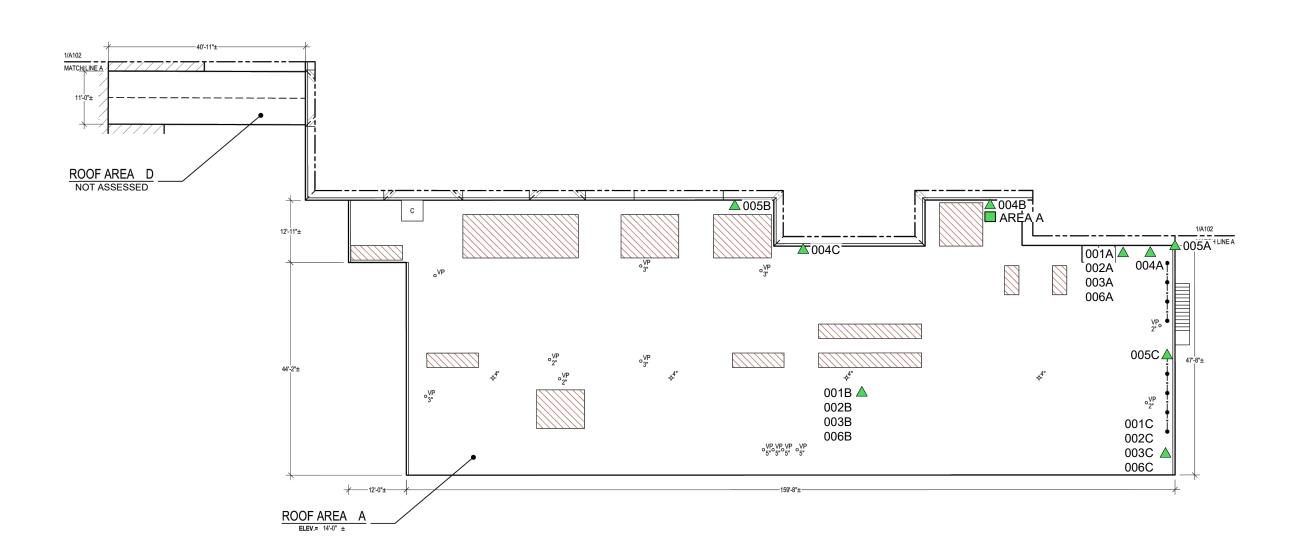
Gale Associates Inc. 6 Bedford Farms Drive Bedford, New Hampshire

Site Address

HBMI - Central Building Roof 6 Elkins Lane, Augusta, Maine

211.06085 Jan 2023

Figure 2
Partial Roof Plan





Legend & Notes

Asbestos Sample Location

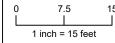


PCB Sample Location

Notes:

- 1. Plan based on measurements and observations made by Ransom Consulting, LLC.
- 2. Some features are approximate in location and scale.
- 3. This plan has been prepared for Gale Associates Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, LLC.

Scale and Orientation



Prepared For

Gale Associates Inc. 6 Bedford Farms Drive Bedford, New Hampshire

Site Address

HBMI - Central Building Roof 6 Elkins Lane, Augusta, Maine

211.06085 Jan 2023

Figure 3 Partial Roof Plan

ATTACHMENT A

Photograph Log

Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof 6 Elkins Lane Augusta, Maine



Photograph Log



Photo 1: Exterior view of the Central Building facing North.



Photo 2: Exterior view of the Central Building facing South.



Photo 3 (12/21/2022): Black roof sealant on Roof Area B testing positive for asbestos (sample set 008). Gray caulk above was negative for asbestos (sample set 007).



Photo 4 (12/21/2022): Roof Area A, conditions at time of assessment.



Photo 5 (12/21/2022): Roof Area B, conditions at time of assessment.



Photo 6: (12/21/2022): Typical roof cut.

ATTACHMENT B

Certifications

Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof 6 Elkins Lane Augusta, Maine





This is to certify that

Wesley E Harden

494 Riverside Drive #1, Auburn, ME 04210



has completed the requisite training, and has passed an examination for accreditation as:

Asbestos Inspector

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C./2646

Course Location Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

February 7-9, 2022 February 09, 2022

Examination Date

February 09, 2023

Expiration Date

Training Director

Course Dates 22-4263-102-403241

Certificate Number

16 Upton Drive, Wilmington, MA 01887

Telephone 978.658.5272

www.ieetrains.com

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101433-0

Optimum Analytical & Consulting LLC

Salem, NH

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2022-04-01 through 2023-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program





State of Maine Department of Environmental Protection

LICENSE

Optimum Analytical & Consulting, LLC

Asbestos Analytical Laboratory
(Bulk)

License Number: <u>LB-0067</u> Expiration Date: <u>03/31/2023</u>





State of Maine Department of Environmental Protection

LICENSE

Optimum Analytical & Consulting, LLC

Asbestos Analytical Laboratory
(Air)

License Number: <u>LA-0065</u> Expiration Date: <u>03/31/2023</u>

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





MELANIE LOYZIM
COMMISSIONER

August 23, 2021

Ransom Consulting, LLC 400 Commercial Street, Suite 404 Portland, Maine 04101

Dear Licensee:

State of Maine
Asbestos Abatement Program

Eriksen P. Phenix

Inspector
Cert No. AI-0560
Trn.Exp.Date 07/23/2022
Expiration Date 07/31/2022
This is not a legal form of official identification

Asbestos application(s) for individual certification of the **one** employee(s) listed below have been received and **approved**. Individual certification numbers are listed below and wallet card(s) are enclosed. Card(s) are property of the individual to whom each is issued. Your responsibility as a licensee is to ensure delivery of the cards to persons in your employment. This letter should be retained for your company files as record of certification. Please attach 1 updated passport size photo with every application.

Remember, in Maine all certified employees working on an asbestos abatement project, whether conducting removal/repair, air monitoring, design, inspection, or analysis functions, must work for a State of Maine licensed asbestos firm and carry his/her wallet card(s) on the job site.

As a reminder, prior to renewing your asbestos certification, the State of Maine requires an annual refresher course to be taken before submitting a renewal application. A certificate shall expire one year from the last day of the month from the date of issuance, or on the last day of the month that the training certificate expires, whichever is sooner.

All our asbestos forms can be found at https://www.maine.gov/dep/waste/asbestos/forms.html Thank you for your cooperation and your completed application(s).

Name <u>Category</u> <u>Certification #</u> <u>Exp. Date</u>

Eriksen P. Phenix Inspector AI-0560 07/31/2022

Sincerely,

Sandra J. Moody, Environmental Specialist

Division of Remediation

Sand of Moody

Bureau of Remediation and Waste Management

ATTACHMENT C

Laboratory Reports

Limited Hazardous Building Materials Inventory Former Maine State Hospital: Central Building Roof 6 Elkins Lane Augusta, Maine





85 Stiles Road, Suite 201 Salem, NH 03079 603-458-5247

Erik Phenix Project Reference: 211.06085.006
Ransom Environmental Consultants, Inc. Laboratory Batch #: 2245324
400 Commercial Street Date Samples Received: 12/23/2022
Portland ME 04101 Date Samples Analyzed: 01/11/2023
Date of Final Report: 01/12/2023

SAMPLE IDENTIFICATION:

Sixty Three (63) samples from AMHI-Central Building Roof, Augusta, ME project were submitted by Client on 12/23/2022

This bulk sample(s) was delivered to Optimum Analytical Consulting, LLC (Optimum) located in Salem, New Hampshire for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials). This report relates only to those samples analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites. Quantification of asbestos content was determined by Calibrated Visual Estimation. Optimum is not responsible for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

In any given material, fibers with a small diameter ($<0.25\mu m$) may not be detected by the PLM method. Floor tile and other resinous bound materials may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additionally, there is currently no approved EPA analytical method to reliably confirm vermiculite as non-asbestos containing. Additional analytical methods may be required. Optimum Analytical recommends using Transmission Electron Microscopy (TEM) or other approved methods for a more definitive analysis.

Optimum will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability. This report may not be reproduced except in full, without the written approval of Optimum Analytical and Consulting, LLC.

The client/laboratory shall not use the NVLAP and AIHA Logo or this test report in a way that constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Point Count = .25%, 1000 Point Count = 0.1%; Present or Absent are observations made during a qualitative analysis.

This report is considered preliminary until signed by both the Laboratory Analyst and Laboratory Director or Supervisor. If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel Laboratory Director

NVLAP Lab Code: 101433-0

PAGE: 1 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

ORDER #: 2245324
PROJECT #: 211.06085.006

DATE COLLECTED:

COLLECTED BY: Client

(%)

DATE RECEIVED: 12/23/2022
ANALYSIS DATE: 01/11/2023
REPORT DATE: 01/12/2023

ANALYST: Jamie Noel

Non-Asbestos

Components

(%)

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.

ADDRESS: 400 Commercial Street

CITY / STATE / ZIP: Portland ME 04101

CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis

LOCATION: AMHI-Central Building Roof, Augusta, ME

Laboratory ID Sample Location Layer No. Asbestos Sample No. Description Layer % Type

2245324-001Roof area ARubber Roof Membrane, BlackLAYER 1
100%None DetectedCellulose Fiber
Binder/Filler1%
99%

REPORT OF ANALYSIS

2245324-002	Roof area A				
001B	Rubber Roof Membrane, Black	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-003	Roof area A				
001C	Rubber Roof Membrane, Black	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-004	Roof area A				
002A	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-005	Roof area A				
002B	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Rinder/Filler	99%

2245324-006	Roof area A				
002C	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-007	Roof area A				
003A	Paper on Foam Insulation, Gray	LAYER 1 100%	None Detected	Cellulose Fiber Binder/Filler	97% 3%

2245324-008	Roof area A				
003B	Paper on Foam Insulation, Gray	LAYER 1	None Detected	Cellulose Fiber	97%
	•	100%		Rindor/Fillor	20/

		100%	Binder/Filler	3%
2245324-009	Roof area A			

003C	Paper on Foam Insulation, Gray	LAYER 1	None Detected	Cellulose Fiber	97%
		100%		Binder/Filler	3%

2245324-010 Roof area A

004A Flashing Caulking, Gray LAYER 1 None Detected Cellulose Fiber 1%
100% Binder/Filler 99%

PAGE: 2 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

ORDER #: 2245324

PROJECT #: 211.06085.006

DATE COLLECTED:

(%)

None Detected

COLLECTED BY: Client

 DATE RECEIVED:
 12/23/2022

 ANALYSIS DATE:
 01/11/2023

 REPORT DATE:
 01/12/2023

ANALYST: Jamie Noel

Non-Asbestos

(%)

1%

1%

Components

Cellulose Fiber

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.

ADDRESS: 400 Commercial Street

CITY / STATE / ZIP: Portland ME 04101
CONTACT: Erik Phenix

DESCRIPTION: PLM Analysis

004C

LOCATION: AMHI-Central Building Roof, Augusta, ME

Flashing Caulking, Gray

Laboratory ID Sample Location Layer No. Asbestos Sample No. Description Layer % Type

2245324-011 Roof area A

004B Flashing Caulking, Gray LAYER 1 None Detected Cellulose Fiber

100% Binder/Filler 99%

2245324-012 Roof area A

LAYER 1

REPORT OF ANALYSIS

100% Binder/Filler 99%

2245324-013 Roof area A

005A Roof Sealant, Black LAYER 1 None Detected Cellulose Fiber 1% 100% Binder/Filler 99%

2245324-014Roof area A005BRoof Sealant, BlackLAYER 1
100%None Detected
Binder/FillerCellulose Fiber
99%

2245324-015 Roof area A

005C Roof Sealant, Black LAYER 1 None Detected Cellulose Fiber 1%
100% Binder/Filler 99%

2245324-016 Roof area A

006A Asphalt Coating on Deck. Black LAYER 1 None Detected Cellulose Fiber 1%

O06A Asphalt Coating on Deck, Black LAYER 1 None Detected Cellulose Fiber 1%
100% Binder/Filler 99%

2245324-017 Roof area A

006B Asphalt Coating on Deck, Black LAYER 1 None Detected Cellulose Fiber 1% 100% Binder/Filler 99%

2245324-018 Roof area A

006C Asphalt Coating on Deck, Black LAYER 1 None Detected Cellulose Fiber 1%
100% Binder/Filler 99%

2245324-019 Roof area B
007A Flashing Caulking, Gray LAYER 1 None Detected Cellulose Fiber 1%

100% Binder/Filler 99%

2245324-020 Roof area B

007B Flashing Caulking, Gray LAYER 1 None Detected Cellulose Fiber 1% 100% Binder/Filler 99%

PAGE: 3 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

> ORDER #: 2245324

211.06085.006 PROJECT #:

DATE COLLECTED:

COLLECTED BY: Client

DATE RECEIVED: 12/23/2022 01/11/2023 **ANALYSIS DATE: REPORT DATE:** 01/12/2023

ANALYST: Jamie Noel

(%)

1%

99%

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

Ransom Environmental Consultants, Inc.

ADDRESS: 400 Commercial Street CITY / STATE / ZIP: Portland ME 04101

CONTACT: Erik Phenix **DESCRIPTION:** PLM Analysis

CLIENT:

LOCATION: AMHI-Central Building Roof, Augusta, ME

REPORT OF ANALYSIS Laboratory ID Sample Location Layer No. **Asbestos** Non-Asbestos Description Sample No. Layer % Components Type (%) 2245324-021 Roof area B 007C Flashing Caulking, Gray LAYER 1 None Detected Cellulose Fiber 100% Binder/Filler

2245324-022	Roof area B				
A800	Roof Sealant, Black	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-023	Roof area B					
008B	Roof Sealant, Black	LAYER 1	Chrysotile	5.73%	Cellulose Fiber	1%
		100%			Binder/Filler	93.27%

		 2	00.2.70
2245224 024	D (D		
2245324-024	Root area B		

2270027-027	Nooi alca D	
008C	Roof Sealant, Black	LAYER 1
	Note: Positive Stop	100%

2245324-025	Roof area B				
009A	Rubber Roof Membrane, Black	LAYER 1	None Detected	Cellulose Fiber	1%

000.			
	100%	Binder/Filler	99%

2245324-026	Roof area B				
009B	Rubber Roof Membrane, Black	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-027	Roof area B				
009C	Rubber Roof Membrane, Black	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-028	Roof area B				
010A	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-029	Roof area B				
010B	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

2245324-030	Roof area B				
010C	Foam Insulation, Yellow	LAYER 1	None Detected	Cellulose Fiber	1%
		100%		Binder/Filler	99%

PAGE: 4 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

ORDER #: 2245324 PROJECT #: 211.06085.006

DATE COLLECTED:

COLLECTED BY: Client

DATE RECEIVED: 12/23/2022
ANALYSIS DATE: 01/11/2023
REPORT DATE: 01/12/2023

ANALYST: Jamie Noel

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.

ADDRESS: 400 Commercial Street CITY / STATE / ZIP: Portland ME 04101

CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis

LOCATION: AMHI-Central Building Roof, Augusta, ME

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2245324-031 011A	Roof area B Insulation Paper, Brown/Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	98% 2%
2245324-032 011B	Roof area B Insulation Paper, Brown/Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	98% 2%
2245324-033 011C	Roof area B Insulation Paper, Brown/Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	98% 2%
2245324-034 012A	Roof area B Asphalt Coating on Deck, Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	1% 5% 94%
2245324-035 012B	Roof area B Asphalt Coating on Deck, Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	1% 5% 94%
2245324-036 012C	Roof area B Asphalt Coating on Deck, Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	1% 5% 94%
2245324-037 013A	Roof area E Flashing Caulking, Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-038 013B	Roof area E Flashing Caulking, Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-039 013C	Roof area E Flashing Caulking, Gray	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%

PAGE: 5 of 10



85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

> ORDER #: 2245324

211.06085.006 PROJECT #:

DATE COLLECTED:

COLLECTED BY: Client

DATE RECEIVED: 12/23/2022 **ANALYSIS DATE:** 01/11/2023 REPORT DATE: 01/12/2023

ANALYST: Jamie Noel

CLIENT: Ransom Environmental Consultants, Inc. ADDRESS: 400 Commercial Street

CITY / STATE / ZIP: Portland ME 04101

Erik Phenix CONTACT: **DESCRIPTION:** PLM Analysis

LOCATION: AMHI-Central Building Roof, Augusta, ME

Non-Asbestos Laboratory ID Sample Location Layer No. **Asbestos** Description Sample No. Layer % Type (%) Components (%) 2245324-040 Roof area E LAYER 1 None Detected Cellulose Fiber 15% 014A Asphalt Roofing, Black Fibrous Glass 20% 100% Binder/Filler 65% 2245324-041 Roof area E None Detected Cellulose Fiber 014B Asphalt Roofing, Black LAYER 1 15% Fibrous Glass 20% 100% Binder/Filler 65% 2245324-042 Roof area E 014C LAYER 1 None Detected Cellulose Fiber 15% Asphalt Roofing, Black Fibrous Glass 20% 100% Binder/Filler 65% 2245324-043 Roof area E LAYER 1 None Detected Cellulose Fiber 95% 015A Fiber Board, Brown 100% Binder/Filler 5% 2245324-044 Roof area E LAYER 1 None Detected Cellulose Fiber 95% 015B Fiber Board, Brown 100% Binder/Filler 5% 2245324-045 Roof area E Fiber Board, Brown LAYER 1 None Detected Cellulose Fiber 95% 015C 100% Binder/Filler 5% 2245324-046 Roof area E LAYER 1 None Detected Cellulose Fiber 1% 016A Foam Insulation, Yellow 100% Binder/Filler 99% 2245324-047 Roof area E LAYER 1 None Detected Cellulose Fiber 1% 016B Foam Insulation, Yellow 100% Binder/Filler 99% 2245324-048 Roof area E LAYER 1 None Detected Cellulose Fiber 1% 016C Foam Insulation, Yellow 100% Binder/Filler 99%

REPORT OF ANALYSIS

PAGE: 6 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

ORDER #: 2245324

PROJECT #: 211.06085.006

DATE COLLECTED:

COLLECTED BY: Client

 DATE RECEIVED:
 12/23/2022

 ANALYSIS DATE:
 01/11/2023

 REPORT DATE:
 01/12/2023

ANALYST: Jamie Noel

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.
ADDRESS: 400 Commercial Street

CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis

CITY / STATE / ZIP: Portland ME 04101

LOCATION: AMHI-Central Building Roof, Augusta, ME

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2245324-049 017A	Roof area E Insulation Paper, Gray/Brown	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	97% 3%
2245324-050 017B	Roof area E Insulation Paper, Gray/Brown	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	97% 3%
2245324-051 017C	Roof area E Insulation Paper, Gray/Brown	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	97% 3%
2245324-052 018A	Roof area E Rubber Roof Membrane, Black	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-053 018B	Roof area E Rubber Roof Membrane, Black	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-054 018C	Roof area E Rubber Roof Membrane, Black	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-055 019A	Roof area E Foam Insulation, Yellow	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-056 019B	Roof area E Foam Insulation, Yellow	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-057 019C	Roof area E Foam Insulation, Yellow	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
2245324-058 020A	Roof area E Insulation Paper, Tan/Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	2% 95% 3%

PAGE: 7 of 10



BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

ORDER #: 2245324

PROJECT #: 211.06085.006

DATE COLLECTED:

COLLECTED BY: Client

DATE RECEIVED: 12/23/2022 ANALYSIS DATE: 01/11/2023 REPORT DATE: 01/12/2023

ANALYST: Jamie Noel

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.

ADDRESS: 400 Commercial Street CITY / STATE / ZIP: Portland ME 04101

CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis

LOCATION: AMHI-Central Building Roof, Augusta, ME

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2245324-059 020B	Roof area E Insulation Paper, Tan/Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	2% 95% 3%
2245324-060 020C	Roof area E Insulation Paper, Tan/Black	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	2% 95% 3%
2245324-061 021A	Roof area E Roof Sealant, Black	LAYER 1 100%	None Detected		Cellulose Fiber Brucite Binder/Filler	1% 5% 94%
2245324-062 021B	Roof area E Roof Sealant, Black	LAYER 1 100%	None Detected		Cellulose Fiber Brucite Binder/Filler	1% 5% 94%
2245324-063 021C	Roof area E Roof Sealant, Black	LAYER 1 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%

Analyst Signatory:

Jamie Noel

NVLAP Lab Code: 101433-0

PAGE: 8 of 10

2245324

Ransom Consulting, LLC Client: Erik Phenix/Wesley Harden Contact: 400 Commercial Street, Suite 404, Portland ME 04101 Address: 207-772-2891 / Cell: 207-272-8673 Phone: Fax: Email: ephenix@ransomenv.com wes.harden@ransomenv.com AMHI - Central Buliding Roof Project: Ransom Project # 211.06085.006 Augusta, ME Positive Stop Requested Client Notes: Please analyze prepare NOB samples via gravimetric reduction, per MEDEP requirements P.O. #. 12/22/2022 0:00 Date Submitted: Analysis: Bulk PLM Standard TAT TurnAroundTime

*Instructions: Use Column "B" for your contact info

To See an Example Click the bottom Example Tab.

Enter samples between "<<" and ">>"

Begin Samples with a "<< "above the first sample

and end with a ">>" below the last sample.
Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data

Sample Number	Building/Area	<u></u>	Sample Description
<<			Rubber roof membrane
- 001A	Roof area A		Rubber roof membrane
~001B	Roof area A		Rubber roof membrane
-001C	Roof area A		Foam insulation
¬002A	Roof area A		**************************************
-002B	Roof area A		Foam insulation
-002C	Roof area A		Foam insulation
-003A	Roof area A		Paper on foam insulation
-003B	Roof area A		Paper on foam insulation
003C	Roof area A		Paper on foam insulation
-004A	Roof area A		Flashing caulking
-004B	Roof area A		Flashing caulking
_004C	Roof area A		Flashing caulking
- 005A	Roof area A		Roof sealant
- 005B	Roof area A		Roof sealant
_005C	Roof area A		Roof sealant
006A	Roof area A		Asphalt coating on deck
-006B	Roof area A		Asphalt coating on deck
_006C	Roof area A		Asphalt coating on deck
007A	Roof area B		Flashing caulking
007B	Roof area B		Flashing caulking
~007C	Roof area B		Flashing caulking
	Roof area B		Roof sealant
-008A	Roof area B		Roof sealant
-008B	Roof area B		Roof sealant
-008C	Roof area B		Rubber roof membrane
- 009A	Roof area B		Rubber roof membrane
-009B	Roof area B		Rubber roof membrane
-009C	Roof area B		Foam insulation
~ 010A	Roof area B		Foam insulation
- 010B	Roof area B		Foam insulation
_ 010C			Insulation paper
_011A	Roof area B Roof area B		Insulation paper
-011B			Insulation paper
~011C	Roof area B	• • • • • • •	Asphalt coating on deck
~ 012A	Roof area B		Asphalt coating on deck
- 012B	Roof area B	7	Asphalt coating on deck
_ 012C	Roof area B		Flashing caulking
_ 013A	Roof area E		Flashing caulking
-013B	Roof area E		Flashing caulking
_ 013C	Roof area E		Asphalt roofing
- 014A	Roof area E		Asphalt roofing
-014B	Roof area E		Asphalt roofing
_014C	Roof area E		Fiber board
-015A	Roof area E		
_ 015B	Roof area E		Fiber board Fiber board
015C	Roof area E		r ibei boaid

Pileer 12/23/22 11:30

2245324

Client:	Ransom Consulting, LLC	*Instructions:
Contact:	Erik Phenix/Wesley Harden	Use Column "B" for your contact info
Address:	400 Commercial Street, Suite 404, Portland ME 04101	
Phone:	207-772-2891 / Cell: 207-272-8673	To See an Example Click the
Fax:		bottom Example Tab.
Email:	ephenix@ransomenv.com	
	wes.harden@ransomenv.com	Enter samples between "<<" and ">>"
Project:	AMHI - Central Buliding Roof	Begin Samples with a "<< "above the first samp
Ransom Project#	211.06085.006	
	Augusta, ME	and end with a ">>" below the last sample.
Client Notes:	Positive Stop Requested	Only Enter your data on the first sheet "Sheet1"
	Please analyze prepare NOB samples via	
	gravimetric reduction, per MEDEP requirements	
P.O. #.		6104 Note: Data 1 and Data 2 are optional
Date Submitted:		12/22/2022 0:00 fields that do not show up on the official
	THE RESIDENCE OF STREET	report, however they will be included
Analysis:	Bulk PLM	in the electronic data returned to you
TurnAroundTime:	Standard TAT	to facilitate your reintegration of the report data.
016A	Roof area E	Foam insulation
016B	Roof area E.	Foam insulation
016C	Roof area E	Foam insulation
017A	Roof area E	Insulation paper
017B	Roof area E	Insulation paper
017C	Roof area E -	Insulation paper
018A	Roof area E	Rubber roof membrane
018B	Roof area E	Rubber roof membrane
-018C	Roof area E	Rubber roof membrane
019A	Roof area E	Foam insulation
019B	Roof area E	Foam insulation
019C	Roof area E	Foam insulation
020A	Roof area E	Insulation paper
020B	Roof area E	Insulation paper
020C	Roof area E	Insulation paper
021A	Roof area E	Roof sealant
021B	Roof area E	Roof sealant
021C	Roof area E ·	Roof sealant
>>>		

63

4MM 12-22-22

Aleen 12/23/22 11:30



ANALYTICAL REPORT

Lab Number: L2272094

Client: Ransom Consulting, LLC.

400 Commercial Street

Suite 404

Portland, ME 04101-4660

ATTN: Erik Phenix
Phone: (207) 772-2891

Project Name: AMHI CENTRAL BUILDING ROOF

Project Number: 211.06085.006

Report Date: 01/06/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: AMHI CENTRAL BUILDING ROOF

Project Number: 211.06085.006

 Lab Number:
 L2272094

 Report Date:
 01/06/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2272094-01	AREA A	SOLID	AUGUSTA, ME	12/21/22 10:00	12/22/22
L2272094-02	AREA B	SOLID	AUGUSTA, ME	12/21/22 11:30	12/22/22
L2272094-03	AREA E	SOLID	AUGUSTA, ME	12/21/22 13:15	12/22/22



Project Name:AMHI CENTRAL BUILDING ROOFLab Number:L2272094Project Number:211.06085.006Report Date:01/06/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name:AMHI CENTRAL BUILDING ROOFLab Number:L2272094Project Number:211.06085.006Report Date:01/06/23

Case Narrative (continued)

PCBs

L2272094-01, -02, and -03: The sample has elevated detection limits due to limited sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Lelly Well Kelly O'Neill

Authorized Signature:

Title: Technical Director/Representative

Date: 01/06/23



ORGANICS



PCBS



Project Name: AMHI CENTRAL BUILDING ROOF Lab Number: L2272094

Project Number: 211.06085.006 **Report Date:** 01/06/23

SAMPLE RESULTS

Lab ID: L2272094-01 Date Collected: 12/21/22 10:00

Client ID: AREA A Date Received: 12/22/22 Sample Location: AUGUSTA, ME Field Prep: Not Specified

Sample Depth:

Matrix: Solid Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 12/26/22 13:05
Analytical Date: 12/28/22 22:43 Cleanup Method: EPA 3665A

Analyst: AD

Percent Solids: Results reported on an 'AS RECEIVED' basis. Cleanup Method: EPA 3660B

Cleanup Date: 12/28/22

12/28/22

Cleanup Date:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	134		1	Α			
Aroclor 1221	ND		ug/kg	134		1	Α			
Aroclor 1232	ND		ug/kg	134		1	Α			
Aroclor 1242	ND		ug/kg	134		1	А			
Aroclor 1248	ND		ug/kg	134		1	Α			
Aroclor 1254	ND		ug/kg	134		1	А			
Aroclor 1260	ND		ug/kg	134		1	Α			
Aroclor 1262	ND		ug/kg	134		1	Α			
Aroclor 1268	ND		ug/kg	134		1	Α			
PCBs, Total	ND		ug/kg	134		1	Α			

		Acceptance				
Surrogate	% Recovery	Qualifier	Criteria	Column		
2,4,5,6-Tetrachloro-m-xylene	67		30-150	В		
Decachlorobiphenyl	62		30-150	В		
2,4,5,6-Tetrachloro-m-xylene	65		30-150	Α		
Decachlorobiphenyl	58		30-150	Α		



Project Name: AMHI CENTRAL BUILDING ROOF Lab Number: L2272094

Project Number: 211.06085.006 **Report Date:** 01/06/23

SAMPLE RESULTS

Lab ID: L2272094-02 Date Collected: 12/21/22 11:30

Client ID: AREA B Date Received: 12/22/22 Sample Location: AUGUSTA, ME Field Prep: Not Specified

Sample Depth:

Matrix: Solid Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 12/26/22 13:05
Analytical Date: 12/28/22 22:51 Cleanup Method: EPA 3665A

Analyst: AD

Percent Solids: Results reported on an 'AS RECEIVED' basis. Cleanup Method: EPA 3660B

Cleanup Date: 12/28/22

12/28/22

Cleanup Date:

Parameter	Result	Result Qualifier Units		RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	129		1	А			
Aroclor 1221	ND		ug/kg	129		1	Α			
Aroclor 1232	ND		ug/kg	129		1	А			
Aroclor 1242	ND		ug/kg	129		1	А			
Aroclor 1248	ND		ug/kg	129		1	Α			
Aroclor 1254	ND		ug/kg	129		1	В			
Aroclor 1260	ND		ug/kg	129		1	Α			
Aroclor 1262	ND		ug/kg	129		1	Α			
Aroclor 1268	ND		ug/kg	129		1	А			
PCBs, Total	ND		ug/kg	129		1	В			

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	В
Decachlorobiphenyl	67		30-150	В
2,4,5,6-Tetrachloro-m-xylene	61		30-150	Α
Decachlorobiphenyl	58		30-150	Α



Project Name: AMHI CENTRAL BUILDING ROOF Lab Number: L2272094

Project Number: 211.06085.006 **Report Date:** 01/06/23

SAMPLE RESULTS

Lab ID: Date Collected: L2272094-03 12/21/22 13:15

Client ID: AREA E Date Received: 12/22/22 Sample Location: Field Prep: AUGUSTA, ME Not Specified

Sample Depth:

Extraction Method: EPA 3540C Matrix: Solid **Extraction Date:** 12/26/22 13:05 1,8082A Analytical Method: Cleanup Method: EPA 3665A Analytical Date: 12/28/22 22:59

Analyst: AD

Cleanup Date: 12/28/22 Cleanup Method: EPA 3660B Results reported on an 'AS RECEIVED' basis. Percent Solids:

Cleanup Date: 12/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	160		1	Α			
Aroclor 1221	ND		ug/kg	160		1	Α			
Aroclor 1232	ND		ug/kg	160		1	Α			
Aroclor 1242	ND		ug/kg	160		1	Α			
Aroclor 1248	ND		ug/kg	160		1	Α			
Aroclor 1254	ND		ug/kg	160		1	Α			
Aroclor 1260	ND		ug/kg	160		1	Α			
Aroclor 1262	ND		ug/kg	160		1	Α			
Aroclor 1268	ND		ug/kg	160		1	Α			
PCBs, Total	ND		ug/kg	160		1	Α			

		Acceptance				
Surrogate	% Recovery	Qualifier	Criteria	Column		
2,4,5,6-Tetrachloro-m-xylene	47		30-150	В		
Decachlorobiphenyl	50		30-150	В		
2,4,5,6-Tetrachloro-m-xylene	47		30-150	Α		
Decachlorobiphenyl	47		30-150	Α		



L2272094

Lab Number:

Project Name: AMHI CENTRAL BUILDING ROOF

Project Number: 211.06085.006 **Report Date:** 01/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 12/28/22 23:15

Analyst: MEO

Extraction Method: EPA 3540C
Extraction Date: 12/26/22 13:05
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/22
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/22

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	Lab for s	ample(s):	01-03	Batch:	WG17	27459-1
Aroclor 1016	ND		ug/kg	91.7			А
Aroclor 1221	ND		ug/kg	91.7			Α
Aroclor 1232	ND		ug/kg	91.7			Α
Aroclor 1242	ND		ug/kg	91.7			Α
Aroclor 1248	ND		ug/kg	91.7			Α
Aroclor 1254	ND		ug/kg	91.7			Α
Aroclor 1260	ND		ug/kg	91.7			Α
Aroclor 1262	ND		ug/kg	91.7			Α
Aroclor 1268	ND		ug/kg	91.7			Α
PCBs, Total	ND		ug/kg	91.7			Α

	Acceptance							
Surrogate	%Recovery Qualifie	r Criteria	Column					
2,4,5,6-Tetrachloro-m-xylene	65	30-150	В					
Decachlorobiphenyl	64	30-150	В					
2,4,5,6-Tetrachloro-m-xylene	66	30-150	Α					
Decachlorobiphenyl	65	30-150	Α					



Lab Control Sample Analysis Batch Quality Control

Project Name: AMHI CENTRAL BUILDING ROOF

Project Number: 211.06085.006 Lab Number:

L2272094

01/06/23

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1727459-2 WG1727459-3									
Aroclor 1016	65		64		40-140	2		50	Α
Aroclor 1260	59		61		40-140	3		50	А

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67	66	30-150	В
Decachlorobiphenyl	64	67	30-150	В
2,4,5,6-Tetrachloro-m-xylene	67	65	30-150	Α
Decachlorobiphenyl	61	65	30-150	Α

AMHI CENTRAL BUILDING ROOF

Lab Number: L2272094

Project Number: 211.06085.006 **Report Date:** 01/06/23

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Project Name:

Cooler Custody Seal

A Absent

Container Information		Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2272094-01A	Glass 250ml/8oz unpreserved	Α	NA		3.6	Υ	Absent		TS100(),PCB-8082-3540C(365)
L2272094-02A	Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		TS100(),PCB-8082-3540C(365)
L2272094-03A	Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		TS100(),PCB-8082-3540C(365)



Project Name: Lab Number: AMHI CENTRAL BUILDING ROOF L2272094 **Report Date: Project Number:** 211.06085.006 01/06/23

GLOSSARY

Acronyms

LOD

MS

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments

from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration. **EPA**

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

Environmental Protection Agency.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

MDI - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

> - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile

Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less

> than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name:AMHI CENTRAL BUILDING ROOFLab Number:L2272094Project Number:211.06085.006Report Date:01/06/23

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benzo(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- ${\bf J} \qquad \hbox{-Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs)}.$
- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name:AMHI CENTRAL BUILDING ROOFLab Number:L2272094Project Number:211.06085.006Report Date:01/06/23

Data Qualifiers

- ND Not detected at the reporting limit (RL) for the sample.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report



Project Name:AMHI CENTRAL BUILDING ROOFLab Number:L2272094Project Number:211.06085.006Report Date:01/06/23

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.
Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:**17873** Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene;

4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics.

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522, EPA 537.1.**

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Serial No:01062316:41 ALPHA Job #: U227200 CHAIN OF CUSTODY Date Rec'd in Lab: **Billing Information** Report Information - Data Deliverables Project Information MANSFIELD, MA WESTBORO, MA PO# 6/03 Same as Client info MAIL TEL: 508-898-9220 TEL: 508-822-9300 □ FAX FAX: 508-822-3288 FAX: 508-898-9193 ☐ Add'l Deliverables #ADEX **Client Information** Regulatory Requirements/Report Limits State /Fed Program Project Manager: Enksen Phloix TSCA TSCA ALPHA Quote #: **Turn-Around Time** ansomenv.lom RUSH (only confirmed if pre-approved!) 0 harden Dranso MINV. 10m Date Due: SAMPLE HANDLING Time: These samples have been previously analyzed by Alpha Filtration Other Project Specific Requirements/Comments/Detection Limits: □ Done □ Not needed Souhletextraction ☐ Lab to do Preservation ☐ Lab to do (Please specify below) Sample Sampler's Collection ALPHA Lab ID Sample Specific Comments Sample ID Matrix Initials Date Time (Lab Use Only) 12-21-22 1000 Please print clearly, legibly and com-Container Type pletely. Samples can not be logged Preservative in and turnaround time clock will not start until any ambiguities are resolved, Date/Time Date/Time ved By: Relinquished By: All samples submitted are subject to 1022 Alpha's Terms and Conditions. See reverse side. Page of 81-of (#814-oct-07)