



## **Hazardous Building Materials Assessment**

Parts of Millhaven Institution  
5775 Bath Road, Bath, Ontario

Prepared for:

### **Public Services and Procurement Canada**

294 King Street East  
Kingston, Ontario, K7L 3B2

Attention: Duncan Parker  
Project Manager

February 18, 2020

Pinchin File: 269554



**Issued to:** Public Services and Procurement Canada  
**Contact:** Duncan Parker  
Project Manager  
**Issued on:** February 18, 2020  
**Pinchin File:** 269554  
**Issuing Office:** Kingston, ON  
**Pinchin Contact:** Glenn Hendry, B.Sc. (Env.)  
Project Manager  
613.541.1013 ext. 1608; [ghendry@pinchin.com](mailto:ghendry@pinchin.com)

---

Author: 

---

Arlie Flynn, B.Sc. (Env.)  
Project Technologist  
613.541.1013  
[aflynn@pinchin.com](mailto:aflynn@pinchin.com)

Reviewer: 

---

Halie MacKillican,  
Project Technologist  
613.541.1013 ext. 1616  
[hmackillican@pinchin.com](mailto:hmackillican@pinchin.com)

Reviewer: 

---

Michael Harrett, C.E.T.  
Regional Practice Leader  
613.541.1013 ext. 1601  
[mharrett@pinchin.com](mailto:mharrett@pinchin.com)



## EXECUTIVE SUMMARY

Public Services and Procurement Canada (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at parts of 5775 Bath Road, Bath, Ontario. Pinchin performed the assessment on January 23, 2020.

The objective of the assessment was to identify specified hazardous building materials in preparation for the window replacement renovation. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed areas included the gun ports and surrounding windows of Controls: U, S, N, A, J and E.

## SUMMARY OF FINDINGS

Asbestos: Asbestos-containing materials (ACM) are present as follows:

- Non-friable hard black caulking, containing chrysotile asbestos, is present on metal window frames in J control (location 5). Caulking is in good condition; and
- Non-friable hard black caulking, containing chrysotile asbestos, is present on metal window frames in E control (location 6). Caulking is in good condition.

Lead: Lead is present as follows:

- Paints containing elevated lead concentrations are present as follows:
  - Blank paint on metal bars around the exterior windows of U control (location 1);
  - Red paint on metal window frames on the interior windows of U control (location 1);
  - Grey paint on metal bars and metal window frames on both the interior and exterior windows of S control (location 2); and
  - Black paint on metal bars and metal window frames on both the interior and exterior windows of N control (location 3).
- Batteries of emergency lights and fire alarm systems.

Silica: Crystalline silica is present in concrete, mortar, masonry and stone.

Mercury: Mercury vapour is present in light tubes.



Polychlorinated Biphenyls (PCBs): PCBs are present as follows:

- PCBs are presumed to be present in light ballasts; and
- Black butyl sealant present at window frames in N control are considered PCB solids, butyl sealants are in good condition.

Mould and Water Damage: Visible mould growth and water damage was not observed.

## **SUMMARY OF RECOMMENDATIONS**

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations:

1. Prepare specifications for the hazardous material removal required for the planned work.
2. Conduct further investigation of the following items, which could not be completed during this assessment due to limitations on scope, occupancy, or being in service at the time of the assessment:
  - a. Any materials listed as exclusions in this report, prior to disturbance.
3. Do not disturb suspected hazardous building materials discovered during the planned work, which have not been identified in this report and arrange for further evaluation and testing.
4. Remove and dispose of asbestos-containing materials if disturbed by the planned renovation work.
5. Remove and properly dispose of PCB ballasts when fixtures are decommissioned. Remove and properly dispose of PCB caulking.
6. Recycle mercury-containing light tubes when removed from service.
7. Follow appropriate safe work procedures when handling or disturbing silica and lead.

*This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.*



## TABLE OF CONTENTS

1.0	INTRODUCTION AND SCOPE .....	1
1.1	Scope of Assessment .....	1
2.0	BACKGROUND INFORMATION .....	2
2.1	Building Description .....	2
3.0	FINDINGS .....	2
3.1	Asbestos .....	2
3.2	Lead .....	4
3.3	Silica .....	5
3.4	Mercury .....	5
3.5	Polychlorinated Biphenyls .....	5
3.6	Mould .....	6
4.0	RECOMMENDATIONS .....	6
4.1	General .....	6
4.2	Building Renovation Work .....	7
5.0	TERMS AND LIMITATIONS .....	8
6.0	REFERENCES .....	8

## APPENDICES

APPENDIX I	Drawings
APPENDIX II-A	Asbestos Analytical Certificates
APPENDIX II-B	Lead Analytical Certificates
APPENDIX II-C	PCB Analytical Certificates
APPENDIX III	Methodology



## **1.0 INTRODUCTION AND SCOPE**

Public Services and Procurement Canada (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at parts of 5775 Bath Road, Bath, Ontario.

Arlie Flynn, B.Sc. (Env.), Project Technologist, performed the assessment on January 23, 2020. The surveyor was accompanied by Duncan Parker and a Millhaven representative during the assessment. The assessed area was occupied at the time of the assessment.

The objective of the assessment was to identify specified hazardous building materials in preparation for the window replacement renovation. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

The proposed renovations as identified by the Client include; the gun ports and surrounding windows of controls: U, S, N, A, J and E.

### **1.1 Scope of Assessment**

The assessment was performed to establish the location and type of specified hazardous building materials incorporated in the structure(s) and its finishes. This assessment is intended to be used for renovation purposes only, and may not provide sufficient detail for long term management of hazardous materials as required by Health and Safety regulations.

The assessed area was limited to the parts of the building within the area to be renovated including:

- The gun ports and surrounding windows of controls: U, S, N, A, J and E.

The extent of the assessed area was defined by the Client and is shown on the appended drawings.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos;
- Lead;
- Silica;
- Mercury;
- Polychlorinated Biphenyls (PCBs); and
- Mould.



The following Designated Substances are not typically found in building materials in a composition/state that is hazardous and were not included in this assessment:

- Arsenic;
- Acrylonitrile;
- Benzene;
- Coke oven emissions;
- Ethylene oxide;
- Isocyanates; and
- Vinyl chloride monomer.

## 2.0 BACKGROUND INFORMATION

### 2.1 Building Description

Description Item	Details
Use	Institutional
Number of Floors	Two stories plus one level below grade
Total Area	The assessed area is approximately 200-300 square feet per control, per floor
Year of Construction	The building was constructed in 1970
Structure	Concrete block, steel and poured concrete
Exterior Cladding	Concrete block and stone
HVAC	Boiler
Roof	Built-up, not assessed
Flooring	Concrete, in the assessed area
Interior Walls	Concrete block, in the assessed area
Ceilings	Concrete or open, in the assessed area

## 3.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the hazardous materials identified and their locations.

### 3.1 Asbestos

#### 3.1.1 Pipe Insulation

Pipes were not found within the assessed area.



### 3.1.2 Duct Insulation and Mastic

Ducts were not found within the assessed area.

### 3.1.3 Mechanical Equipment Insulation

Mechanical equipment was not found within the assessed area.

### 3.1.4 Vermiculite

Loose fill vermiculite debris was not observed in the spaces or areas inspected. Destructive testing was not performed, and vermiculite may be present within masonry walls, above solid ceilings or other void spaces.

### 3.1.5 Sealants, Caulking

The following table presents a summary of caulking and sealants present:

Material and Colour	Location (Location #)	Quantity	Sample Number	Asbestos Type
Butyl sealant, black	Windows between glass and frame, U control (location 1)	-	S0001A-C	None detected
Caulking, grey	On window frames, S control (location 2)	-	S0002A-C	None detected
Butyl sealant, black	Windows between glass and frame, S control (location 2)	-	S0003A-C	None detected
Butyl sealant, black	Windows between glass and frame, N control (location 3)	-	S0004A-C	None detected
Caulking, black	On metal window frames, N control (location 3)	-	S0005A-C	None detected
Butyl sealant, black	Windows between glass and frame, A control (location 4)	-	S0006A-C	None detected
<b>Caulking, hard black</b>	<b>On metal window frames, J control (location 5)</b>	<b>200 LF</b>	<b>S0007A-C</b>	<b>Chrysotile</b>
Butyl sealant, black	Windows between glass and frame, J control (location 5)	-	S0008A-C	None detected
Butyl Sealant, black	Windows between glass and frame, E control (location 6)	-	S0009A-C	None detected
<b>Caulking, hard black</b>	<b>On metal window frames, E control (location 6)</b>	<b>200 LF</b>	<b>S0010A-C</b>	<b>Chrysotile</b>

Caulking and sealants are non-friable materials and in good condition.



### 3.1.6 Presumed Asbestos Materials

The following is a list of materials which may contain asbestos, which were not observed and/or not sampled during the assessment; these materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Roofing felts and tar, mastics;
- Floor levelling compound;
- Electrical components;
- Vermiculite;
- Adhesives and duct mastics;
- Soffit and fascia boards;
- Fire resistant doors; and
- Exterior finishes and cladding.

## 3.2 Lead

### 3.2.1 Paints and Surface Coatings

The following table summarizes the analytical results for paints sampled:

Sample Number	Colour, Substrate Description	Location (Location #)	Lead (%)
L1	Black on metal bars	Exterior of U control windows (location 1)	0.433
L2	Red on metal window frames	Interior window frames, U control (location 1)	0.540
L3	Grey on metal bars and metal window frames	Interior and exterior of S control (location 2)	0.241
L4	Black on metal bars and metal window frames	Interior and exterior of N control (location 3)	0.200
L5	Black and blue on metal bars and metal window frames	Exterior of A control (location 4)	0.0049
L6	Red on metal window frames	Interior of A control (location 4)	0.0636
L7	Blue on metal bars and metal window frames	Exterior of J control (location 5)	0.0030
L8	Red on metal window frames	Interior of J control (location 5)	0.0433
L9	Blue on metal window frames	Interior of E control (location 6)	0.0301
L10	Blue on metal bars and metal window frames	Exterior of E control (location 6)	0.0655

Results above 0.1% are considered elevated (i.e., greater than the EACO guideline of 0.1%). All paints determined to be elevated were found to be in good condition and not flaking, peeling or delaminating.

### 3.2.2 *Lead Products and Applications*

Lead-containing batteries are present in emergency lighting and fire alarm control panels.

### 3.2.3 *Presumed Lead Materials*

Lead is presumed to be present in electrical components, including wiring connectors, grounding conductors, and solder.

## 3.3 **Silica**

Crystalline silica is a presumed component of the following materials:

- Poured or pre-cast concrete;
- Masonry and mortar; and
- Stone.

## 3.4 **Mercury**

### 3.4.1 *Lamps*

Mercury vapour is present in fluorescent lamps.

### 3.4.2 *Mercury-Containing Devices*

Mercury-containing devices were not found within the assessed area.

## 3.5 **Polychlorinated Biphenyls**

### 3.5.1 *Caulking*

The following table presents a summary of caulking present:

<b>Material and Colour</b>	<b>Location (location #)</b>	<b>Quantity</b>	<b>Sample Number</b>	<b>PCB concentration (ppm)</b>
Butyl sealant, black	Windows between glass and frame, U control (location 1)	-	P1	<10.6
Caulking, grey	On window frames, S control (location 2)	-	P2	<6.10
Butyl sealant, black	Windows between glass and frame, S control (location 2)	-	P3	<17.2

Material and Colour	Location (location #)	Quantity	Sample Number	PCB concentration (ppm)
<b>Butyl sealant, black</b>	<b>Windows between glass and frame, N control (location 3)</b>	<b>50 LF</b>	<b>P4</b>	<b>67.6</b>
Caulking, black	On metal window frames, N control (location 3)	-	P5	<38.5
Butyl sealant, black	Windows between glass and frame, A control (location 4)	-	P6	<5.00
Caulking, hard black	On metal window frames, J control (location 5)	-	P7	<9.43
Butyl sealant, black	Windows between glass and frame, J control (location 5)	-	P8	<5.00
Butyl sealant, black	Windows between glass and frame, E control (location 6)	-	P9	<5.00
Caulking, hard black	On metal window frames, E control (location 7)	-	P10	<7.04

Caulking highlighted in the table above is considered a PCB solid based on the regulatory threshold (50 ppm).

### 3.5.2 Lighting Ballasts

The building has not been comprehensively re-lamped with new energy efficient light ballasts and lamps, and as such, a percentage of light ballasts may be manufactured prior to 1980 and may contain PCBs.

### 3.5.3 Transformers

Transformers were not found within the assessed area.

## 3.6 Mould

Visible mould growth and water damage was not found within the assessed area.

## 4.0 RECOMMENDATIONS

### 4.1 General

1. Prepare plans and performance specifications for hazardous material removal required for the planned work. The specifications should include the scope of work, safe work practices, personal protective equipment, respiratory protection, and disposal of waste materials.



2. If suspected hazardous building materials are discovered during the planned work, which are not identified in this report, do not disturb and arrange for further testing and evaluation.
3. Conduct further investigation of the following items, which could not be completed during this assessment due to limitations on scope, occupancy, or being in service at the time of the assessment:
  - b. Any materials listed as exclusions in this report, prior to disturbance.
4. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
5. Retain a qualified consultant to specify, inspect and verify the successful removal of hazardous materials.
6. Update the asbestos inventory upon completion of the abatement and removal of asbestos-containing materials.

## **4.2 Building Renovation Work**

The following recommendations are made regarding renovation involving the hazardous materials identified.

### *4.2.1 Asbestos*

Remove asbestos-containing materials (ACM) prior to renovation, alteration, or maintenance if ACM may be disturbed by the work.

If the identified ACM will not be removed prior to commencement of the work, any potential disturbance of ACM must follow asbestos precautions appropriate for the type of work being performed.

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

### *4.2.2 Lead*

For paints identified as having elevated levels of lead (i.e., greater than the EACO guideline of 0.1% for lead-containing paints), construction disturbance may result in over-exposure to lead dust or fumes. The need for work procedures, engineering controls and personal protective equipment should be assessed on a site-specific basis to comply with provincial standards or guidelines.

Items painted with paints containing elevated levels of lead may be a hazardous waste. Test lead-painted materials for leachable lead prior to disposal.

Well adhered paints containing elevated levels of lead on metal substrates do not require leachable lead analysis as the materials can be recycled with the paint intact.



Lead-containing items should be recycled when taken out of service.

#### 4.2.3 *Silica*

Construction disturbance of silica-containing products 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 provincial standards or guidelines.

#### 4.2.4 *Mercury*

Do not break lamps. 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 local regulations.

#### 4.2.5 *PCBs*

When light fixtures are removed, examine light ballasts for PCB content. If ballasts are not clearly labelled as “non-PCB”, or are suspected to contain PCBs; package and ship ballasts for destruction at a federally permitted facility.

Remove PCB caulking prior to building demolition or if affected by the renovation work. PCB caulking is a hazardous waste; package and ship for destruction at a federally permitted facility.

## 5.0 **TERMS AND LIMITATIONS**

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

## 6.0 **REFERENCES**

The following legislation and documents were referenced in completing the assessment and this report:

1. Asbestos on Construction Projects and in Buildings and Repair Operations, Ontario Regulation 278/05.
2. Designated Substances, Ontario Regulation 490/09.

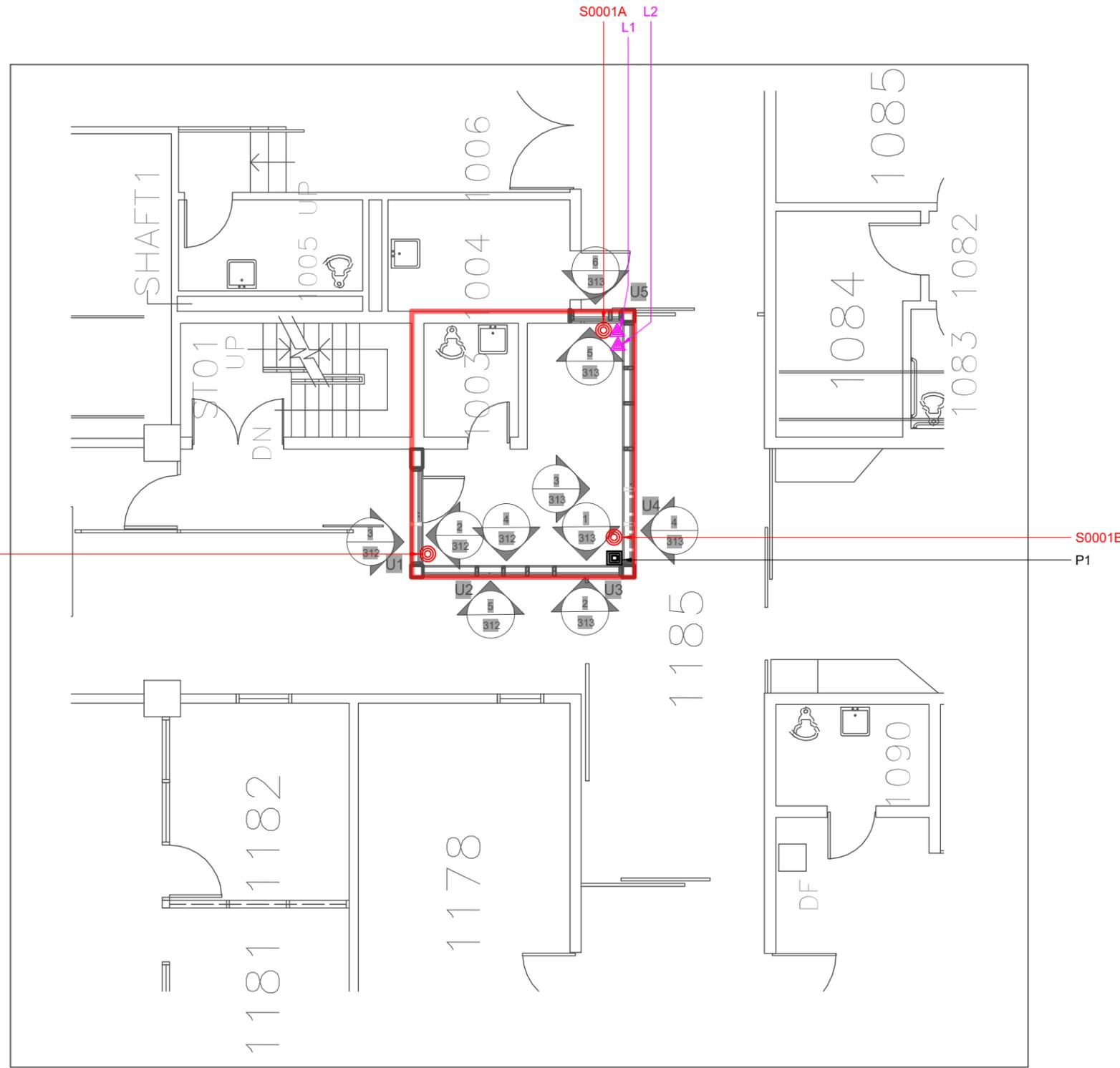


3. Lead on Construction Projects, Ministry of Labour Guidance Document.
4. The Environmental Abatement Council of Ontario (EACO) Lead Guideline for Construction, Renovation, Maintenance or Repair.
5. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.
6. Silica on Construction Projects, Ministry of Labour Guidance Document.
7. Alert – Mould in Workplace Buildings, Ontario Ministry of Labour.
8. PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act.

\\pinchin.com\kgn\Job\269000s\0269554.000 PublicWorks,5775BathRd,HAZ.DSR\Deliverables\269554 DSUB 5775BathRdBathON  
PublicServicesandProcurementCanada.docx

Template: Master Report for Hazardous Materials Assessment (Pre-Construction), HAZ, January 10, 2020

**APPENDIX I**  
**Drawings**



- LEGEND**
- ASSESSED AREA
  - ⊙ ASBESTOS BULK SAMPLE
  - ▲ LEAD BULK SAMPLE
  - PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:**
- HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:**
- BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



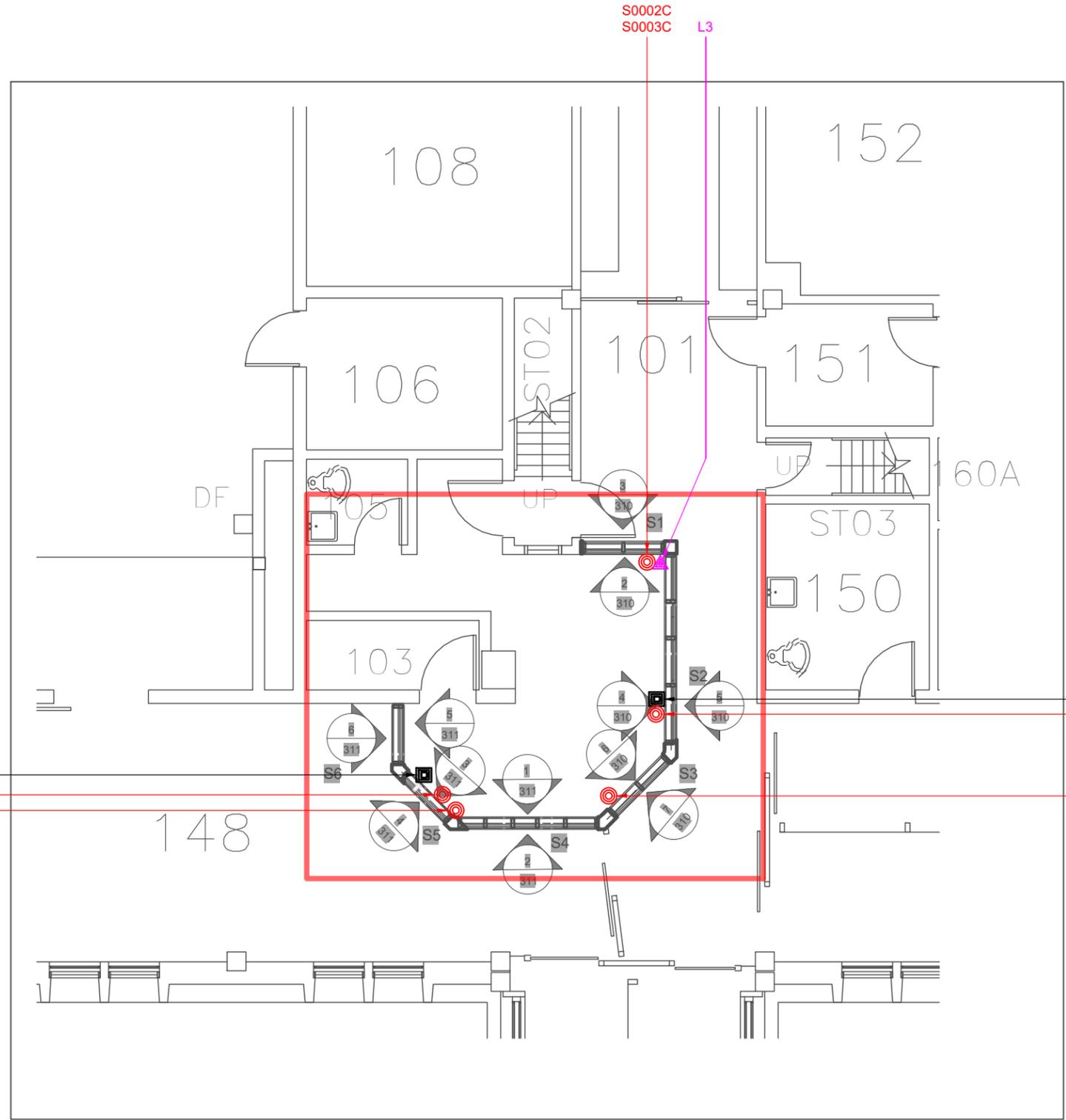
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**U CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 1 OF 6



- LEGEND**
- ASSESSED AREA
  - ⊙ ASBESTOS BULK SAMPLE
  - ▲ LEAD BULK SAMPLE
  - PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:**
- HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:**
- BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



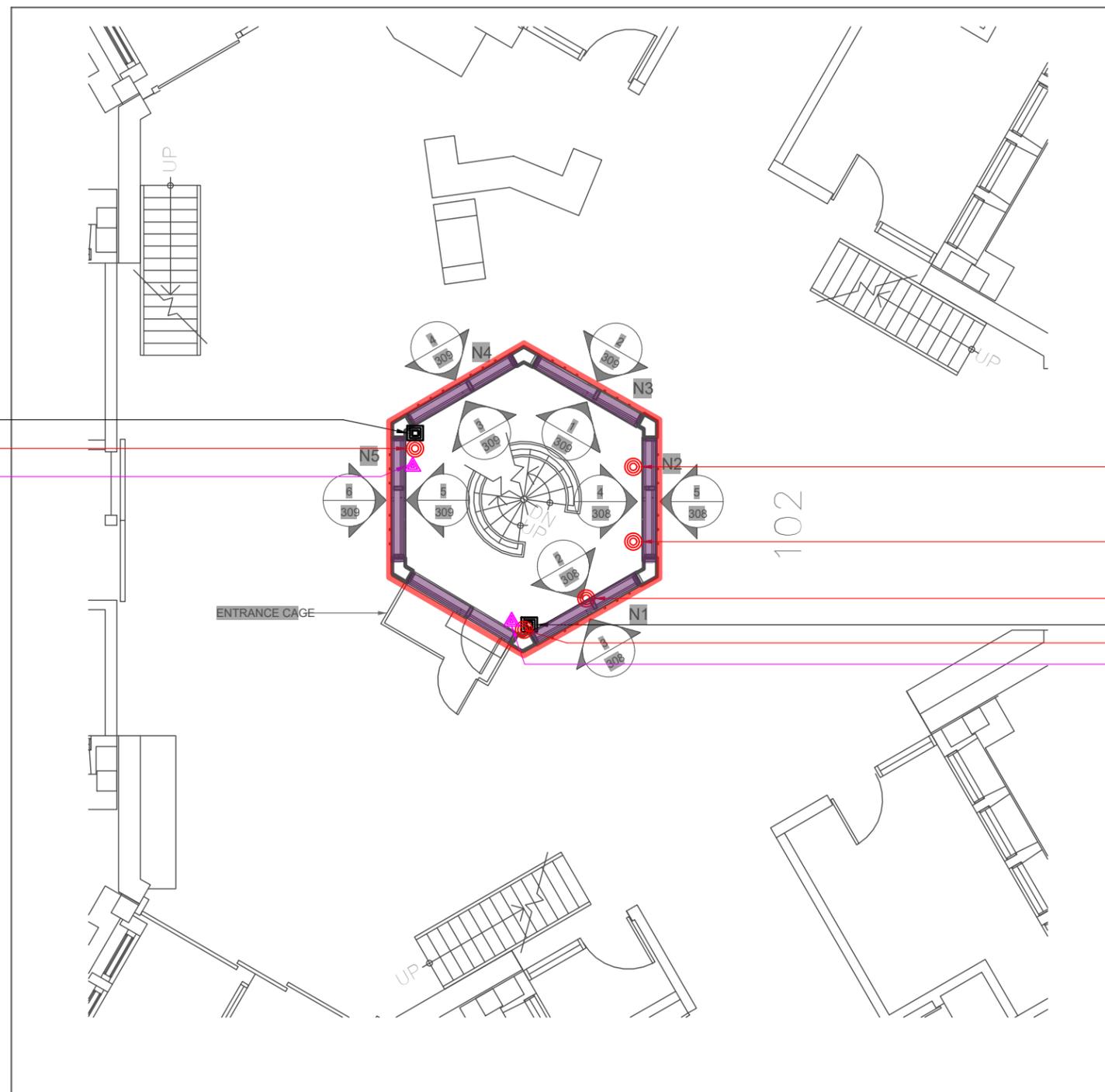
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**S CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 2 OF 6



**LEGEND**

- ASSESSED AREA
- ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE
- PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:
  - HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:
  - BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



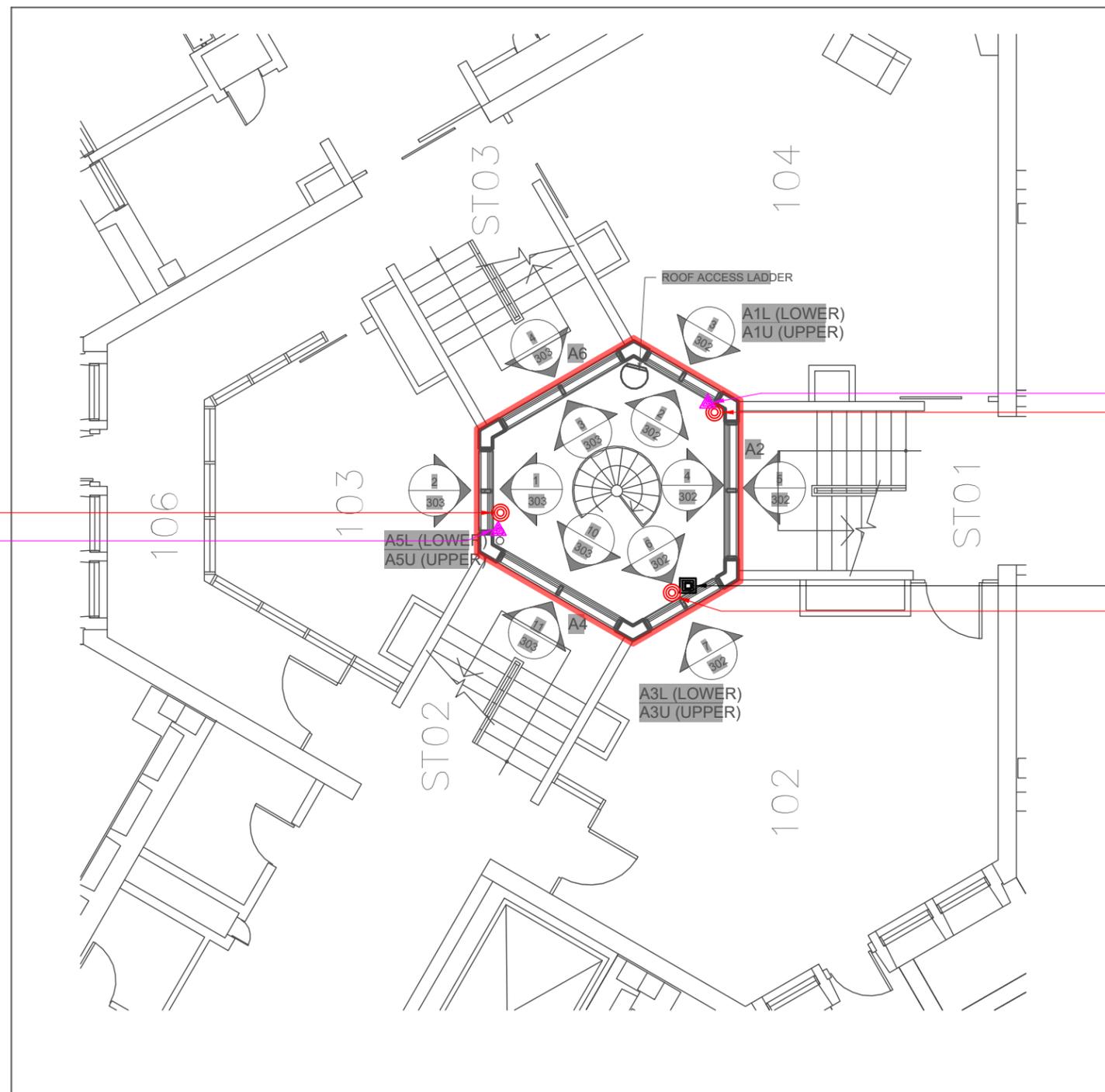
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**N CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 3 OF 6



**LEGEND**

- ASSESSED AREA
- ⊙ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE
- PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:
  - HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:
  - BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



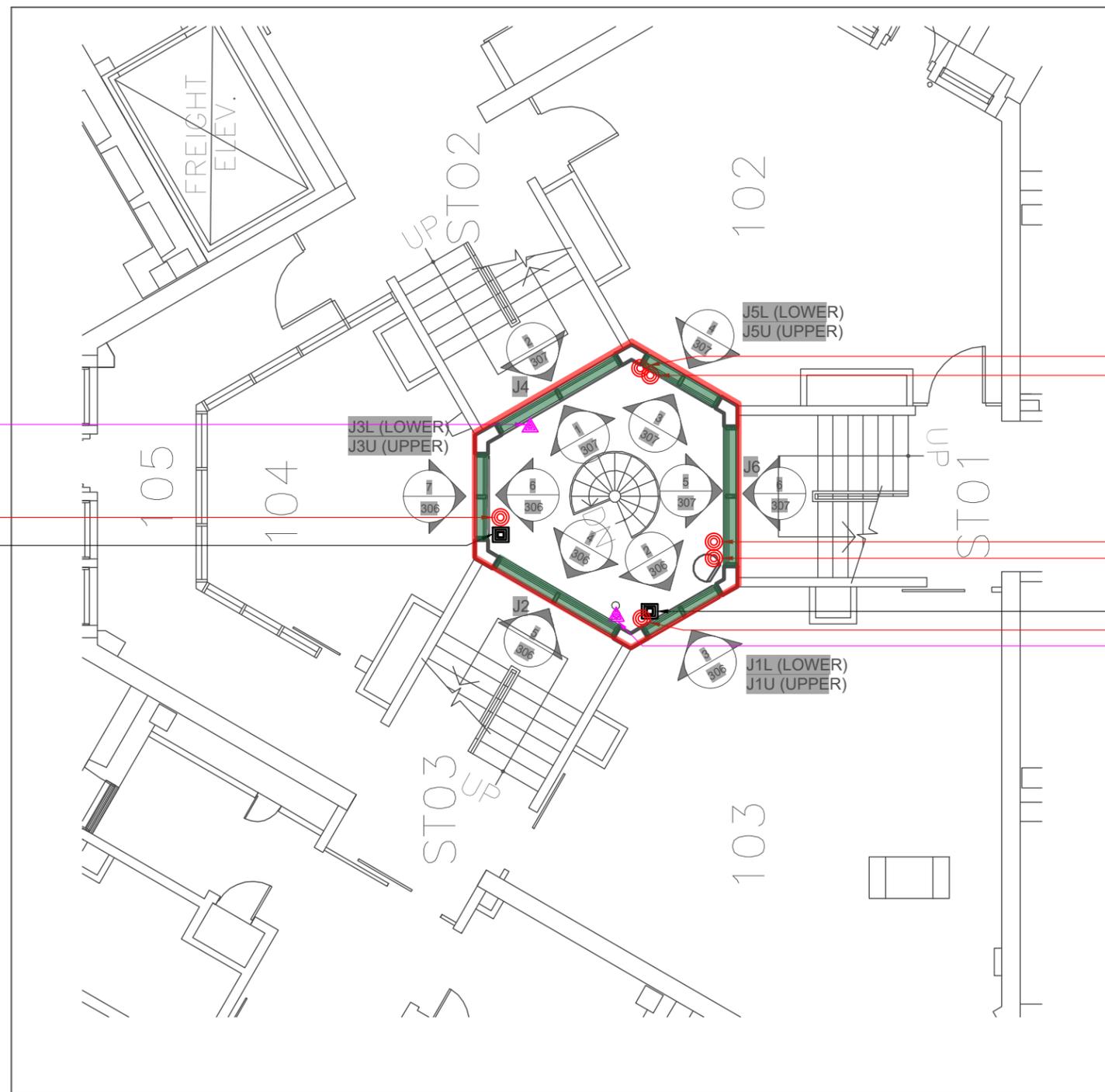
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**A CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 4 OF 6



**LEGEND**

- ASSESSED AREA
- ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE
- PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:
  - HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:
  - BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



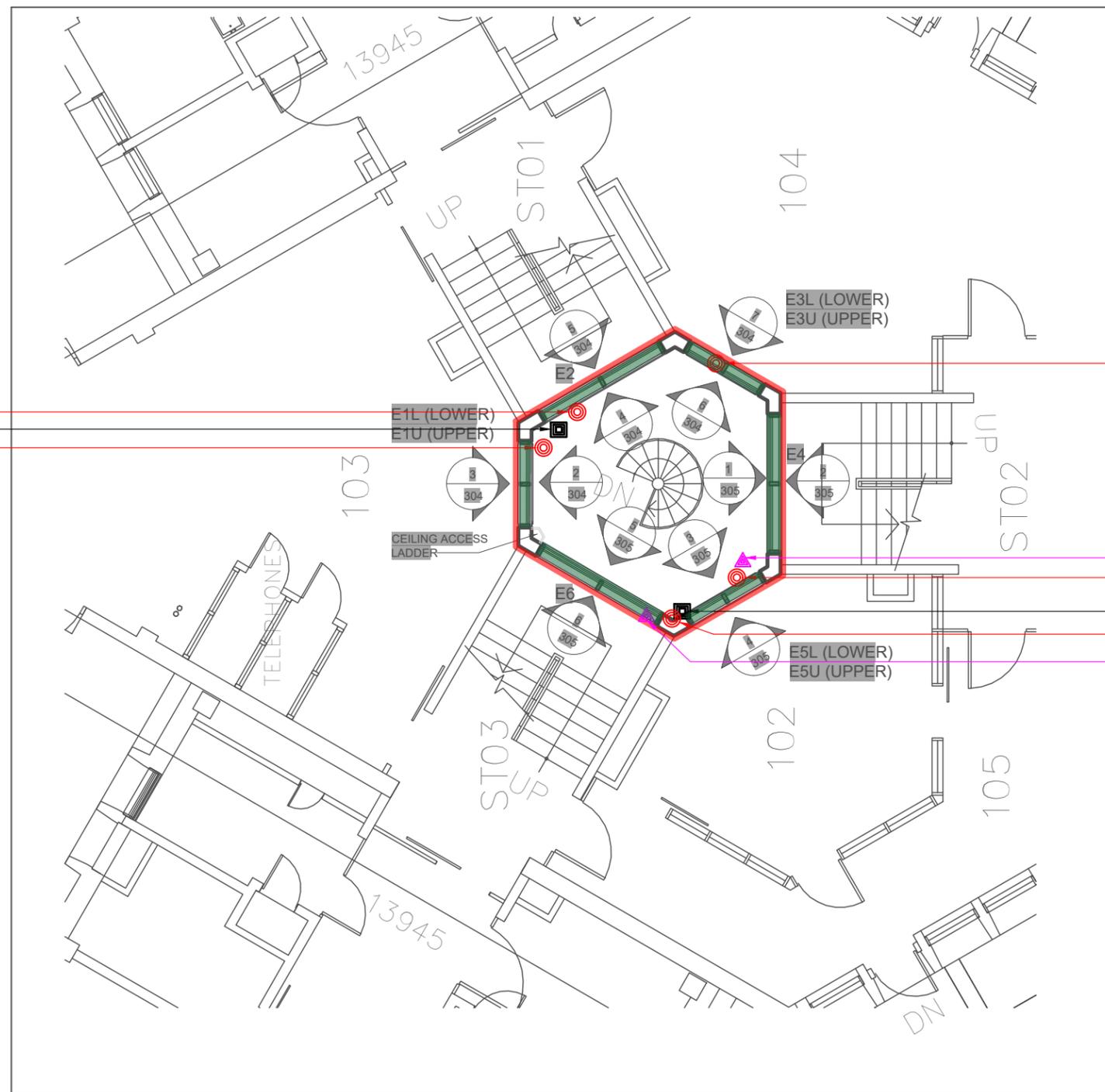
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**J CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 5 OF 6



S0009B  
P10  
S0009C

S0010B

L9

S0010C

P9

S0009A

S0010A

L10



**LEGEND**

- ASSESSED AREA
- ⊙ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE
- PCB BULK SAMPLE
- ASBESTOS-CONTAINING MATERIALS:
  - HARD BLACK CAULKING ON METAL WINDOW FRAMES
- PCB-CONTAINING MATERIALS:
  - BLACK BUTYL SEALANT BETWEEN GLASS AND METAL FRAME

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.



PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**PUBLIC SERVICES AND PROCUREMENT CANADA**

PROJECT LOCATION:  
**5775 BATH ROAD  
BATH, ONTARIO**

FIGURE NAME:  
**E CONTROL**

PROJECT NUMBER: 269554	SCALE: NOT TO SCALE
DRAWN BY: CM	REVIEWED BY: AF
DATE: FEBRUARY 2020	FIGURE NUMBER: 6 OF 6

**APPENDIX II-A**  
**Asbestos Analytical Certificates**



Your Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Your C.O.C. #: na

**Attention: Glenn Hendry**

Pinchin Ltd  
 1456 Centennial Drive  
 Suite 2  
 Kingston, ON  
 CANADA K7P 0K4

**Report Date: 2020/01/31**  
 Report #: R6057917  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BV LABS JOB #: C022526**

**Received: 2020/01/27, 10:35**

Sample Matrix: Solid  
 # Samples Received: 30

<b>Analyses</b>	<b>Quantity</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Laboratory Method</b>	<b>Analytical Method</b>
Asbestos by PLM - 0.5 RDL (1)	30	N/A	2020/01/31	COR3SOP-00002	EPA 600R-93/116

**Remarks:**

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by BV Labs, unless otherwise agreed in writing. BV Labs is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by BV Labs, results relate to the supplied samples tested.

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

Bureau Veritas Laboratories' Asbestos Laboratory is accredited by NVLAP for bulk asbestos analysis by polarized light microscopy, NVLAP Code 600136-0.

This report may not be reproduced, except in full, without the written approval of Bureau Veritas Laboratories. This report may not be used by the client to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Bureau Veritas Laboratories' scope of accreditation includes EPA-600/M4-82-020: "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" and EPA-600/R-93/116: "Method for the Determination of Asbestos in Bulk Building Materials".

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) P.O.B. - Percent of Bulk

When Asbestos data is reported with other data, this report contains data that are not covered by the NVLAP accreditation.



Your Project #: 269554  
Site Location: 5775 BATH ROAD, BATH, ONTARIO  
Your C.O.C. #: na

**Attention: Glenn Hendry**

Pinchin Ltd  
1456 Centennial Drive  
Suite 2  
Kingston, ON  
CANADA K7P 0K4

**Report Date: 2020/01/31**  
Report #: R6057917  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BV LABS JOB #: C022526**  
**Received: 2020/01/27, 10:35**

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.  
Antonella Brasil, Senior Project Manager  
Email: Antonella.Brasil@bvlabs.com  
Phone# (905)817-5817

=====  
This report has been generated and distributed using a secure automated process.

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0001A BLACK BUTYL SEALANT,U CONTROL</b>							
BV Labs ID:		LWD851			Date Analyzed:		2020/01/30
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous black butyl sealant	Not Detected			Non-Fibrous	

<b>S0001B BLACK BUTYL SEALANT,U CONTROL</b>							
BV Labs ID:		LWD852			Date Analyzed:		2020/01/30
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	50	Homogeneous black butyl sealant	Not Detected			Non-Fibrous	
Layer 2	50	Homogeneous black fibrous material	Not Detected	Synthetic fibres	90%	Non-Fibrous	

<b>S0001C BLACK BUTYL SEALANT,U CONTROL</b>							
BV Labs ID:		LWD853			Date Analyzed:		2020/01/30
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous black butyl sealant	Not Detected			Non-Fibrous	

<b>S0002A GREY WINDOW CAULKING,S CONTROL</b>							
BV Labs ID:		LWD854			Date Analyzed:		2020/01/30
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous grey caulking	Not Detected			Non-Fibrous	

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

### Asbestos Analytical Results

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0002B GREY WINDOW CAULKING,S CONTROL</b>					
BV Labs ID: LWD855		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	70	Homogeneous light grey caulking	Not Detected		Non-Fibrous
Layer 2	30	Homogeneous dark grey caulking	Not Detected		Non-Fibrous

<b>S0002C GREY WINDOW CAULKING,S CONTROL</b>					
BV Labs ID: LWD857		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey caulking	Not Detected		Non-Fibrous

<b>S0003A BLACK BUTYL SEALANT,S CONTROL</b>					
BV Labs ID: LWD858		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0003B BLACK BUTYL SEALANT,S CONTROL</b>					
BV Labs ID: LWD859		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0003C BLACK BUTYL SEALANT,S CONTROL</b>					
BV Labs ID: LWD860		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0004A BLACK BUTYL SEALANT,N CONTROL</b>					
BV Labs ID: LWD861		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0004B BLACK BUTYL SEALANT,N CONTROL</b>					
BV Labs ID: LWD862		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0004C BLACK BUTYL SEALANT,N CONTROL</b>					
BV Labs ID: LWD863		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0005A BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL</b>					
BV Labs ID: LWD864		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous

<b>S0005B BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL</b>					
BV Labs ID: LWD865		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous

<b>S0005C BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL</b>					
BV Labs ID: LWD866		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous

<b>S0006A BLACK BUTYL SEALANT,A CONTROL</b>					
BV Labs ID: LWD867		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0006B BLACK BUTYL SEALANT,A CONTROL</b>					
BV Labs ID: LWD868		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0006C BLACK BUTYL SEALANT,A CONTROL</b>					
BV Labs ID: LWD869		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0007A HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL</b>					
BV Labs ID: LWD870		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Chrysotile 2%		Non-Fibrous

<b>S0007B HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL</b>					
BV Labs ID: LWD871		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1			N/A		
<b>Comment:</b> Not analyzed - positive stop					

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0007C HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL</b>					
BV Labs ID: LWD872		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1			N/A		
<b>Comment:</b> Not analyzed - positive stop					

<b>S0008A BLACK BUTYL SEALANT,J CONTROL</b>					
BV Labs ID: LWD873		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0008B BLACK BUTYL SEALANT,J CONTROL</b>					
BV Labs ID: LWD874		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0008C BLACK BUTYL SEALANT,J CONTROL</b>					
BV Labs ID: LWD875		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0009A BLACK BUTYL SEALANT,E CONTROL</b>					
BV Labs ID: LWD876		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0009B BLACK BUTYL SEALANT,E CONTROL</b>					
BV Labs ID: LWD877		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0009C BLACK BUTYL SEALANT,E CONTROL</b>					
BV Labs ID: LWD878		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black butyl sealant	Not Detected		Non-Fibrous

<b>S0010A HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL</b>					
BV Labs ID: LWD879		Date Analyzed: 2020/01/30			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	<b>Chrysotile</b> 4%		Non-Fibrous

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**Asbestos Analytical Results**

EPA/600R-93/116 by Polarized Light Microscopy

<b>S0010B HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL</b>					
BV Labs ID: LWD880		Date Analyzed: 2020/01/30			
<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1		N/A			
<b>Comment:</b> Not analyzed - positive stop					

<b>S0010C HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL</b>					
BV Labs ID: LWD881		Date Analyzed: 2020/01/30			
<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1		N/A			
<b>Comment:</b> Not analyzed - positive stop					

The limit of quantitation is 0.50%, although asbestos may be qualitatively detected at concentrations less than 0.50%. Samples for which asbestos is detected at <0.50% are reported as trace, "<0.50%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)  
 Date Format : yyyy/mm/dd



**TEST SUMMARY**

**BV Labs ID:** LWD851  
**Sample ID:** S0001A BLACK BUTYL SEALANT,U CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD852  
**Sample ID:** S0001B BLACK BUTYL SEALANT,U CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD853  
**Sample ID:** S0001C BLACK BUTYL SEALANT,U CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD854  
**Sample ID:** S0002A GREY WINDOW CAULKING,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD855  
**Sample ID:** S0002B GREY WINDOW CAULKING,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD857  
**Sample ID:** S0002C GREY WINDOW CAULKING,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD858  
**Sample ID:** S0003A BLACK BUTYL SEALANT,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud



### TEST SUMMARY

**BV Labs ID:** LWD859  
**Sample ID:** S0003B BLACK BUTYL SEALANT,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD859 Dup  
**Sample ID:** S0003B BLACK BUTYL SEALANT,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD860  
**Sample ID:** S0003C BLACK BUTYL SEALANT,S CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD861  
**Sample ID:** S0004A BLACK BUTYL SEALANT,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD862  
**Sample ID:** S0004B BLACK BUTYL SEALANT,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD863  
**Sample ID:** S0004C BLACK BUTYL SEALANT,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD864  
**Sample ID:** S0005A BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud



### TEST SUMMARY

**BV Labs ID:** LWD865  
**Sample ID:** S0005B BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD866  
**Sample ID:** S0005C BLACK CAULKING ON METAL WINDOW FRAMES,N CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD867  
**Sample ID:** S0006A BLACK BUTYL SEALANT,A CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD868  
**Sample ID:** S0006B BLACK BUTYL SEALANT,A CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD869  
**Sample ID:** S0006C BLACK BUTYL SEALANT,A CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD869 Dup  
**Sample ID:** S0006C BLACK BUTYL SEALANT,A CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD870  
**Sample ID:** S0007A HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud



### TEST SUMMARY

**BV Labs ID:** LWD871  
**Sample ID:** S0007B HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD872  
**Sample ID:** S0007C HARD BLACK CAULKING ON METAL WINDOW FRAMES,J CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD873  
**Sample ID:** S0008A BLACK BUTYL SEALANT,J CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD874  
**Sample ID:** S0008B BLACK BUTYL SEALANT,J CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD875  
**Sample ID:** S0008C BLACK BUTYL SEALANT,J CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD876  
**Sample ID:** S0009A BLACK BUTYL SEALANT,E CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD877  
**Sample ID:** S0009B BLACK BUTYL SEALANT,E CONTROL  
**Matrix:** Solid  
**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud



BV Labs Job #: C022526  
 Report Date: 2020/01/31

Pinchin Ltd  
 Client Project #: 269554  
 Site Location: 5775 BATH ROAD, BATH, ONTARIO  
 Sampler Initials: AF

**TEST SUMMARY**

**BV Labs ID:** LWD878  
**Sample ID:** S0009C BLACK BUTYL SEALANT,E CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD879  
**Sample ID:** S0010A HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD879 Dup  
**Sample ID:** S0010A HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD880  
**Sample ID:** S0010B HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud

**BV Labs ID:** LWD881  
**Sample ID:** S0010C HARD BLACK CAULKING ON METAL WINDOW FRAMES,E CONTROL  
**Matrix:** Solid

**Collected:** 2020/01/23  
**Shipped:**  
**Received:** 2020/01/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.5 RDL	MIC	6558486	N/A	2020/01/31	Jasser Daoud



BUREAU  
VERITAS

BV Labs Job #: C022526

Report Date: 2020/01/31

Pinchin Ltd

Client Project #: 269554

Site Location: 5775 BATH ROAD, BATH, ONTARIO

Sampler Initials: AF

## GENERAL COMMENTS

Results relate only to the items tested.



BV Labs Job #: C022526  
Report Date: 2020/01/31

Pinchin Ltd  
Client Project #: 269554  
Site Location: 5775 BATH ROAD, BATH, ONTARIO  
Sampler Initials: AF

### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

A handwritten signature in black ink, appearing to read 'R. Samson', written over a horizontal line.

Romeo Samson, Team Lead- Asbestos

---

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

**APPENDIX II-B**  
**Lead Analytical Certificates**

## Certificate of Analysis

### Pinchin Ltd. (Kingston)

1456 Centennial Drive, Suite 2  
Kingston, ON K7P 0K4  
Attn: Arlie Flynn

Client PO: 5775 Bath Road, Bath, Ontario  
Project: 269554  
Custody:

Report Date: 29-Jan-2020  
Order Date: 24-Jan-2020

**Order #: 2004581**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2004581-01	L1 - black on metal bars, U control
2004581-02	L2 - red on metal window frames, U control
2004581-03	L3 - grey on metal bars and metal window frames, S control
2004581-04	L4 - black on metal bars and metal window frames, N control
2004581-05	L5 - black/blue on metal bars and metal window frames, A control
2004581-06	L6 - red on metal window frames, interior of control, A control
2004581-07	L7 - blue on metals bars and metal window frames, J control
2004581-08	L8 - red on interior metal window frames, J control
2004581-09	L9 - blue on interior metal window frames, E control
2004581-10	L10 - blue on metal bars and metal window frames, E control

Approved By:



Milan Ralitsch, PhD  
Senior Technical Manager

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

Certificate of Analysis  
Client: Pinchin Ltd. (Kingston)  
Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
Order Date: 24-Jan-2020  
Project Description: 269554

### Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	27-Jan-20	28-Jan-20

### Sample Data Revisions

None

### Work Order Revisions/Comments:

None

### Other Report Notes:

n/a: not applicable  
ND: Not Detected  
MDL: Method Detection Limit  
Source Result: Data used as source for matrix and duplicate samples  
%REC: Percent recovery.  
RPD: Relative percent difference.

Certificate of Analysis  
 Client: Pinchin Ltd. (Kingston)  
 Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
 Order Date: 24-Jan-2020  
 Project Description: 269554

## Sample Results

Lead				Matrix: Paint	
				Sample Date: 23-Jan-20	
Paracel ID	Client ID	Units	MDL	Result	
2004581-01	L1 - black on metal bars, U control	% by Wt.	0.0005	0.433	
2004581-02	L2 - red on metal window frames, U control	% by Wt.	0.0005	0.540	
2004581-03	L3 - grey on metal bars and metal window frames, S control	% by Wt.	0.0005	0.241	
2004581-04	L4 - black on metal bars and metal window frames, N control	% by Wt.	0.0005	0.200	
2004581-05	L5 - black/blue on metal bars and metal window frames, A control	% by Wt.	0.0005	0.0049	
2004581-06	L6 - red on metal window frames, interior of control, A control	% by Wt.	0.0005	0.0636	
2004581-07	L7 - blue on metal bars and metal window frames, J control	% by Wt.	0.0005	0.0030	
2004581-08	L8 - red on interior metal window frames, J control	% by Wt.	0.0005	0.0433	
2004581-09	L9 - blue on interior metal window frames, E control	% by Wt.	0.0005	0.0301	
2004581-10	L10 - blue on metal bars and metal window frames, E control	% by Wt.	0.0005	0.0655	

## Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Matrix Blank</b>									
Lead	ND	0.0005	% by Wt.						
<b>Matrix Duplicate</b>									
Lead	0.0661	0.0005	% by Wt.	0.0655			0.8	50	
<b>Matrix Spike</b>									
Lead	0.155	0.0005	% by Wt.	0.0655	71.5	70-130			



TRUSTED.  
RESPONSIVE  
RELIABLE

Parcel ID: 2004581



Chain of Custody  
(Lab Use Only)

OTTAWA KINGSTON NIAGARA MISSISSAUGA SARNIA www.paracellabs.com

Page 1 of 1

Client Name: Pinchin Ltd.	Project Reference: 5775 Bath Road, Bath, Ontario
Contact Name: Arlie Flynn	Quote #
Address: 1456 Centennial Drive, Suite 2, Kingston, ON	PO # 269554
Telephone: 613.541.1013	Email Address: kvanderburgt@pinchin.com arflynn@pinchin.com

TAT:  Regular  3 Day  
 2 Day  1 Day  
Date Required: \_\_\_\_\_

Criteria:  O. Reg. 153 (As Amended) Table  RSC Filing  O. Reg. 558/00  PWO  CCME  SUB (Storm)  SUB (Sanitary) Municipality: \_\_\_\_\_  Other: \_\_\_\_\_

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analyses

Parcel Order Number: 2004581		Matrix	Air Volume	# of Containers	Sample Taken		Lead	Required Analyses																
Sample ID/Location Name					Date	Time																		
1	L1 - black on metal bars, U control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
2	L2 - red on metal window frames, U control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
3	L3 - grey on metal bars and metal window frames, S control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
4	L4 - black on metal bars and metal window frames, N control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
5	L5 - black / blue on metal bars and metal window frames, A control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
6	L6 - red on metal window frames, interior of control, A control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
7	L7 - blue on metal bars and metal window frames, J control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
8	L8 - red on interior metal window frames, J control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
9	L9 - blue on interior metal window frames, E control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																
10	L10 - blue on metal bars and metal window frames, E control	P		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>																

Comments: Please report in %  
Please CC Glenn Hendry, ghendry@pinchin.com, with results

Method of Delivery: Pick-up

Relinquished By (Sign): <i>Arlie Flynn</i>	Received by Driver/Depot: <i>[Signature]</i>	Received at Lab: <i>[Signature]</i>	Verified By: <i>Karen Cooper</i>
Relinquished By (Print): Arlie Flynn	Date/Time: <i>Jan 24 14:30</i>	Date/Time: <i>Jan 27 10:2020</i>	Date/Time: <i>Jan 24 15:25</i>
Date/Time: 01/23/2020 PM	Temperature: _____ °C	Temperature: _____ °C	pH Verified [ ] By: _____

**APPENDIX II-C**  
**PCB Analytical Certificates**

## Certificate of Analysis

### Pinchin Ltd. (Kingston)

1456 Centennial Drive, Suite 2  
Kingston, ON K7P 0K4  
Attn: Arlie Flynn

Client PO: 5775 Bath Road, Bath, Ontario  
Project: 269554  
Custody:

Report Date: 29-Jan-2020  
Order Date: 24-Jan-2020

**Order #: 2004582**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2004582-01	P1 - black butyl sealant, U control
2004582-02	P2 - grey window caulking, S control
2004582-03	P3 - black butyl sealant, S control
2004582-04	P4 - black butyl sealant, N control
2004582-05	P5 - black caulking on metal window frames, N control
2004582-06	P6 - black butyl sealant, A control
2004582-07	P7 - hard black caulking on metal window frames, J control
2004582-08	P8 - black butyl sealant, J control
2004582-09	P9 - black butyl sealant, E control
2004582-10	P10 - hard black caulking on metal window frames, E control

Approved By:



Mark Foto, M.Sc.  
Lab Supervisor

Certificate of Analysis  
Client: Pinchin Ltd. (Kingston)  
Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
Order Date: 24-Jan-2020  
Project Description: 269554

### Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
PCBs, total	SW846 8082A - GC-ECD	27-Jan-20	28-Jan-20

Certificate of Analysis  
 Client: Pinchin Ltd. (Kingston)  
 Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020

Order Date: 24-Jan-2020

Project Description: 269554

<b>Client ID:</b>	P1 - black butyl sealant, U control	P2 - grey window caulking, S control	P3 - black butyl sealant, S control	P4 - black butyl sealant, N control
<b>Sample Date:</b>	23-Jan-20 09:00	23-Jan-20 09:00	23-Jan-20 09:00	23-Jan-20 09:00
<b>Sample ID:</b>	2004582-01	2004582-02	2004582-03	2004582-04
<b>MDL/Units</b>	Other	Other	Other	Other

**PCBs**

PCBs, total	0.05 ppm wet	<10.6 [1]	<6.10 [1]	<17.2 [1]	67.6
Decachlorobiphenyl	Surrogate	124%	116%	146% [2]	142% [2]

<b>Client ID:</b>	P5 - black caulking on metal window frames, N control	P6 - black butyl sealant, A control	P7 - hard black caulking on metal window frames, J control	P8 - black butyl sealant, J control
<b>Sample Date:</b>	23-Jan-20 09:00	23-Jan-20 09:00	23-Jan-20 09:00	23-Jan-20 09:00
<b>Sample ID:</b>	2004582-05	2004582-06	2004582-07	2004582-08
<b>MDL/Units</b>	Other	Other	Other	Other

**PCBs**

PCBs, total	0.05 ppm wet	<38.5 [1]	<5.00 [1]	<9.43 [1]	<5.00 [1]
Decachlorobiphenyl	Surrogate	138%	130%	86.0%	108%

<b>Client ID:</b>	P9 - black butyl sealant, E control	P10 - hard black caulking on metal window frames, E control	-	-
<b>Sample Date:</b>	23-Jan-20 09:00	23-Jan-20 09:00	-	-
<b>Sample ID:</b>	2004582-09	2004582-10	-	-
<b>MDL/Units</b>	Other	Other	-	-

**PCBs**

PCBs, total	0.05 ppm wet	<5.00 [1]	<7.04 [1]	-	-
Decachlorobiphenyl	Surrogate	108%	116%	-	-

Certificate of Analysis  
 Client: Pinchin Ltd. (Kingston)  
 Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
 Order Date: 24-Jan-2020  
 Project Description: 269554

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>PCBs</b>									
PCBs, total	ND	0.50	ppm						
Surrogate: Decachlorobiphenyl	1.19		ppm		119	60-140			

Certificate of Analysis  
 Client: Pinchin Ltd. (Kingston)  
 Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
 Order Date: 24-Jan-2020  
 Project Description: 269554

### Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>PCBs</b>									
PCBs, total	ND	0.05	ppm dry	ND				40	
Surrogate: Decachlorobiphenyl	0.192		ppm dry		115	60-140			

Certificate of Analysis  
 Client: Pinchin Ltd. (Kingston)  
 Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
 Order Date: 24-Jan-2020  
 Project Description: 269554

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>PCBs</b>									
PCBs, total	0.925	0.05	ppm	ND	138	60-140			
Surrogate: Decachlorobiphenyl	0.190		ppm		113	60-140			

Certificate of Analysis  
Client: Pinchin Ltd. (Kingston)  
Client PO: 5775 Bath Road, Bath, Ontario

Report Date: 29-Jan-2020  
Order Date: 24-Jan-2020  
Project Description: 269554

**Qualifier Notes:**

***Sample Qualifiers :***

- 1 : Elevated detection limits due to the nature of the sample matrix.
- 2 : The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

**Sample Data Revisions**

None

**Work Order Revisions / Comments:**

None

**Other Report Notes:**

n/a: not applicable  
ND: Not Detected  
MDL: Method Detection Limit  
Source Result: Data used as source for matrix and duplicate samples  
%REC: Percent recovery.  
RPD: Relative percent difference.

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.  
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.



TRUSTED  
RESPONS  
RELIABL

Parcel ID: 2004582



Chain of Custody  
(Lab Use Only)

vd.  
JB  
com

OTTAWA KINGSTON NIAGARA MISSISSAUGA S

www.paracellabs.com

Page 1 of 1

Client Name: Pinchin Ltd.  
Contact Name: Arlie Flynn  
Address: 1456 Centennial Drive, Suite 2, Kingston, ON  
Telephone: 613.541.1013

Project Reference: 5775 Bath Road, Bath Ontario  
Quote #  
PO #: 269554  
Email Address: kvanderburgt@pinchin.com  
aflynn@pinchin.com

TAT:  Regular  3 Day  
 2 Day  1 Day  
Date Required: \_\_\_\_\_

Criteria:  O. Reg. 153 (As Amended) Table  RSC Filing  O. Reg. 558/00  PWQO  CCME  SUB (Storm)  SUB (Sanitary) Municipality: \_\_\_\_\_  Other: \_\_\_\_\_

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analyses

Parcel Order Number:		Matrix	Air Volume	# of Containers	Sample Taken		PCB											
2004582					Date	Time												
Sample ID/Location Name																		
1	P1 - black butyl sealant, U control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
2	P2 - grey window caulking, S control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
3	P3 - black butyl sealant, S control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
4	P4 - black butyl sealant, N control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
5	P5 - black caulking on metal window frames, N control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
6	P6 - black butyl sealant, A control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
7	P7 - hard black caulking on metal window frames, J control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
8	P8 - black butyl sealant, J control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
9	P9 - black butyl sealant, E control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
10	P10 - hard black caulking on metal window frames, E control	0		1	01/23/2020	AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>										

Comments: Please report in PPM  
Please CC Glenn Hendry, ghendry@pinchin.com, with results

Method of Delivery:

Relinquished By (Sign): <i>Arlie Flynn</i>	Received by Driver/Depot: <i>Glenn Hendry</i>	Received at Lab: <i>Glenn Hendry</i>	Verified By: <i>Hazen Cooper</i>
Relinquished By (Print): Arlie Flynn	Date/Time: Jan 24 14:30	Date/Time: Jan 25/20 12:00	Date/Time: Jan 24 15:27
Date/Time: 01/23/2020 PM	Temperature: _____°C	Temperature: _____°C	pH Verified [ ] By: _____

**APPENDIX III**  
**Methodology**

## 1.0 GENERAL

Pinchin conducts a room-by-room survey (rooms, corridors, service areas, exterior, etc.) to identify the hazardous building materials as defined by the scope of work. All work is conducted in accordance with our own internal Standard Operating Procedures.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities are recorded. The locations of any samples collected are recorded on small-scale plans.

As-built drawings and previous reports are referenced where provided.

### 1.1 Limitations on Scope

The assessment excludes the following:

- Articles belonging to the owner, tenant or occupant (e.g. stored items, furniture, appliances, etc.);
- Underground materials or equipment (e.g. vessels, drums, underground storage tanks, pipes, etc.);
- Building envelope, structural components, inaccessible or concealed materials or other items where sampling may cause consequential damage to the property;
- Energized systems (e.g. internal boiler components, elevators, mechanical or electrical components);
- Controlled products (e.g. stored chemicals, operational or process-related substances); and
- Materials not typically associated with construction (e.g. settled dust, spills, residual contamination from prior spills, etc.).

The assessment will not include demolition of wall, floor and ceiling finishes as they are not anticipated to be disturbed as part of the renovations. Demolition of exterior building finishes, masonry walls (chases, shafts etc.), and structural items is not conducted.

### 1.2 Asbestos

An inspection is conducted for the presence of friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.

A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Samples are collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy is also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start / finish date of construction and associated usage of ACM.

In some cases, manufactured products such as asbestos cement pipe are visually identified without sample confirmation.

Flooring mastic or adhesive is sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

Limited demolition of masonry block walls (core holes) is conducted to investigate for loose fill vermiculite insulation. The core holes are temporarily patched with expanding foam or caulking.

The following materials (if present) are not sampled and will be presumed to contain asbestos:

- Roofing felts and tar, including repair mastics;
- Concrete floor levelling compound, including ceramic tile thin set;
- Elevator and lift brakes;
- Electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring;
- Moulded plastic components (laboratory bench tops);
- Refractory materials and insulations in boilers, incinerators and stacks;
- Insulation under metal clad boilers and vessels;
- Mechanical packing, ropes and gaskets;
- Vermiculite in concrete block wall cavities;
- Adhesives and duct mastics;
- Paper products under wood flooring or metal or slate roofing;
- Soffit and fascia boards at elevated heights;
- Fire resistant doors or metal clad finishes;

- Exterior cladding;
- Stucco, plaster or other cementitious parge coatings;
- Vibration dampers on HVAC equipment;
- Wall, floor and ceiling finishes; and
- Materials outside the assessed area or inaccessible materials.

The bulk samples are submitted to a NVLAP accredited laboratory for analysis. The analysis is performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

Analytical results are compared to the following criteria:

<b>Jurisdiction</b>	<b>Friable</b>	<b>Non-Friable</b>
BC	0.5% <sup>1</sup>	0.5%
Alberta	Undefined <sup>2</sup>	Undefined <sup>2</sup>
Saskatchewan	>0.5% <sup>1</sup>	>1%
Manitoba	0.1% <sup>1</sup>	1%
Ontario	0.5%	0.5%
Yukon, Nunavut, Northwest Territories	1%	1%
Federal	1%	1%

The asbestos analysis is completed using a stop positive approach. Only one result meeting the above regulated criteria is required to determine that a material is asbestos-containing, but all samples must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material are analyzed if no asbestos is detected. In some cases, all samples are analyzed in the sample set regardless of result.

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation.

<sup>1</sup> Or any amount if vermiculite

<sup>2</sup> There is no criteria established for defining an asbestos-containing material by Alberta OHS Regulations. Historically, the accepted threshold was 1%, however materials that contain any asbestos will now need to be assessed before disturbance to determine the potential for fibre release based on the planned work activity.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible); and
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

### 1.3 Lead

Samples of distinctive paint finishes and surface coatings present in more than a limited application, where removal of the paint is possible is collected. The samples are collected by scraping the painted finish to include base and covering applications. Drawings included show sample locations.

Analysis for lead in paints or surface coatings is performed at an accredited laboratory in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption, or equivalent.

The Ontario Ministry of Labour (MOL) has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. Pinchin follows the recommendations of the Environmental Abatement Council of Ontario (EACO) Lead Guideline for Construction, Renovation, Maintenance or Repair. The Guideline suggests that 0.1% (1,000 ppm) lead in paint represents a de minimis concentration of lead in paint for construction hygiene purposes, that is a concentration below which the lead content is not the limiting hazard in any disturbance of leaded paint for non-aggressive disturbance of painted finishes, (hand powered demolition, chipping, scraping, light sanding, etc.). The use of aggressive methods such as power grinding, torching, welding, etc. may result in significant lead exposures even with low concentrations of lead in paints (below 0.1%). Paint and surface coatings are evaluated for condition such as flaking, chipping or spalling.

Other lead building products (e.g. batteries, lead sheeting, flashing) are identified by visual observation only.

Pinchin reviews the bulk samples results for elevated concentrations of lead. Where elevated concentrations are present, paint samples including the substrate (e.g., wood, concrete, plaster) are submitted for Toxicity Characteristic Leaching Procedure (TCLP) analysis. Analytical results are compared against local provincial requirements for waste characterization.

#### **1.4 Silica**

Building materials known to contain crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) is identified by visual inspection only. Pinchin does not perform sampling of these materials for laboratory analysis of crystalline silica content.

#### **1.5 Mercury**

Building materials/products/equipment (e.g. thermostats, barometers, pressure gauges, light tubes), suspected to contain mercury are identified by visually inspection only. Dismantling of equipment suspected of containing mercury is not performed. Sampling of these materials for laboratory analysis of mercury content is not performed.

#### **1.6 Polychlorinated Biphenyls**

The potential for light ballast and wet transformers to contain PCBs is based on the age of the building, a review of maintenance records and examination of labels or nameplates on equipment, where present and accessible. The information is compared to known ban dates of PCBs and Environment Canada publications.

Dry type transformers are presumed to be free of dielectric fluids and hence non-PCB.

Fluids (mineral oil, hydraulic, Aroclor or Askarel) in transformers or other equipment are not sampled for PCB content.

Caulking or sealants are sampled for PCBs based on the date of construction or installation. Caulking installed after 1985 (1980 ban date plus a reasonable non-compliance period based on our experience) is presumed to be free of PCBs and hence not sampled. If sampled, analysis for PCBs is performed using an ASTM test method appropriate to the sample matrix at an accredited laboratory. Sample results are compared to the criteria of 50 ppm for solids as stated in the PCB Regulation, SOR/2008-273.

#### **1.7 Visible Mould**

The presence of mould is determined by visual inspection of exposed building surfaces. If any mould growth is concealed within building cavities it is not addressed in this assessment.

Methodology for Hazardous Building Materials Assessment