



HAZARDOUS MATERIALS ASSESSMENT

Basin Head Museum & Cannery

336 Basin Head Rd, Souris, PE

Prepared For:

PEI Department of Transportation & Infrastructure
P.O. Box 2000
Charlottetown, PE

March 9, 2023

ALL-TECH Project No.: PE22400



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EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for Basin Head Museum & Cannery located at 336 Basin Head Road in Kingsboro, Prince Edward Island.

The purpose of the assessment was to identify hazardous materials within the building which may require safe handling procedures and disposal requirements in accordance with their applicable regulations prior to any planned work, renovations, or demolition and to assist in the Asbestos Management Plan (AMP) of any in place asbestos containing materials (ACM).

This report has been prepared to document the identities, usages and locations of any designated substances and hazardous materials identified within the building.

The on-site assessment was started in November 2022 with additional work and follow ups complete in January 2023. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

Based on the findings from the Hazardous Materials Assessment, the following conclusions and recommendations are presented.

A summary of the Hazardous Materials identified within the buildings is provided below in Table A based on our assessment as well as safe handling requirements. Areas identified with visually same ACM materials are outlined in Appendix III Site drawing with ACM locations.

Assessment Summary of ACM conditions and action report is outlined in Appendix IV and shall be used in conjunction with PEI Department of Transportation & Infrastructure's Asbestos Management Plan (2023) and shall be subject to annual review.

Other hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix V.

Upon review of this report and based on any planned work, renovations or demolition, a full scope of work should be developed. This scope of work will be dependent upon which materials need to be disturbed or removed prior to the renovations. Should ACM not require disturbance or removal, then those identified shall remain in place and be part of the Management Plan.

TABLE A
Summary of Hazardous Materials for Management Plan
Basin Head Museum & Cannery

<i>Hazardous Materials</i>	<i>Description / Comments</i>	<i>Safe Handling Requirements</i>	<i>Disposal Requirements</i>
ASBESTOS	Museum Asbestos containing drywall joint compound	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH	Regulatory approval from PEIELJ Disposal at approved facility such as EPWMF in Wellington, PEI

		Division and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	
LEAD PAINT	Cannery Building White / red wall paint Green wood beam paint	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
MERCURY	fluorescent lamp tubes Apartment mercury containing thermostat	Do not break lamps or separate liquid mercury from components	Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable Regulations.
SILICA	Presumed in the following building components: <ul style="list-style-type: none"> • Poured or pre-cast concrete (slab) 	Trained personnel in the safe handling of silica dust and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	Regulatory approval from PEIELJ

This summary should not be used alone. The report must be read in its entirety.



Larry Koughan, CET, CRSP
Project Principal
ALL-TECH Environmental Services Limited

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SITE / CLIENT INFORMATION

Project No:	PE22400
Assessment Date:	November 2022
Client Name:	PEI Department of Transportation & Infrastructure
Address:	Basin Head Museum & Cannery 336 Basin Head Rd Kingsboro, PE

1 INTRODUCTION

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for Basin Head Museum & Cannery located at 336 Basin Head Road in Kingsboro, Prince Edward Island.

The purpose of the assessment was to identify hazardous materials within the building which may require safe handling procedures and disposal requirements in accordance with their applicable regulations prior to any planned work, renovations, or demolition and to assist in the Asbestos Management Plan (AMP) of any in place asbestos containing materials (ACM).

This report has been prepared to document the identities, usages and locations of any designated substances and hazardous materials identified within the building.

The on-site assessment was started in November 2022 with additional work and follow ups complete in January 2023. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

1.1 SURVEY OBJECTIVES

The scope of the survey was to conduct a non-destructive assessment to identify asbestos, lead, and PCBs within the subject building as well as any other suspect hazardous materials if encountered. ALL-TECH inspected both interior and exterior spaces of the subject building to determine whether designated substances and hazardous materials were present. Representative sampling for suspect asbestos and lead paint materials was conducted as required based on industry standards and the consultant's experience.

1.2 BACKGROUND BUILDING INFORMATION

TABLE 1 BUILDING FRAMEWORK	
Building Use	Provincial museum & cannery
Number of Floors	Museum - 2 floors plus basement Cannery - 1
Total Area	Museum - 437 m ² Cannery - 120 m ²
Year of Construction	Museum – 1973 Cannery – 1920
Structure	Wood, concrete
Exterior Cladding	Wood
HVAC	NA
Roof	Metal
Flooring	Vinyl sheet flooring; wood
Interior Walls	Drywall (where finished)
Ceilings	Drywall (where finished)

2 REGULATIONS & GUIDELINES

A summary table (Table 2) is provided for the applicable regulations, policies, codes, and / or guidelines of hazardous materials assessed for the purpose of this report. This information was used as reference to assess suspect hazardous materials and make recommendations based on the findings.

TABLE 2 SUMMARY OF REGULATORY FRAMEWORK	
ASBESTOS	<ul style="list-style-type: none"> Occupational Health and Safety Act R.S.P.E.I. 1988, Cap. O-1.01 General Regulations – Part 49 (Including any amendments to May 2021). Guide to Asbestos Management, Workers Compensation Board of PEI. Environmental Protection Act Chapter E-9 Waste Management Regulations, Prince Edward Island Transportation of Dangerous Goods Act (TDGA)
LEAD	<ul style="list-style-type: none"> Hazardous Products Act Prince Edward Island Department of Environment, Labour and Justice (PEIELJ) Transportation of Dangerous Goods Act (TDGA) The Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair. Surface Coating Materials Regulations, SOR/2016-193, Canada Consumer Product Safety Act.
PCB's	<ul style="list-style-type: none"> Environmental Contaminants Act, Chlorophenyl Regulations Environment Canada – "Identification of Lamp Ballasts Containing PCB's," report EPS 2/CC/2 (revised) August 1991 PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act.

2.1 ASBESTOS

Asbestos materials can be found in one of two forms: friable asbestos or a non-friable type. Friable asbestos material refers to material that when dry, can be crumbled, pulverized, or reduced to a powder by hand pressure. This type of asbestos material is hazardous due to its potential to become airborne, if damaged or disturbed.

Friable asbestos building products used that have been used in the past are sprayed acoustic and fire protection insulation which were installed on mechanical room ceilings, building structures, ceiling finishes, etc., and mechanical insulation on piping, tanks, boilers, vessels, etc. Some non-friable building products are vinyl acoustic floor tiles, gaskets, transite panels, piping, and shingles.

Non-friable materials if handled improperly during removal or renovations, such as cutting transite panels with an electrical tool, can cause high fiber releases.

Asbestos is classified as a hazardous material under the TDGA and must adhere to specific requirements for transfer including but not limited to waste transfer manifests and proper placards. All asbestos waste must be disposed of at an approved municipal solid waste disposal site. Recent changes from the Prince Edward Island's Department of Environment's Environmental Protection Act, Waste Resource Management Regulations have defined asbestos as "special waste" as asbestos containing materials containing 1% or greater by weight for the purpose of disposal.

All work should be carried out by personnel trained and licensed with the provincial department of the Workers Compensation Board / Occupational Health and Safety Division for asbestos abatement.

2.2 LEAD

Lead in paints is regulated under the Canadian Environmental Protection Act (CEPA) as published in Canada Gazette Part II. The lead content limit has been set to 600 mg/kg (0.06 percent by weight) for surface coating materials.

Any disturbance or removal of lead-based materials which may generate lead dust shall have to conform to the federal and provincial Occupational Health and Safety Act and Regulations. All work should be carried out by personnel trained in the safe handling of lead-based paint coatings and shall be trained in the use of respirators and be properly fit tested.

PEIELJ has established guidelines that restrict hazardous materials from municipal landfills and Construction and Demolition (C&D) waste disposal sites which potentially may migrate / leach into groundwater and cause adverse environmental impacts. Lead coated surfaces may leach from their base materials into soil and subsequent groundwater. PEIELJ has established guidelines that materials containing 1000 mg/kg or 0.1% lead by weight shall be classified as lead-based paints. If materials are

found to be above this guideline and require removal and disposal, then the materials must undergo leachate testing to assess to concentration which could potentially leach into the ground soil and groundwater. Presently provincial requirements for lead leachate testing shall not exceed 5 mg/L.

Materials with leachable lead concentrations above provincial guidelines must be manifested as dangerous goods during transport under the federal TDGA. Hazardous materials that are being disposed of out of province must comply with Interprovincial Movement of Hazardous Waste Regulations under the Canadian Environmental Protection Act (CEPA).

PEIELJ has established guidelines that restrict hazardous materials from municipal landfills and Construction and Demolition (C&D) waste disposal sites which potentially may migrate / leach into groundwater and cause adverse environmental impacts. Lead coated surfaces may leach from their base materials into soil and subsequent groundwater. PEIELJ has established guidelines that materials containing 1000 mg/kg or 0.1% lead by weight shall be classified as lead-based paints. If materials are found to be above this guideline and require removal and disposal, then the materials must undergo leachate testing to assess to concentration which could potentially leach into the ground soil and groundwater. Presently provincial requirements for lead leachate testing shall not exceed 5 mg/L. Disposal criteria for lead containing paints are based on total and leachable concentrations are as follows:

- Materials with total lead concentrations below the applicable Total guidelines can be disposed of at any C&D disposal site.
- Materials with *total lead concentrations above* the applicable Total guidelines and *leachable lead concentrations below* the applicable Leachate guidelines must be disposed of at an approved municipal solid waste landfill that has a composite liner and leachate collection system (i.e., East Prince Waste Management Facility in Wellington, PEI). A waste generator permit must first be approved and obtained by PEIELJ.
- Materials with total and leachable lead concentrations above provincial guidelines must be transported to an approved hazardous waste disposal site.

Materials with leachable lead concentrations above provincial guidelines must be manifested as dangerous goods during transport under the federal TDGA. Hazardous materials that are being disposed of out of province must comply with Interprovincial Movement of Hazardous Waste Regulations under the Canadian Environmental Protection Act (CEPA).

2.3 POLYCHLORINATED BIPHENYLS (PCB's)

In 1976, the Canadian Environment Contaminants Act passed regulations which prohibited the use of PCBs in transformer equipment. Under the same Act, the Chlorophenyl Regulations No. 1, states that PCBs cannot be used as a constituent of electrical capacitors, electrical transformers and associated electrical equipment manufactured in or imported into Canada after July 1, 1980.

There is currently no regulatory requirement to remove in-use PCBs from service. However, should suspect PCB containing light ballasts be removed from service, they should be treated as PCB waste or if confirmed to contain PCB oil in excess of 0.5 kg.

3 METHODOLOGY

The scope of work for the survey was to visually identify controlled hazardous materials for the safe handling and disposal of hazardous materials prior to renovations within the building. Where visual identification of asbestos containing materials and lead based paints were suspected but unable to be determined, samples were collected and sent to an approved laboratory for analysis.

There was limited destructive testing of structural members (i.e., walls, flooring) during the assessment. Where accessible, areas above ceiling cavities and behind walls were visually assessed to identify potentially concealed hazardous materials.

3.1 ASBESTOS

Using standard bulk sampling methodologies, representative suspect asbestos containing materials were sampled from ceiling & wall finishes, floor coverings, located throughout all three buildings. Samples were placed in sealed plastic bags, labelled and a chain of custody form completed to be forwarded to IATL Laboratory via courier for analysis.

The asbestos assessment involved a visual investigation of suspect materials for the presence of asbestos containing materials. If these materials were suspected to contain asbestos, a bulk sample was collected of the representative material to be analysed with Polarized Light Microscopy.

It should be noted that asbestos containing materials may be present behind unrevealed areas. During demolition of these materials, precautions should be taken such as the use of personal protective equipment in the event of exposing concealed asbestos materials. If suspect materials are revealed, have them tested immediately.

3.2 LEAD

During the assessment, suspect lead-based paints were sampled from surfaces as determined by the consultant. Where practical, all layers of paint were removed and placed in sealed plastic bags, labelled and a chain of custody form completed to be forwarded to IATL Laboratory via courier for analysis.

3.3 POLYCHLORINATED BIPHENYLS

During the assessment, suspect PCB containing light ballasts were examined for PCB identification or by recording serial numbers for reference. Ballasts were inspected and manufacturers name, date and serial numbers were recorded when visible. The manufacturers identification numbers were then compared to Environment Canada's "Identification of Lamp Ballasts Containing PCB's," Report EPS 2/CC/2 9(revised), August 1991.

It should be noted that the assessment did not include the sampling / testing or analysis of the suspect PCB containing materials.

4 ASSESSMENT FINDINGS

4.1 ASBESTOS

During the survey, the consultant collected individual bulk material samples of suspect ACMs within the structures. Laboratory analysis certificates are presented in Appendix I.

Museum

A total of eight (8) bulk material samples were collected within the museum building during the survey. Some of these samples such as drywall and joint compounds were separated and a total of thirteen (13) samples were analyzed. Of the 13 samples analyzed, two (2) were found to be asbestos containing.



Cannery & Apartment

A total of six (6) bulk material samples were collected within the cannery and apartment building during the survey. Some of these samples such as drywall and joint compounds were separated and a total of eight (8) samples were analyzed. Of the 8 samples analyzed, none were found to be asbestos containing.

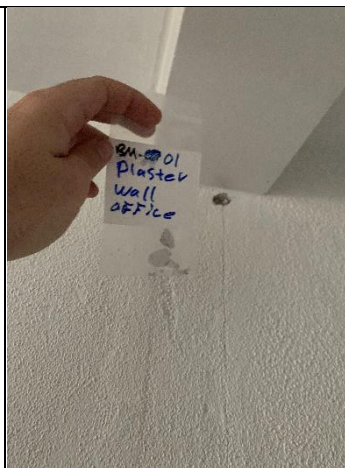


For details on approximate quantities, condition, friability, accessibility and locations of hazardous materials; refer to the Summary of ACM conditions report in Appendix IV.

Individual items sampled and ACM materials identified are itemized in each sub-section below.

4.1.1 Texture Coat Finishes

Texture coat finish was observed in the museum building. The material was sampled and reported with no asbestos detected.



4.1.2 Pipe Insulation

Museum

Straight sections and the elbows of pipe are insulated with fiberglass.



4.1.3 Duct Insulation and Mastic

No insulated ducts were observed or reported.

4.1.4 Mechanical Equipment Insulation

Museum

Newer mechanical boiler visually identified with metal cladding with fiberglass insulation liner.



4.1.5 Plaster

Museum

One plaster section of wall was observed throughout the buildings in the museum. The material was sampled and reported with no asbestos detected.

Apartment & Cannery

No plaster finishes were present at the time of the assessment.



4.1.6 Drywall Joint Compound

Drywall joint compound walls and ceilings were noted and sampled in various random locations throughout the buildings.

Museum

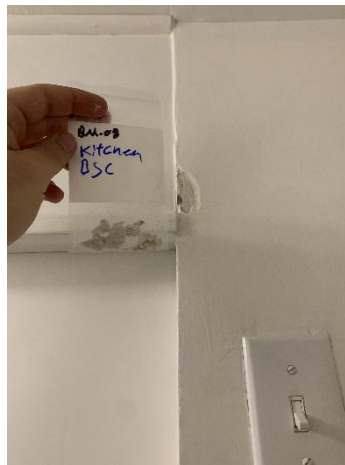
A total of eight (8) joint compound samples were collected during the assessment. Two samples sampled on the main floor were found to contain **1.5% -1.9% Chrysotile** asbestos. Three joint compound samples collected in the basement were all reported as non asbestos containing.

Apartment

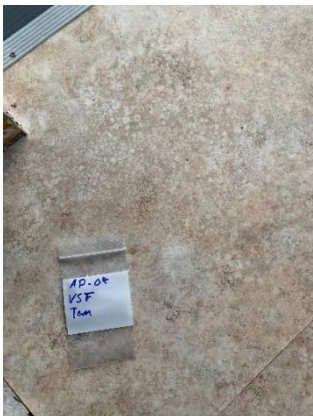

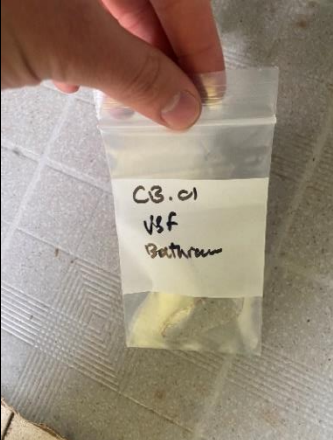
A total of three (3) joint compound samples were collected during the assessment. None were found to contain asbestos.

Cannery

No drywall joint compounds were present at the time of the assessment.



4.1.7 Vinyl Sheet Flooring

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
AP-04	Tan colour vinyl sheet flooring	Apartment	None Detected	
AP-05	White colour vinyl sheet flooring	Apartment	None Detected	
CB-01	Grey Vinyl sheet flooring	Cannery building – bathroom	None Detected	

4.1.8 Vinyl Floor Tiles

No vinyl floor tiles were observed or reported

4.1.9 Ceiling Tiles

Museum

Only one area was noted with acoustic ceiling tiles in the museum basement. The material was sampled and reported with no asbestos detected.

Cannery & Apartment

No ceiling tiles observed or reported at the time of the assessment.



4.1.10 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and was excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Roofing felts and tar

4.2 LEAD-BASED PAINTS

Based on the age of the buildings, lead based paints were sampled. The following is a breakdown of samples collected per building:

Museum - A total of thirteen (13) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

Based on the assessment findings, none of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials.


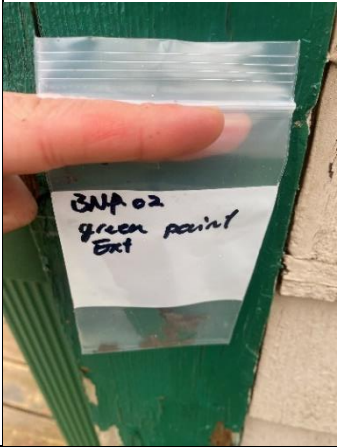
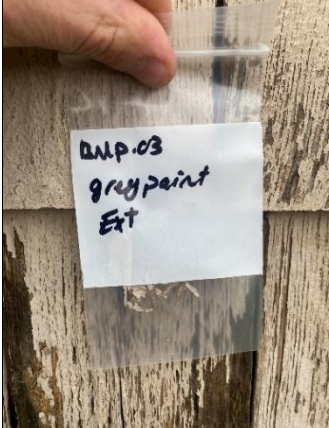
Cannery - A total of eight (8) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

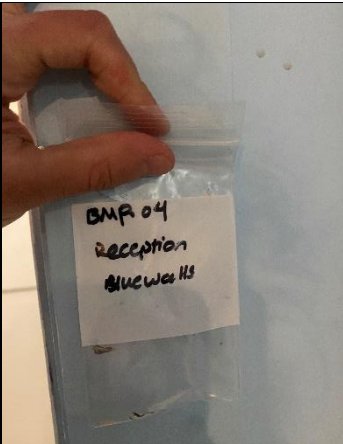
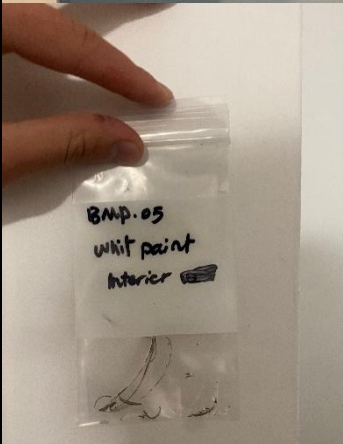
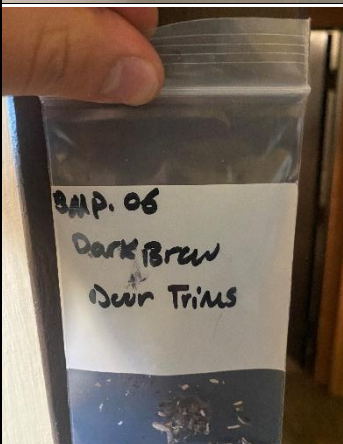
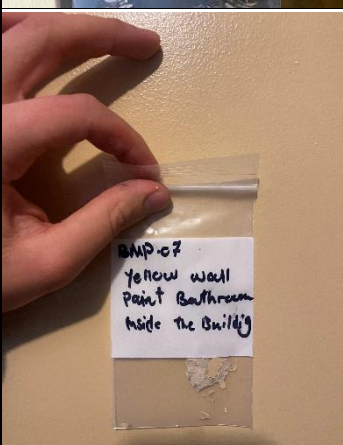
Based on the assessment findings, two (2) of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials.

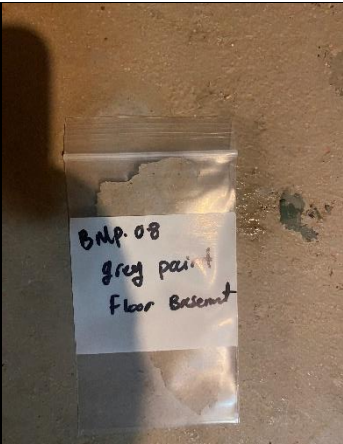
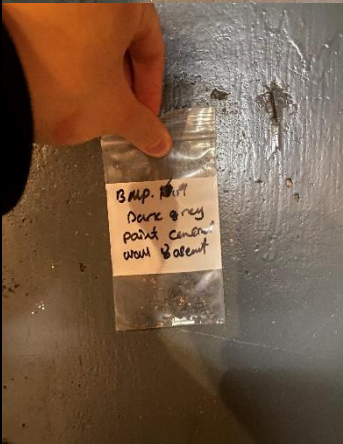
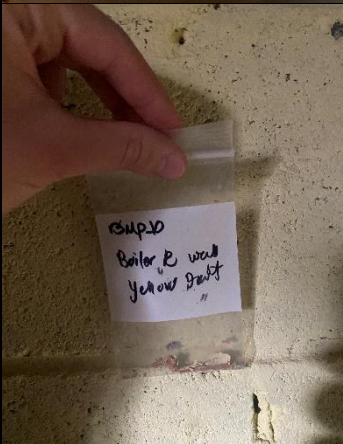
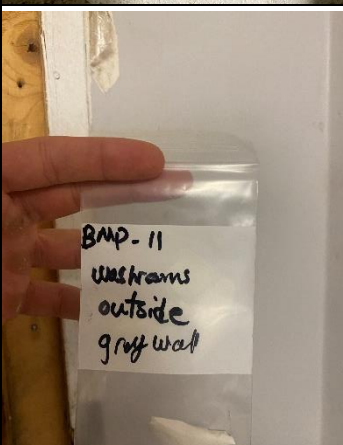
Apartment - A total of six (6) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

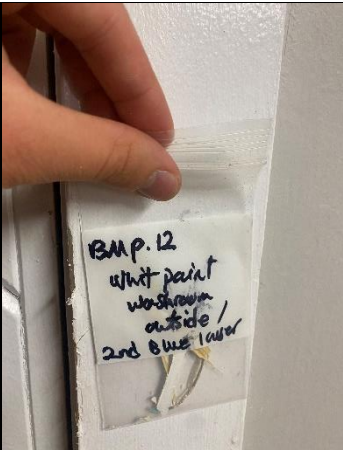

Based on the assessment findings, none of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials.

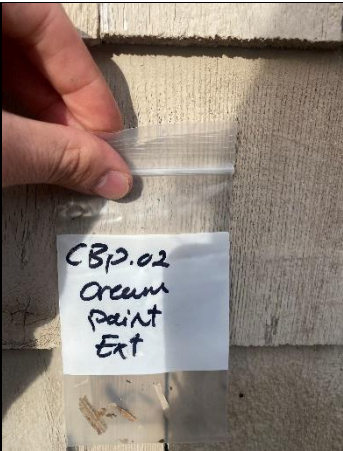


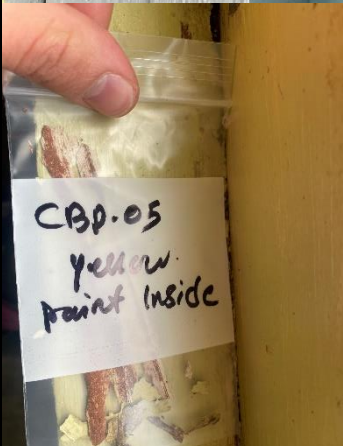
Laboratory analysis certificate is presented in Appendix II.




Sample No.:	Colour / Substrate Description	Location	Lead Content (%)	Photo
Museum				
BMP-01	Red paint	Exterior	< 0.0075	
BMP -02	Green paint	Exterior	< 0.0061	
BMP -03	Tan paint	Exterior	< 0.0078	

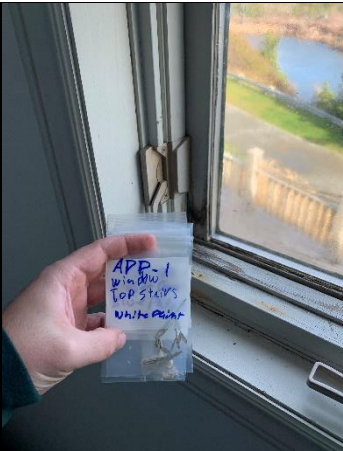
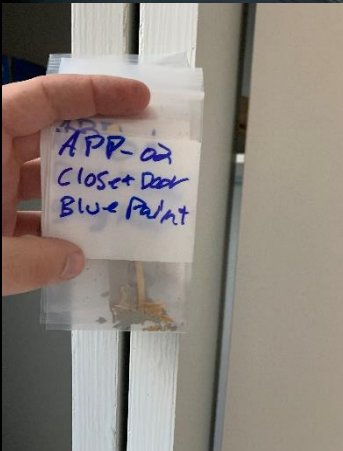

BMP -04	Blue wall paint	Reception area	< 0.0016	
BMP -05	White paint	wall	0.020	
BMP -06	Brown paint	Door trims	< 0.0083	
BMP -07	Yellow wall paint	Bathroom in the building	< 0.0063	


BMP -08	Tan floor paint	Basement	< 0.0066	
BMP -09	Dark grey wall paint	Basement	< 0.0060	
BMP -10	Yellow wall paint	Boiler room	< 0.011	
BMP-11	Grey wall paint	Outside washroom	< 0.0074	

BMP-12	White with blue exterior paint	Outside washroom	< 0.0057	
BMP-13	Red door paint	Outside washroom	< 0.0075	
Cannery Building				
CBP-01	Green paint	Exterior	< 0.0063	

CBP-02	Cream paint	Exterior	0.0070	
CBP-03	Red paint	Exterior	< 0.0079	
CBP-04	Blue paint	Inside	< 0.0063	
CBP-05	Yellow paint	Inside	0.0081	

CBP-06	Cream paint	Floor	< 0.0073	
CBP-07	Green paint	Beam	0.93	
CBP-08	1 st layer with paint/ 2 nd layer red paint	Wall	0.18	
Apartment				

APP-01	White paint	Window at the top of the stairs inside	< 0.0092	
APP-02	Blue paint	Closet door inside	< 0.0085	
APP-03	Grey paint	Door frame inside	< 0.0079	
APP-04	Cream paint	Exterior	< 0.0086	NA
APP-05	Green paint	Exterior	< 0.0078	NA

APP-06	Red paint	Exterior	< 0.0073	
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4.3 POLYCHLORINATED BIPHENYLS (PCB's)

Newer recessed light fixtures were observed in the museum building. Other lights present were non ballast containing. Typical lights and ballasts found and reported are noted below in section 4.3.1. Manufacturer's labels were marked as non-PCB containing.

Through referencing and markings on lamp ballasts, it was determined that the ballasts observed on site are non-PCB containing.

4.3.1 Lighting Lamp Ballasts

Photo 1 – Newer recessed light fixtures. No PCB's.

Photo 2 – Basement fluorescent light fixtures. No PCB's.

Photo 3 – Other lights present. No ballasts present.



Photo 1



Photo 2



Photo 3

4.3.2 Transformers

Electrical transformers were not found or reported during the assessment.

4.4 MERCURY

4.4.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

4.4.2 Mercury Containing Devices

Mercury containing thermostats ampules were reported in the apartment.



5 SUMMARY OF HAZARDOUS MATERIALS

A summary of the Hazardous Materials identified within the buildings is provided below in Table 3 based on our assessment as well as safe handling requirements. Areas identified with visually same ACM materials are outlined in Appendix III Site drawing with ACM locations.

Assessment Summary of ACM conditions and action report is outlined in Appendix IV and shall be used in conjunction with PEI Department of Transportation & Infrastructure's Asbestos Management Plan (2023) and shall be subject to annual review.

Other hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix V.

Upon review of this report and based on any planned work, renovations or demolition, a full scope of work should be developed. This scope of work will be dependent upon which materials need to be disturbed or removed prior to the renovations. Should ACM not require disturbance or removal, then those identified shall remain in place and be part of the Management Plan.

TABLE 3
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Basin Head Museum & Cannery

<i>Hazardous Materials</i>	<i>Description / Comments</i>	<i>Safe Handling Requirements</i>	<i>Disposal Requirements</i>
ASBESTOS	Museum Asbestos containing drywall joint compound	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH Division and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	Regulatory approval from PEIELJ Disposal at approved facility such as EPWMF in Wellington, PEI
LEAD PAINT	Cannery Building White / red wall paint Green wood beam paint	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
MERCURY	fluorescent lamp tubes. Apartment mercury containing thermostat	Do not break lamps or separate liquid mercury from components	Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable Regulations.
SILICA	Presumed in the following building components: <ul style="list-style-type: none"> • Poured or pre-cast concrete (slab) 	Trained personnel in the safe handling of silica dust and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I	Regulatory approval from PEIELJ

6 ON-GOING MANAGEMENT & MAINTENANCE

The following recommendations are made regarding on-going management and maintenance work involving the hazardous materials identified.

Perform a detailed intrusive assessment prior to building renovation or demolition operations. The assessment should include; destructive testing (e.g., coring and/or removal of building finishes and components), and other materials not previously tested (e.g., roofing materials).

6.1 Asbestos

Ensure policies and procedures outlined in the buildings Asbestos Management Plan (AMP) are followed when conducting asbestos-related work at this facility.

Perform a re-assessment of asbestos-containing materials (ACM) on an annual basis. The next reassessment of ACM should be performed prior to March 2024 to remain in compliance.

Remove ACM prior to alteration or maintenance work if ACM may be disturbed by the work. Follow appropriate asbestos precautions for the classification of work being performed.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.

6.2 Lead

For lead-containing or lead-based paints (i.e., greater than the CEPA guidelines of 600 mg/kg (0.06 percent by weight) for surface coating materials, work procedures, engineering controls and personal protective equipment should be assessed on a site-specific basis to comply with Occupational Health and Safety regulations and Lead guidelines.

Dispose of painted materials exceeding the criteria for leachable lead as hazardous waste.

6.3 Mercury

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent lamps and thermostats when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable regulations.

6.4 Silica

Disturbance of silica-containing products during maintenance activities may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with per applicable regulations and guidelines.

7 DISCLAIMER

The recommendations detailed in this report were carried out in a manner consistent with the level of care and skill normally exercised by reasonable members of the environmental and industrial hygiene consulting profession currently practicing under similar conditions in the area.

In preparing this report, ALL-TECH Environmental Services Limited relied on information supplied by others, including independent laboratories, and testing services. Except as expressly set out in this report, we have not made any independent verification of such information.

The recommendations in this report have been made in the context of existing industry accepted guidelines which were in place at the date of this report.

We trust this information is beneficial for assisting you in better understanding the process that has been carried out as well as the benefits and limitations of air sample results.

Should you have any questions or concerns pertaining to this report, please contact the undersigned directly.



Larry G. Koughan, CET, CRSP
Senior Project Consultant



APPENDIX I

Laboratory Certificate of Analysis – Asbestos PLM Samples

Museum

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531368 Client No.: BM-01	Analyst Observation: White Texture Client Description: Texture Coat Wall	Location: Office Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7531369 Client No.: BM-02	Analyst Observation: White Drywall Client Description: Drywall Joint Compound (Ceiling)	Location: Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95


Lab No.: 7531369(L2) Client No.: BM-02	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound (Ceiling)	Location: Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

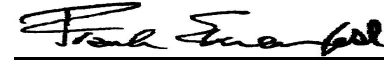
Lab No.: 7531370 Client No.: BM-03	Analyst Observation: Brown Ceiling Tile Client Description: Brown Fibre Ceiling Tile	Location: Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 100 Cellulose	<u>Percent Non-Fibrous Material:</u> None Detected

Lab No.: 7531371 Client No.: BM-04	Analyst Observation: White Drywall Client Description: Drywall Joint Compound	Location: Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95

Lab No.: 7531371(L2) Client No.: BM-04	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound	Location: Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5


Client: ALL131

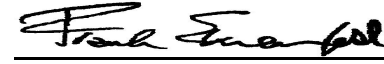
Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531372 Client No.: BM-05 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7531372(L2) Client No.: BM-05 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531373 Client No.: BM-06 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Plaster Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Behind Kiosk Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531373(L2) Client No.: BM-06 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Behind Kiosk Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531374 Client No.: BM-07 <u>Percent Asbestos:</u> PC 1.9 Chrysotile	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 98.1
Lab No.: 7531375 Client No.: BM-08 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531375(L2)
Client No.: BM-08

Analyst Observation: Off-White Joint Compound
Client Description: Drywall Joint Compound


Location: Kitchen
Facility:

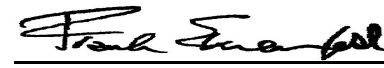
Percent Asbestos:
PC 1.5 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.5

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

Appendix to Analytical Report

Customer Contact:

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gänge, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/2/2022
Report No.: 673395 - PLM
Project: Basin Head Museum
Project No.: PE22400

Client: ALL131

2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Cannery

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/5/2022
Report No.: 673392 - PLM
Project: Basin Head Cannery Building
Project No.: PE22400

Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531324

Client No.: CB-01

Percent Asbestos:

None Detected

Analyst Observation: Grey Vinyl Sheet Flooring

Client Description: Vinyl Sheet Flooring

Percent Non-Asbestos Fibrous Material:

20 Cellulose

Location: Bathroom

Facility:

Percent Non-Fibrous Material:

80

Please refer to the Appendix of this report for further information regarding your analysis.

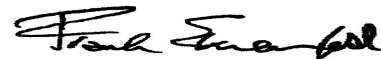
Date Received: 11/28/2022

Date Analyzed: 12/05/2022

Signature:

Analyst: David Hayes

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5
Client: ALL131

Report Date: 12/5/2022
Report No.: 673392 - PLM
Project: Basin Head Cannery Building
Project No.: PE22400

Appendix to Analytical Report

Customer Contact:

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

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iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

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iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

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Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673392 - PLM
Project: Basin Head Cannery Building
Project No.: PE22400

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

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Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/5/2022
Report No.: 673392 - PLM
Project: Basin Head Cannery Building
Project No.: PE22400

Client: ALL131

2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Apartment

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5


Client: ALL131

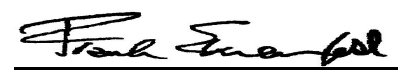
Report Date: 12/2/2022
Report No.: 673390 - PLM
Project: Basin Head Apartment
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531318 Client No.: AP-01	Analyst Observation: Tan Joint Compound Client Description: Drywall Joint Compound	Location: Stairwell Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531319 Client No.: AP-02	Analyst Observation: Tan Joint Compound Client Description: Drywall Joint Compound	Location: Closet In Living Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531319(L2) Client No.: AP-02	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound	Location: Closet In Living Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531320 Client No.: AP-03	Analyst Observation: Tan Joint Compound Client Description: Drywall Joint Compound	Location: Bedroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531320(L2) Client No.: AP-03	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound	Location: Bedroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531321 Client No.: AP-04	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Tan Vinyl Sheet Flooring	Location: Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose 3 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 82

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Dean Andrews

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/2/2022
Report No.: 673390 - PLM
Project: Basin Head Apartment
Project No.: PE22400

Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531322

Client No.: AP-05

Percent Asbestos:

None Detected

Analyst Observation: White Vinyl Sheet Flooring

Client Description: White Vinyl Sheet Flooring

Percent Non-Asbestos Fibrous Material:

15 Cellulose

2 Fibrous Glass

Location:

Facility:

Percent Non-Fibrous Material:

83

Please refer to the Appendix of this report for further information regarding your analysis.

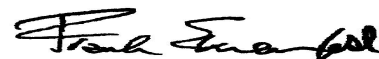
Date Received: 11/28/2022

Date Analyzed: 12/02/2022

Signature:

Analyst: 
Dean Andrews

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673390 - PLM
Project: Basin Head Apartment
Project No.: PE22400

Appendix to Analytical Report

Customer Contact:

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673390 - PLM
Project: Basin Head Apartment
Project No.: PE22400

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gänge, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

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The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/2/2022
Report No.: 673390 - PLM
Project: Basin Head Apartment
Project No.: PE22400

2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.
*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

APPENDIX II

Laboratory Certificate of Analysis – Lead Paint Samples

Museum

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

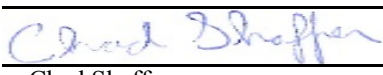
Client: ALL131

Report Date: 12/5/2022
Report No.: 673356 - Lead Paint
Project: Basin Head Museum
Project No.: PE22400


LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530892 Client No.: BMP-01	Description: Red Paint Location: Exterior	Result (% by Weight): <0.0075 Result (ppm): <75 Comments:
Lab No.: 7530893 Client No.: BMP-02	Description: Green Paint Location: Exterior	Result (% by Weight): <0.0061 Result (ppm): <61 Comments:
Lab No.: 7530894 Client No.: BMP-03	Description: Tan Paint Location: Exterior	Result (% by Weight): <0.0078 Result (ppm): <78 Comments:
Lab No.: 7530895 Client No.: BMP-04	Description: Blue Wall Paint Location: Reception Area	Result (% by Weight): <0.016 Result (ppm): <160 Comments: *
Lab No.: 7530896 Client No.: BMP-05	Description: White Paint Location: Wall	Result (% by Weight): 0.020 Result (ppm): 200 Comments: ***
Lab No.: 7530897 Client No.: BMP-06	Description: Brown Paint Location: On Door Trim	Result (% by Weight): <0.0083 Result (ppm): <83 Comments: ***
Lab No.: 7530898 Client No.: BMP-07	Description: Yellow Wall Paint Location: Bathroom In Bldg	Result (% by Weight): <0.0063 Result (ppm): <63 Comments: ***
Lab No.: 7530899 Client No.: BMP-08	Description: Tan Floor Paint Location: Basement	Result (% by Weight): <0.0066 Result (ppm): <66 Comments:

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/05/2022
Signature: 
Analyst: Chad Shaffer

Approved By:


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673356 - Lead Paint
Project: Basin Head Museum
Project No.: PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530900 Description: Dk Grey Wall Paint Result (% by Weight): <0.0060
Client No.: BMP-09 Location: Basement Result (ppm): <60
Comments:

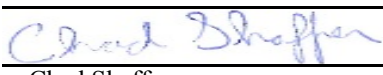
Lab No.: 7530901 Description: Yellow Wall Paint Result (% by Weight): <0.011
Client No.: BMP-10 Location: Boiler Rm Result (ppm): <110
Comments: * **


Lab No.: 7530902 Description: Grey Wall Paint Result (% by Weight): <0.0074
Client No.: BMP-11 Location: Outside Washroom Result (ppm): <74
Comments:

Lab No.: 7530903 Description: White W/Blue Exterior Paint Result (% by Weight): <0.0057
Client No.: BMP-12 Location: Outside Washroom Result (ppm): <57
Comments: ***

Lab No.: 7530904 Description: Red Door Paint Result (% by Weight): <0.0075
Client No.: BMP-13 Location: Outside Washroom Result (ppm): <75
Comments: ***

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/05/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673356 - Lead Paint
Project: Basin Head Museum
Project No.: PE22400

Appendix to Analytical Report:

Customer Contact:

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL=0.010% by weight (based upon 100 mg sampled).

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/5/2022
Report No.: 673356 - Lead Paint
Project: Basin Head Museum
Project No.: PE22400

Client: ALL131

* Insufficient sample provided to perform QC reanalysis (<200 mg)
** Not enough sample provided to analyze (<50 mg)
*** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Cannery

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673352 - Lead Paint
Project: Basin Head Cannery Building
Project No.: PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530875	Description: Green Paint	Result (% by Weight): <0.0063
Client No.: CBP-01	Location: Exterior	Result (ppm): <63
		Comments: ***

Lab No.: 7530876	Description: Cream Paint	Result (% by Weight): 0.0070
Client No.: CBP-02	Location: Exterior	Result (ppm): 70
		Comments:

Lab No.: 7530877	Description: Red Paint	Result (% by Weight): <0.0079
Client No.: CBP-03	Location: Exterior	Result (ppm): <79
		Comments:

Lab No.: 7530878	Description: Blue Paint	Result (% by Weight): <0.0063
Client No.: CBP-04	Location: Inside	Result (ppm): <63
		Comments:


Lab No.: 7530879	Description: Yellow Paint	Result (% by Weight): 0.0081
Client No.: CBP-05	Location: Inside	Result (ppm): 81
		Comments:


Lab No.: 7530880	Description: Cream Paint	Result (% by Weight): <0.0073
Client No.: CBP-06	Location: Floor	Result (ppm): <73
		Comments:

Lab No.: 7530881	Description: Green Paint	Result (% by Weight): 0.93
Client No.: CBP-07	Location: Beam	Result (ppm): 9300
		Comments: ***

Lab No.: 7530882	Description: 1st Layer White Paint 2nd Layer Red Paint	Result (% by Weight): 0.18
Client No.: CBP-08	Location: Wall	Result (ppm): 1800
		Comments:

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/05/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673352 - Lead Paint
Project: Basin Head Cannery Building
Project No.: PE22400

Appendix to Analytical Report:

Customer Contact:

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

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iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

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iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL=0.010% by weight (based upon 100 mg sampled).

Disclaimers / Qualifiers:

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CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5

Report Date: 12/5/2022
Report No.: 673352 - Lead Paint
Project: Basin Head Cannery Building
Project No.: PE22400

Client: ALL131

* Insufficient sample provided to perform QC reanalysis (<200 mg)
** Not enough sample provided to analyze (<50 mg)
*** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Apartment

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
Bedford NS B4A 2Z5
Client: ALL131

Report Date: 12/5/2022
Report No.: 673351 - Lead Paint
Project: Basin Head Apartment
Project No.: PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530869	Description: White Paint	Result (% by Weight): <0.0092
Client No.: APP-01	Location: Window At The Top Of Stairs Inside	Result (ppm): <92
		Comments:

Lab No.: 7530870	Description: Blue Paint	Result (% by Weight): <0.0085
Client No.: APP-02	Location: Closet Door Inside	Result (ppm): <85
		Comments: ***

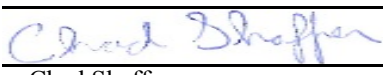
Lab No.: 7530871	Description: Grey Paint	Result (% by Weight): <0.0079
Client No.: APP-03	Location: Door Frame Inside	Result (ppm): <79
		Comments: ***

Lab No.: 7530872	Description: Cream Paint	Result (% by Weight): <0.0086
Client No.: APP-04	Location: Exterior	Result (ppm): <86
		Comments:


Lab No.: 7530873	Description: Green Paint	Result (% by Weight): <0.0078
Client No.: APP-05	Location: Exterior	Result (ppm): <78
		Comments: ***

Lab No.: 7530874	Description: Red Paint	Result (% by Weight): <0.0073
Client No.: APP-06	Location: Exterior	Result (ppm): <73
		Comments: ***

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/05/2022
Signature: 
Analyst: Chad Shaffer

Approved By:


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

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20 Duke St., Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673351 - Lead Paint
Project: Basin Head Apartment
Project No.: PE22400

Appendix to Analytical Report:

Customer Contact:

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

Exceptions Noted: See Following Pages

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Report Date: 12/5/2022
Report No.: 673351 - Lead Paint
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Project No.: PE22400

Client: ALL131

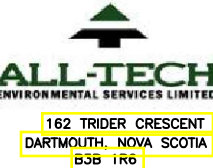
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** Not enough sample provided to analyze (<50 mg)
*** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

APPENDIX III

Site Drawings with sample locations and ACM locations

ASBESTOS SURVEY BY



ASBESTOS LEGEND

- = CEILING
- = FLOOR
- = CEILING AND FLOOR
- = UNSURVEYED AREA
- = APPLIANCE
- = MECHANICAL
- = PIPE MATERIAL
- = DUCT WORK
- = ELECTRICAL
- = WALL/JOINT COMPOUND
- = SAMPLE NUMBER
ASBESTOS DETECTED
- = SAMPLE NUMBER
ASBESTOS NOT DETECTED
- = SAMPLE NUMBER
LEAD DETECTED
- = SAMPLE NUMBER
LEAD NOT DETECTED

projet

PE22400
BASIN HEAD MUSEUM
336 BASIN HEAD RD,
SOURIS, PEI

Drawing

dessin

BASIN HEAD MUSEUM
MAIN FLOOR

Design: JUK

conçu

Date: FEB_2023

Drawn: AJH

dessiné

Date: MAR_2023

NOTE:

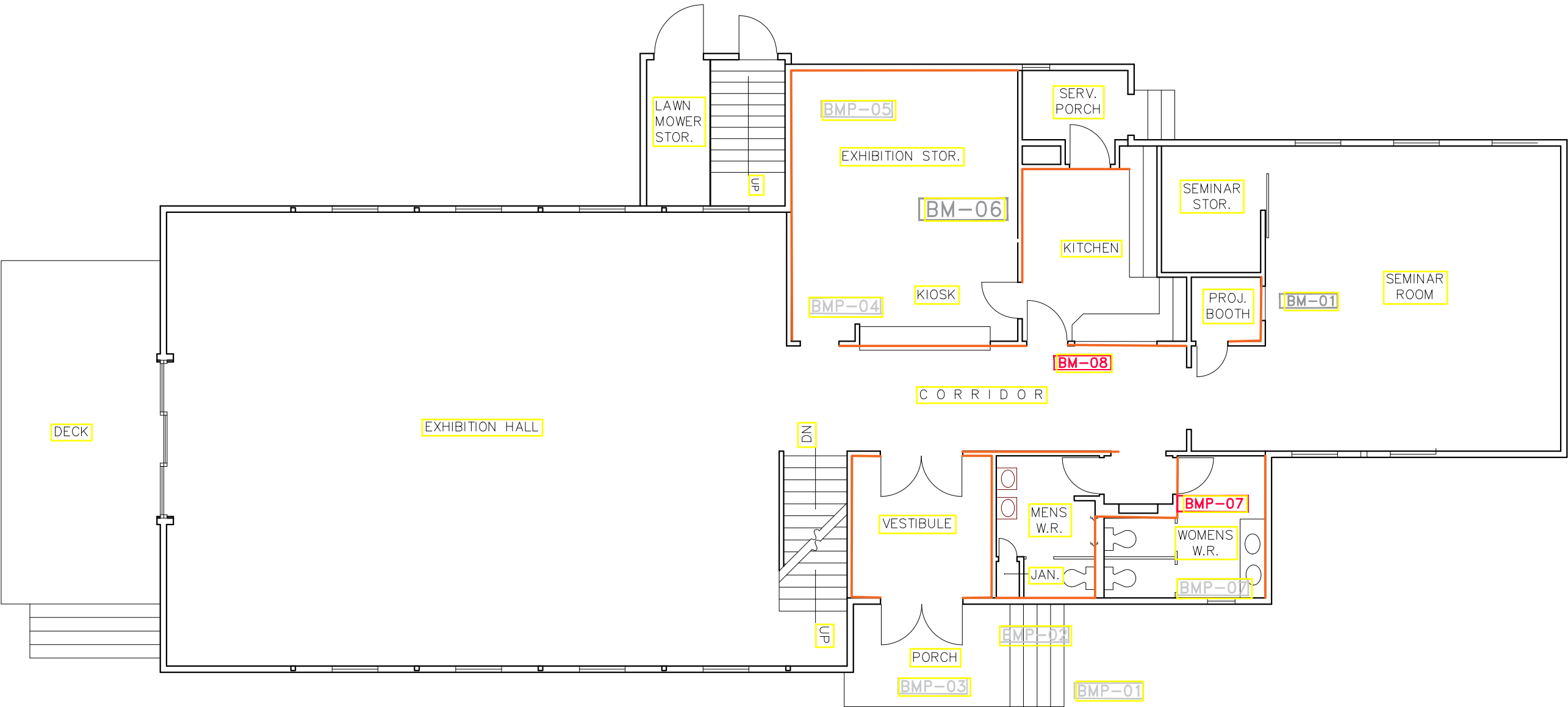
THIS DRAWING SHOULD BE USED
FOR REFERENCE PURPOSES ONLY
REFER TO THE ASBESTOS AND
LEAD SURVEYS FOR THE ROOM BY
ROOM DATE FOR SPECIFIC DETAILS

Scale: 1 OF 2

Scale: NOT TO SCALE

Revisions

Date



APPENDIX IV

Summary of ACM conditions report

Basin Head Museum (Main floor) - Summary of ACM Conditions Report (2022)

Room No.	Description	Sample No.	Material description	Asbestos Type & Content (%)	Estimated Volume or Area	Friable (F) Non-friable (NF)	Access	Condition	Action Code (refer to legend)	Photo
NA	Exhibition storage	VBM-07	Drywall joint compound	Chrysotile 1.9%	178 m2	F	A	Good	5	
NA	Kitchen	BM-08	Drywall joint compound	Chrysotile 1.5%	114 m2	F	A	Good	5	
NA	Projection booth	VBM-07	Drywall joint compound	Chrysotile 1.9%	78 m2	F	A	Good	5	
NA	Corridor	VBM-07	Drywall joint compound	Chrysotile 1.9%	185 m2	F	A	Good	5	
NA	Ladies washroom	VBM-07	Drywall joint compound	Chrysotile 1.5%	144 m2	F	A	Good	5	
NA	Mens washroom	VBM-07	Drywall joint compound	Chrysotile 1.5%	144 m2	F	A	Good	5	
NA	Vestibule	VBM-07	Drywall joint compound	Chrysotile 1.5%	73 m2	F	A	Good	5	

LEGEND			
Sample Number Identifiers		Units	
BM-##	actual sample number	EA	Each
VBM-##	visually identified same as this sample number	m	meters
		m2	square metres
		m3	cubic metres

ASSESSMENT CODES			
ACCESS		CONDITION	
A	Accessible to all building occupants	GOOD	ACM is completely covered and/or exhibits no evidence of damage or deterioration
B	Accessible to maintenance and operations staff without a ladder	FAIR	Minor penetrating damage to ACM (cuts, tears, nicks, deterioration, or delamination).
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas	POOR	ACM is damaged, deteriorated or delaminated
D	Not normally accessible		



ACTION CODES			
1	Immediate Clean-up of Debris that is likely to be disturbed.	4	ACM repair
2	ACM Removal required for compliance.	5	Continued management and surveillance.
3	Proactive ACM Removal.		

APPENDIX V

Summary of other Hazardous Materials report

Basin Head Cannery - Summary of Hazardous Materials Report (2022)

Lead Paint


Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Estimated Area (m2)	Comments	Photo
NA	Main building	CBP-07	Green paint on beams	0.93	--	all like beams treated as lead based paints	
NA	Main building	MWP-03	white / red wall paint	0.18	--	all like painted surfaces treated as lead based paints	

Silica

Room No.	Location	Sample No.	Material	Comments	Photo
NA	Exterior	NA	Concrete foundation	Concrete foundation throughout the footing on the building.	NA

Basin Head Cannery Apartment - Summary of Hazardous Materials Report (2022)

Mercury

Room No.	Location	Sample No.	Material	Comments	Photo
NA	Apartment	NA	Thermostat		

NA - = Not Applicable