Hazardous Building Materials Assessment (Pre-Construction)

Toronto Fire Services Station 212
8500 Sheppard Avenue East,
Toronto, Ontario

Prepared for:

City of Toronto
55 John Street, 2nd Floor
Toronto, Ontario, M5V 3C6

September 26, 2023

Pinchin File: 331484.000

Issued to:	**City of Toronto**
Issued on:	**September 26, 2023**
Pinchin File:	**331484.000**
Issuing Office:	**Toronto, ON**

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EXECUTIVE SUMMARY

City of Toronto (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at Toronto Fire Services Station 212 located at 8500 Sheppard Avenue East, Toronto, Ontario. Pinchin performed the assessment on September 7, 2023.

The objective of the assessment was to identify specified hazardous building materials in preparation for the installation of a new natural gas generator within select interior and exterior areas of the building. The scope of work consists of but is not limited to the following activities as confirmed by the Client via email on August 23, 2023, along with attached specification document and construction drawings (Tender Drawing for 8500 Sheppard Avenue East, Toronto, Ontario, prepared by J + B Engineering Inc., dated October 21, 2023, Project No. 210240-E-100):

- Remove existing natural gas piping from roof and exterior walls and ceiling.
- Remove pressure regulator and generator chimney from the roof.
- Remove existing generator with associated services from Generator room.

SUMMARY OF FINDINGS

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

Asbestos: Confirmed asbestos-containing materials were not identified in the assessed areas.

Lead:

- Paints sampled contain insignificant levels of lead (<0.009%).
- Lead products were not found during the assessment.

Silica: Crystalline silica is present in concrete, mortar, masonry, ceramic tiles, ceiling tiles.

Mercury: Mercury vapour is present in light tubes.

Polychlorinated Biphenyls (PCBs): PCBs are not present.

Mould and Water Damage:

- Visible mould damage was not observed during the assessment.
- Water staining was observed on non-asbestos lay-in ceiling tiles within Electrical Room (Location - 1-10).

SUMMARY OF RECOMMENDATIONS

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

1. Replace the water-stained non-asbestos ceiling tiles regardless of the planned renovations.
2. 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.
3. Recycle mercury-containing lamp tubes when removed from service.
4. Follow appropriate safe work procedures when handling or disturbing silica.

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.

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APPENDICES

1.0 INTRODUCTION AND SCOPE

City of Toronto (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at Toronto Fire Services Station 212 located at 8500 Sheppard Avenue East, Toronto, Ontario.

Pinchin performed the assessment on September 7, 2023. The surveyor was unaccompanied 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 installation of a new natural gas generator within select interior and exterior areas of the building. The scope of work consists of but is not limited to the following activities as confirmed by the Client via email on August 23, 2023, along with attached specification document and construction drawings (Tender Drawing for 8500 Sheppard Avenue East, Toronto, Ontario, prepared by J + B Engineering Inc., dated October 21, 2023, Project No. 210240-E-100):

- Remove existing natural gas piping from roof and exterior walls and ceiling.
- Remove pressure regulator and generator chimney from the roof.
- Remove existing generator with associated services from Generator room.

1.1 Scope of Assessment

The **assessed area** consisted of the Roof, Generator Room, Electrical Room and select exterior areas of the building, affected by the planned renovations as described by the Client, and identified in the drawings in Appendix I.

The assessment was performed to establish the type of specified hazardous building materials, locations and approximate quantities incorporated in the structure and its finishes.

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

- Asbestos
- Lead
- Silica
- Mercury
- Mould

Based on the date of construction and known end of use dates, polychlorinated biphenyls are presumed not to be present in the building and will not be included in the report.

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
- Vinyl chloride monomer

2.0 METHODOLOGY

Pinchin conducted a room-by-room assessment to identify the hazardous building materials as defined in the scope.

The assessment included limited sampling of wall and ceiling finishes (drywall) to view concealed conditions at representative areas as permitted by the current building use. Demolition of exterior building finishes, masonry walls (chases, shafts etc.), and structural surrounds was not conducted. Sampling of roofing materials was conducted.

For further details on the methodology including test methods, refer to Appendix IV.

3.0 BACKGROUND INFORMATION

3.1 Assessed Area Description

Description Item	Details
Use	Toronto Fire Station
Assessed Areas	Roof, Generator Room, Electrical Room, and Select Exterior Areas
Total Area	The area of the roof is approximately 6,000 square feet. The total area of assessed interior rooms is approximately 350 square feet.
Year of Construction	The building was constructed in 2003
Structure	Structural steel
Exterior Cladding	Stucco and wall cladding
HVAC	Rooftop HVAC unit and forced air
Roof	Built-up roof
Flooring	Ceramic tile and concrete
Interior Walls	Concrete block
Ceilings	Acoustic (lay-in) ceiling tile

3.2 Existing Reports

Pinchin previously prepared the following report, which has been reviewed as part of this assessment:

- "Designated substance Survey Report Toronto Fire Station 212, 8500 Sheppard Avenue East, Toronto, Ontario" dated December 21, 2020, Pinchin File No. 274992.001.

4.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the hazardous building materials identified. For details on approximate quantities, condition, and locations of hazardous materials; refer to the Room-by-Room Inventory Sheet in Appendix I. A copy of the laboratory certificates are provided in Appendix II. Any quantities listed in this report or Inventory Sheet are estimated based on visual approximations only and are subject to variation.

4.1 Asbestos

4.1.1 Pipe Insulation

Pipes are either uninsulated or insulated with fibreglass and jacketed with canvas or PVC.

Uninsulated pipe, Generator Room (Location 1-02).

Pipe insulated with fibreglass and jacketed in canvas, Electrical Room (Location 1-10).

4.1.2 Duct Insulation and Mastic

Ducts observed are uninsulated.

Duct mastic (dark brown color) at seams / joints on the exterior of ducts throughout the assessed area does not contain asbestos (Lab Reference No.: b299823, samples S0008A-C).

Non-asbestos brown duct mastic, Generator Room (Location 1-02).

4.1.3 Mechanical Equipment Insulation

Mechanical equipment (generator, superior vacuum, etc.) is either uninsulated or insulated with fibreglass or foam and jacketed with metal.

Generator, Generator Room (Location 1-02).

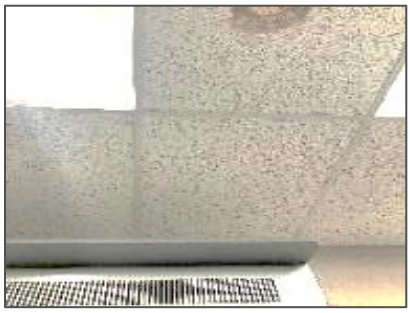
Superior Vacuum, Electrical Room (Location 1-10).

4.1.4 Acoustic Ceiling Tiles

Acoustic ceiling tiles are present in the assessed area, as follows:

Size, Type, Pattern	Locations	Sample Number	Asbestos Type
ACT01, 2'x4', Fissure widthwise w/ pinpoint	*See Room-by-Room Inventory Sheet in Appendix I for locations	11850-B-73-01A-C Date Stamped – 07/01/03	None detected

Water staining was observed on non-asbestos lay-in ceiling tiles within Electrical Room (Location - 1-10).



Non-asbestos acoustic ceiling tiles (ACT01).

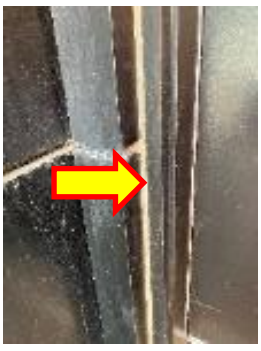
4.1.5 Stucco

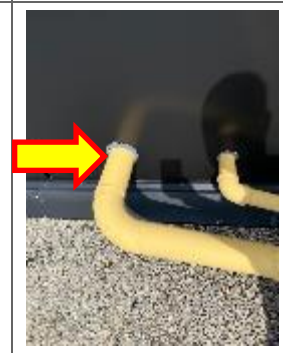
Stucco present as exterior soffits at entrance vestibule ceilings does not contain asbestos (Lab Reference.: b299823, samples S0002A-C).

Non-asbestos stucco present on ceilings, Exterior (Location 0-00).

4.1.6 Caulking

The following is a summary of sealants, caulking, and putties sampled, for a complete list of locations, refer to Appendix V.

Material, Description and Application	Sample Location (Location #)	Sample Number	Asbestos	Photo
Black caulking on metal door frame	Exterior, Vestibule (Location 0-00)	Lab Reference.: b299823, S0003A-C	No	

Material, Description and Application	Sample Location (Location #)	Sample Number	Asbestos	Photo
Black caulking on pipe roof penetration	Exterior, Roof (Location 0-00)	Lab Reference.: b299823, S0004A-C	No	
Black caulking on pipe penetration on metal cladding	Exterior, Roof (Location 0-00)	Lab Reference.: b299823, S0005A-C	No	
Grey caulking on pipe roof penetration	Exterior, Roof (Location 0-00)	Lab Reference.: b299823, S0006A-C	No	
Beige caulking on pipe chimney	Exterior, Roof (Location 0-00)	Lab Reference.: b299823, S0007A-C	No	

4.1.7 Roofing Products

The materials associated with the built-up roof do not contain asbestos (Lab Reference.: b299824, sample S0009A-C).

Non-asbestos roofing materials, Roof (Location 0-00).

Non-asbestos roofing materials, Roof (Location 0-00).

4.1.8 Other Building Materials

Mortar present in the concrete block masonry within Generator Room (Location 1-02) does not contain asbestos (Lab Reference.: b299823, sample S0001A-C).

Thin set under 12”x24” grey ceramic tiles on the floor in the Electrical Room (Location 1-10) is presumed to contain asbestos until further sampling proves otherwise. Ceramic tiles on floor will not be impacted by the scope of the installation of the new natural gas system.

Non-asbestos mortar on masonry wall, Generator Room (Location 1-02).

Presumed asbestos-containing thin-set present under 12”x24” grey ceramic tiles, Electrical Room (1-10).

4.1.9 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:

- Ceramic tile setting compound.
- Vermiculite
- Fire resistant doors
- Sealants on pipe threads
- Electrical components
- Ropes and gaskets in cast-iron bell and spigot joints
- Materials outside the assessed areas

4.2 Lead

4.2.1 Paints

The following table summarizes the analytical results of paints sampled.

Sample Number	Colour, Substrate Description	Sample Location	Lead (%)	Photo
L0001	Yellow paint on metal pipe	Exterior, Roof (Location 0-00) Lab Reference.: R7812874	<0.00060	

Sample Number	Colour, Substrate Description	Sample Location	Lead (%)	Photo
L0002	Grey paint on masonry wall	Generator Room (Location 1-02) Lab Reference.: R7812874	0.00019	
L0003	Black paint on metal door	Exterior, Vestibule (Location 0-00) Lab Reference.: R7812874	<0.00060	
L0004	Light grey on concrete floor	Generator Room (Location 1-02) Lab Reference.: R7812874	0.00042	

Paint containing less than 0.009% (90 mg/kg) lead is assumed to be insignificant.

All paints were observed to be in good condition (i.e. not flaking, peeling, or delaminating).

4.2.2 Lead Products and Applications

Lead products were not found during the assessment.

4.2.3 Excluded Lead Materials

Lead is known to be present in several materials which were not assessed or sampled.

The following materials, where found, should be presumed to contain lead.

- Electrical components, including wiring connectors, grounding conductors, and solder
- Solder on pipe connections
- Glazing on ceramic tiles

4.3 Silica

Crystalline silica is assumed to be a component of the following materials where present in the building.

- Concrete
- Masonry and mortar
- Ceramic tiles and grout
- Ceiling tiles

4.4 Mercury

4.4.1 Lamps

Mercury vapour is present in fluorescent lamp tubes and other lighting that is known to contain mercury such as mercury vapour lamps.

4.4.2 Mercury-Containing Devices

Mercury-containing devices were not found during the assessment.

4.5 Polychlorinated Biphenyls

4.5.1 Lighting Ballasts

Based on date of construction the fixtures will not contain PCB ballasts.

4.5.2 Transformers

Transformers were not found during the assessment.

4.6 Mould and Water Staining

Visible water staining is present on approximately 10 square feet of non-asbestos acoustic ceiling tiles (lay-in, 2' x 4' Fissure widthwise w/ pinpoint) in Electrical Room (Location 1-10).

Water Staining on non-asbestos ceiling tiles, Electrical Room (Location 1-10).

5.0 RECOMMENDATIONS

5.1 General

1. 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.
2. Provide this report to the contractor prior to bidding or commencing work.
3. Retain a qualified consultant to specify, observe and document the successful removal of hazardous materials.

5.2 Building Renovation Work

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

5.2.1 Lead

Exposure from construction disturbance of paints containing lead less than 0.009% (90 mg/kg) is assumed to be insignificant.

5.2.2 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 applicable regulations and guidelines.

5.2.3 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 applicable regulations.

5.2.4 Mould and Water Staining

Mould growth was not observed during the assessment. However, water staining was noted in area affected by the planned work. Remove and replace the water-staining non-asbestos ceiling tile regardless of the planned renovations.

Conduct an intrusive investigation to identify the extent of the source of the water intrusion. Rectify the source of the water staining prior to any reinstatement of removed building materials.

6.0 TERMS AND LIMITATIONS

This work was performed in accordance with the City of Toronto, Blanket Contract #47024791 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.

7.0 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 Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair.
5. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.
6. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 362 as amended.
7. Silica on Construction Projects, Ministry of Labour Guidance Document.

8. Alert – Mould in Workplace Buildings, Ontario Ministry of Labour.
9. Surface Coating Materials Regulations, SOR/2016-193, Canada Consumer Product Safety Act.
10. Consolidated Transportation of Dangerous Goods Regulations, including Amendment SOR/2019-101, Transportation of Dangerous Goods Act.
11. Mould Guidelines for the Canadian Construction Industry, Standard Construction Document CCA 82 – 2004 (Revised 2018), Canadian Construction Association.

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Template: Master Report for Hazardous Materials Assessment (Pre-Construction), HAZ, October 31, 2022

APPENDIX I

Room-by-Room Inventory Sheet

APPENDIX IV - REASSESSMENT SURVEY FORM

Building Address:	8500 Sheppard Avenue East, Toronto	Date(s) of Assessment:	September 7, 2023
Building Name:	Toronto Paramedic Services Station 25	Organization Completing Reassessment:	Pinchin Ltd.
Original Survey Conducted By:	ECOH Management Inc.	Name of Surveyor:	Rashmi Rai
Date(s) of Original Survey:	August 1, 2007		

NOTES:
Thin-set under 12"x24" grey ceramic tiles on the floor in the Electrical Room (Location 1-10) is presumed to contain asbestos until further sampling proves otherwise. Ceramic tiles on floor will not be impacted by the scope of the installation of the new natural gas system.

Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Notes / Recommended Actions*
0-00	Exterior	Roof	Roofing Material	Asbestos	S0009A-C / b299824	None Detected	N/A	N/A	Built-up Roof
0-00	Exterior	Roof	Roof caulking	Asbestos	S0004A-C / b299824	None Detected	N/A	N/A	Black caulking on pipe roof penetration
0-00	Exterior	Roof	Roof caulking	Asbestos	S0005A-C / b299824	None Detected	N/A	N/A	Black caulking on pipe penetration on metal cladding
0-00	Exterior	Roof	Roof caulking	Asbestos	S0006A-C / b299824	None Detected	N/A	N/A	Grey caulking on pipe roof penetration
0-00	Exterior	Roof	Roof caulking	Asbestos	S0007A-C / b299824	None Detected	N/A	N/A	Beige caulking on pipe chimney
0-00	Exterior	Windows	Window Caulking	Asbestos	Not Sampled	ACM Assumed	All	Good	
0-00	Exterior	Walls	Masonry	N/A	N/A	N/A	N/A	N/A	
0-00	Exterior	Soffit	Stucco	Asbestos	S0002A-C / b299824	None Detected	60 SF	N/A	Present as exterior soffits at entrance vestibule ceilings.
0-00	Exterior	Others	Door Caulking	Asbestos	S0003A-C / b299824	None Detected	N/A	N/A	Black caulking on exterior door frame
0-00	Exterior	Others	Pipe	Lead	L0001 / R7812874	<0.00060	N/A	N/A	Yellow paint on metal pipe
0-00	Exterior	Others	Door	Lead	L0002 / R7812874	<0.00060	N/A	N/A	Black paint on metal door

APPENDIX IV - REASSESSMENT SURVEY FORM

1-02	Generator Room	Floor	Concrete	Lead	L0004 / R7812874	0.00042	150 SF	N/A	Light grey paint on floor
1-02	Generator Room	Walls	Masonry	Asbestos	S0001B-C / b299824	None Detected	150 SF	N/A	Mortar on masonry walls
1-02	Generator Room	Ceiling	Not Found	N/A	N/A	N/A	N/A	N/A	
1-02	Generator Room	Pipe	Uninsulated	N/A	N/A	N/A	N/A	N/A	
1-02	Generator Room	Duct	Mastic	Asbestos	S0008A-C / b299824	None Detected	1 LF	Good	Dark brown mastic
1-02	Generator Room	Duct	Uninsulated	N/A	N/A	N/A	N/A	N/A	
1-02	Generator Room	Walls	Masonry	Lead	L0002 / R7812874	0.00019	-	Good	Grey paint on masonry wall
1-10	Electrical Room	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-10	Electrical Room	Walls	Masonry	Asbestos	S0001A / b299824	None Detected	50 SF	Good	Mortar on masonry walls
1-10	Electrical Room	Ceiling	Ceiling Tile 1	Asbestos	Homogeneous w. 11850-B-73-01	None Detected	N/A	N/A	2' x 4' Fissure widthwise w/ pin point. *Water staining was observed on non-asbestos lay-in ceiling tiles.*

APPENDIX II-A

Asbestos Analytical Certificates

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.:	**0331484.000**		
Prepared For:	**R. Rai / A. Gimenez**		
Lab Reference No.:	**b299823**		
Analyst(s):	**C. Luong**		
Date Received:	**September 11, 2023**	**Samples Submitted:**	**24**
Date Analyzed:	**September 19, 2023**	**Phases Analyzed:**	**32**

The Pinchin Ltd. Mississauga asbestos laboratory is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 101270-0) for the 'EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples,' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2017. The Pinchin asbestos laboratory uses the aforementioned methods of analysis.

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

This report relates only to the items tested.

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.: 0331484.000
Prepared For: R. Rai / A. Gimenez

Lab Reference No.: b299823
Date Analyzed: September 19, 2023

BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0001A Wall, Mortar on masonry wall, Elctrical room, Loc. 1-10	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
S0001B Wall, Mortar on masonry wall, Generator room, Loc. 1-02	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
S0001C Wall, Mortar on masonry wall, Generator room, Loc. 1-02	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
S0002A Ceiling, Stucco, Exterior Loc. 0-00	2 Phases: a) Homogeneous, grey, finishing or texture coat. b) Homogeneous, white, soft, cementitious material.	None Detected None Detected	Non-Fibrous Material > 75% Non-Fibrous Material > 75%
S0002B Ceiling, Stucco, Exterior Loc. 0-00	2 Phases: a) Homogeneous, grey, finishing or texture coat. b) Homogeneous, white, soft, cementitious material.	None Detected None Detected	Non-Fibrous Material > 75% Non-Fibrous Material > 75%
S0002C Ceiling, Stucco, Exterior Loc. 0-00	2 Phases: a) Homogeneous, grey, finishing or texture coat. b) Homogeneous, white, soft, cementitious material.	None Detected None Detected	Non-Fibrous Material > 75% Non-Fibrous Material > 75%

Pinchin Ltd. Asbestos Laboratory
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Project No.: 0331484.000
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Lab Reference No.: b299823
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BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0003A Other, Door, Black caulking, Exterior, Loc. 0-00	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0003B Other, Door, Black caulking, Exterior, Loc. 0-00	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0003C Other, Door, Black caulking, Exterior, Loc. 0-00	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0004A Roof, Black caulking on vent and pipe, Loc. 0-00	2 Phases: a) Homogeneous, black, stretchy, tar material. b) Homogeneous, black, tar material with fibres.	None Detected None Detected	Man-Made Vitreous Fibres 0.5-5% Tar and other non-fibrous > 75% Cellulose 10-25% Tar and other non-fibrous > 75%
S0004B Roof, Black caulking on vent and pipe, Loc. 0-00	2 Phases: a) Homogeneous, black, stretchy, tar material. b) Homogeneous, black, tar material with fibres.	None Detected None Detected	Man-Made Vitreous Fibres 0.5-5% Tar and other non-fibrous > 75% Cellulose 10-25% Tar and other non-fibrous > 75%

Pinchin Ltd. Asbestos Laboratory
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Project No.: 0331484.000
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BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0004C Roof, Black caulking on vent and pipe, Loc. 0-00	2 Phases: a) Homogeneous, stretchy, tar material.	None Detected	Man-Made Vitreous Fibres 0.5-5% Tar and other non-fibrous > 75%
	b) Homogeneous, black, tar material with fibres.	None Detected	Cellulose 10-25% Tar and other non-fibrous > 75%
S0005A Roof, Black caulking on pipe to black vent, Loc. 0-00	2 Phases: a) Homogeneous, black, stretchy, caulking material.	None Detected	Non-Fibrous Material > 75%
	b) Homogeneous, black, caulking material.	None Detected	Non-Fibrous Material > 75%
S0005B Roof, Black caulking on pipe to black vent, Loc. 0-00	2 Phases: a) Homogeneous, black, stretchy, caulking material.	None Detected	Non-Fibrous Material > 75%
	b) Homogeneous, black, caulking material.	None Detected	Non-Fibrous Material > 75%
S0005C Roof, Black caulking on pipe to black vent, Loc. 0-00	Homogeneous, black, stretchy, caulking material.	None Detected	Non-Fibrous Material > 75%
S0006A Roof, White caulking on vent and pipe, Loc. 0-00	Homogeneous, beige, caulking material.	None Detected	Non-Fibrous Material > 75%

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BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0006B Roof, White caulking on vent and pipe, Loc. 0-00	Homogeneous, beige, caulking material.	None Detected	Non-Fibrous Material > 75%
S0006C Roof, White caulking on vent and pipe, Loc. 0-00	Homogeneous, beige, caulking material.	None Detected	Non-Fibrous Material > 75%
S0007A Roof, Beige caulking on vent, Loc. 0-00	Homogeneous, grey, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0007B Roof, Beige caulking on vent, Loc. 0-00	Homogeneous, grey, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0007C Roof, Beige caulking on vent, Loc. 0-00	Homogeneous, grey, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0008A Brown mastic on pipe, Generator Room, Loc. 1-02	Homogeneous, dark brown, rubbery, mastic material.	None Detected	Non-Fibrous Material > 75%
S0008B Brown mastic on pipe, Generator Room, Loc. 1-02	Homogeneous, dark brown, rubbery, mastic material.	None Detected	Non-Fibrous Material > 75%
S0008C Brown mastic on pipe, Generator Room, Loc. 1-02	Homogeneous, dark brown, rubbery, mastic material.	None Detected	Non-Fibrous Material > 75%

Reviewed by:

Digitally signed by Cheryl Hendsbee
Date: 2023.09.19 11:01:11-04'00'

Reporting Analyst:

Digitally signed by Cheryl Hendsbee
Date: 2023.09.19 11:00:59-04'00'

Analyzed by: C.L

Reviewed by: KB

Report Sent by: GH

Pinchin Ltd. - Asbestos Laboratory
Internal Asbestos Bulk Sample Chain of Custody

32

Client Name:		Project Address:	
Portfolio/Building No:		Pinchin File:	331484
Submitted by:	Rashmi Rai	Email:	rrai@pinchin.com
CC Results to:	Andres Gimenez	CC Email:	agimenez@pinchin.com
Date Submitted:	September 9 2023	Required by:	September 15 2023
# of Samples:	X 24 Split 12	Priority:	5 Day Turnaround
Year of Building Construction (Mandatory, Years ONLY):			
Do NOT Stop on Positive (Sample Numbers):			
Pinchin Group Company (Mandatory Field):			Pinchin
HMIS2 Building Reference #:			CH
To be Completed by Lab Personnel Only:			
Lab Reference #:	b299823	Time:	24 hour clock
Received by:		Date:	Month Day Year
Name(s) of Analyst(s):	SEP 11 2023 C.L		Sept. 19 2023

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0001	A	Wall, Mortar on masonry wall, Elctrical room, Loc. 1-10 NO
S	0001	B	Wall, Mortar on masonry wall, Generator room, Loc. 1-02 NO
S	0001	C	Wall, Mortar on masonry wall, Generator room, Loc. 1-02 NO
S	0002	A	Ceiling, Stucco, Exterior Loc. 0-00 a) NO b) NO
S	0002	B	Ceiling, Stucco, Exterior Loc. 0-00 a) NO b) NO
S	0002	C	Ceiling, Stucco, Exterior Loc. 0-00 a) NO b) NO
S	0003	A	Other, Door, Black caulking, Exterior, Loc. 0-00 NO
S	0003	B	Other, Door, Black caulking, Exterior, Loc. 0-00 NO
S	0003	C	Other, Door, Black caulking, Exterior, Loc. 0-00 NO
S	0004	A	Roof, Black caulking on vent and pipe, Loc. 0-00 a) NO b) NO
S	0004	B	Roof, Black caulking on vent and pipe, Loc. 0-00 a) NO b) NO
S	0004	C	Roof, Black caulking on vent and pipe, Loc. 0-00 a) NO b) NO
S	0005	A	Roof, Black caulking on pipe to black vent, Loc. 0-00 a) NO b) NO
S	0005	B	Roof, Black caulking on pipe to black vent, Loc. 0-00 a) NO b) NO
S	0005	C	Roof, Black caulking on pipe to black vent, Loc. 0-00 NO
S	0006	A	Roof, White caulking on vent and pipe, Loc. 0-00 NO
S	0006	B	Roof, White caulking on vent and pipe, Loc. 0-00 NO

NOTES

Year of Building Construction must not be higher than the age of the building. Do **NOT** enter decades (1950's - NO letters). Enter best guess (e.g. 1950). You can enter a good guess for 1950's buildings for example, but as the dates become 1980's and 1990's being exact is important.

Printing (Excel 2007); Prior to printing, set "Print Area". Click "Page Layout". Highlight area to be included in Print job by starting in top cell and holding left mouse button while draging and highlighting area. Click "Print Area" button and click "Set Print Area"

Sample Numbers: Sample number will AUTOFILL every time you Put an "A" into the suffix box. If your project/samples do not require a suffix (or not an A), delete the Autofill properties. Columns A-C, Row 17 does not have these properties. Copy these cells to location required to clear the autofill contents. **Must be 4 numerical digits in sample number (NO LETTERS).**

Sample Prefix: Do **NOT** make sample prefix an S. Prefixes are **not** always required. Use when you need to differentiate between other types of samples (e.g. L0001 - lead, A0001 - asbestos) or when a building number is required (multibuilding projects). End building number prefixes with a hyphen.

Import into Lab software: A sample description is **MANDATORY** for the import into the lab software program. If no description is entered it will not import the sample number. Please use precise Building Construction Terms

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0006	C	Roof, White caulking on vent and pipe, Loc. 0-00 ND
S	0007	A	Roof, Beige caulking on vent, Loc. 0-00 ND
S	0007	B	Roof, Beige caulking on vent, Loc. 0-00 ND
S	0007	C	Roof, Beige caulking on vent, Loc. 0-00 ND
S	0008	A	Brown mastic on pipe, Generator Room, Loc. 1-02 ND
S	0008	B	Brown mastic on pipe, Generator Room, Loc. 1-02 ND
S	0008	C	Brown mastic on pipe, Generator Room, Loc. 1-02 ND
S	0009	A	Roof, Built-up roof, Loc. 0-00
S	0009	B	Roof, Built-up roof, Loc. 0-00
S	0009	C	Roof, Built-up roof, Loc. 0-00

Pinchin Staff; save COC to project file and include hard copy with samples.
PWL, PLEL, LGGPP; Include a hard copy with samples and email to **asbestossamples@pinchin.com** (Asbestos Samples Submissions in Global Address Book)

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.:	**0331484.000**		
Prepared For:	**R. Rai / A. Gimenez**		
Lab Reference No.:	**b299824**		
Analyst(s):	**A. Wells**		
Date Received:	**September 11, 2023**	**Samples Submitted:**	**3**
Date Analyzed:	**September 19, 2023**	**Phases Analyzed:**	**27**

The Pinchin Ltd. Mississauga asbestos laboratory is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 101270-0) for the 'EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples,' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2017. The Pinchin asbestos laboratory uses the aforementioned methods of analysis.

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

This report relates only to the items tested.

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.: 0331484.000
Prepared For: R. Rai / A. Gimenez

Lab Reference No.: b299824
Date Analyzed: September 19, 2023

BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0009A Roof, Built-up roof, Loc. 0-00	9 Phases: a) Homogeneous, grey, multi-layered paper.	None Detected	Cellulose > 75% Man-Made Vitreous Fibres 5-10% Non-Fibrous Material 5-10%
	b) Homogeneous, black, thick, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	c) Homogeneous, brown, layered paper.	None Detected	Cellulose > 75%
	d) Homogeneous, black, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	e) Homogeneous, black, tar material between layers of grey paper.	None Detected	Tar and other Non-Fibrous Material > 75%
	f) Homogeneous, black, tar material on cellulose.	None Detected	Tar and other Non-Fibrous Material > 75%
	g) Homogeneous, black, thick, tar-impregnated, compressed, fibrous material.	None Detected	Cellulose 50-75% Tar and other Non-Fibrous Material 25-50%
	h) Homogeneous, black, tar material with fibres.	None Detected	Man-Made Vitreous Fibres 10-25% Tar and other Non-Fibrous Material > 75%
	i) Homogeneous, black, textured, tar material.	None Detected	Tar Material > 75% Other Non-Fibrous 0.5-5%
Comments:	Cellulose and foam are present on the surface of this sample.		

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.: 0331484.000
Prepared For: R. Rai / A. Gimenez

Lab Reference No.: b299824
Date Analyzed: September 19, 2023

BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0009B Roof, Built-up roof, Loc. 0-00	8 Phases:		
	a) Homogeneous, black, thick, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	b) Homogeneous, grey, layered paper.	None Detected	Cellulose > 75% Man-Made Vitreous Fibres 5-10% Non-Fibrous Material 5-10%
	c) Homogeneous, black, tar material on the side of compressed cellulose.	None Detected	Tar and other Non-Fibrous Material > 75%
	d) Homogeneous, black, tar material with fibres.	None Detected	Cellulose 25-50% Tar and other Non-Fibrous Material 50-75%
	e) Homogeneous, black, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	f) Homogeneous, black, layered, tar material with fibres.	None Detected	Man-Made Vitreous Fibres 10-25% Tar and other Non-Fibrous Material > 75%
	g) Homogeneous, black, layered, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	h) Homogeneous, black, textured, tar material.	None Detected	Tar Material > 75% Other Non-Fibrous 5-10%
Comments:	Cellulose and foam are present on the surface of this sample.		

Pinchin Ltd. Asbestos Laboratory
Certificate of Analysis

Project No.: 0331484.000
Prepared For: R. Rai / A. Gimenez

Lab Reference No.: b299824
Date Analyzed: September 19, 2023

BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0009C Roof, Built-up roof, Loc. 0-00	10 Phases:		
	a) Homogeneous, black, tar material on paper.	None Detected	Tar and other Non-Fibrous Material > 75%
	b) Non-homogeneous, beige and black, layered paper and tar material.	None Detected	Cellulose 50-75% Tar and other Non-Fibrous Material 25-50%
	c) Homogeneous, black, tar material on the other side of paper.	None Detected	Tar and other Non-Fibrous Material > 75%
	d) Homogeneous, black, thick, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	e) Homogeneous, grey, multi-layered paper.	None Detected	Cellulose > 75% Man-Made Vitreous Fibres 5-10% Non-Fibrous Material 5-10%
	f) Homogeneous, black, tar-impregnated, compressed, fibrous material.	None Detected	Cellulose 50-75% Tar and other Non-Fibrous Material 25-50%
	g) Homogeneous, black, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	h) Homogeneous, black, layered, tar material with fibres.	None Detected	Man-Made Vitreous Fibres 10-25% Tar and other Non-Fibrous Material > 75%
	i) Homogeneous, black, layered, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	j) Homogeneous, black, textured, tar material.	None Detected	Tar Material > 75% Other Non-Fibrous 5-10%
Comments:	Cellulose and foam are present on the surface of this sample.		

Reviewed by:

Digitally signed by Cheryl Hendsbee
Date: 2023.09.19 11:37:52-04'00'

Reporting Analyst:

Digitally signed by Cheryl Hendsbee
Date: 2023.09.19 11:37:41-04'00'

Analyzed by: AR

Reviewed by: KB

Report Sent by: CH

Pinchin Ltd. - Asbestos Laboratory
Internal Asbestos Bulk Sample Chain of Custody

Client Name:		**Project Address:**	
Portfolio/Building No:		**Pinchin File:**	331484
Submitted by:	Rashmi Rai	**Email:**	rrai@pinchin.com
CC Results to:	Andres Gimenez	**CC Email:**	agimenez@pinchin.com
Date Submitted:	September 9 2023	**Required by:**	September 15 2023
# of Samples:	A3 Split 2B	**Priority:**	5 Day Turnaround
Year of Building Construction (*Mandatory, Years ONLY*):			
Do NOT Stop on Positive (Sample Numbers):			
Pinchin Group Company (*Mandatory Field*):			Pinchin
HMIS2 Building Reference #:			
To be Completed by Lab Personnel Only:	b299824 CH		
Lab Reference #:		**Time:**	24 hour clock
Received by:		**Date:**	Month Day Year
Name(s) of Analyst(s):	SEP 11 2023		MJ 23 09 19

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0001	A	Wall, Mortar on masonry wall, Elctrical room, Loc. 1-10
S	0001	B	Wall, Mortar on masonry wall, Generator room, Loc. 1-02
S	0001	C	Wall, Mortar on masonry wall, Generator room, Loc. 1-02
S	0002	A	Ceiling, Stucco, Exterior Loc. 0-00
S	0002	B	Ceiling, Stucco, Exterior Loc. 0-00
S	0002	C	Ceiling, Stucco, Exterior Loc. 0-00
S	0003	A	Other, Door, Black caulking, Exterior, Loc. 0-00
S	0003	B	Other, Door, Black caulking, Exterior, Loc. 0-00
S	0003	C	Other, Door, Black caulking, Exterior, Loc. 0-00
S	0004	A	Roof, Black caulking on vent and pipe, Loc. 0-00
S	0004	B	Roof, Black caulking on vent and pipe, Loc. 0-00
S	0004	C	Roof, Black caulking on vent and pipe, Loc. 0-00
S	0005	A	Roof, Black caulking on pipe to black vent, Loc. 0-00
S	0005	B	Roof, Black caulking on pipe to black vent, Loc. 0-00
S	0005	C	Roof, Black caulking on pipe to black vent, Loc. 0-00
S	0006	A	Roof, White caulking on vent and pipe, Loc. 0-00
S	0006	B	Roof, White caulking on vent and pipe, Loc. 0-00

NOTES

Year of Building Construction must not be higher than the age of the building. Do **NOT** enter decades (1950's - NO letters). Enter best guess (e.g. 1950). You can enter a good guess for 1950's buildings for example, but as the dates become 1980's and 1990's being exact is important.

Printing (Excel 2007); Prior to printing, set "Print Area". Click "Page Layout". Highlight area to be included in Print job by starting in top cell and holding left mouse button while draging and highlighting area. Click "Print Area" button and click "Set Print Area"

Sample Numbers: Sample number will AUTOFILL every time you Put an "A" into the suffix box. If your project/samples do not require a suffix (or not an A), delete the Autofill properties. Columns A-C, Row 17 does not have these properties. Copy these cells to location required to clear the autofill contents. **Must be 4 numerical digits in sample number (NO LETTERS).**

Sample Prefix: Do **NOT** make sample prefix an S. Prefixes are **not** always required. Use when you need to differentiate between other types of samples (e.g. L0001 - lead, A0001 - asbestos) or when a building number is required (multibuilding projects). End building number prefixes with a hyphen.

Import into Lab software: A sample description is **MANDATORY** for the import into the lab software program. If no description is entered it will not import the sample number. Please use precise Building Construction Terms

Pinchin Staff: [illegible] CoC to project file and

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0006	C	Roof, White caulking on vent and pipe, Loc. 0-00
S	0007	A	Roof, Beige caulking on vent, Loc. 0-00
S	0007	B	Roof, Beige caulking on vent, Loc. 0-00
S	0007	C	Roof, Beige caulking on vent, Loc. 0-00
S	0008	A	Brown mastic on pipe, Generator Room, Loc. 1-02
S	0008	B	Brown mastic on pipe, Generator Room, Loc. 1-02
S	0008	C	Brown mastic on pipe, Generator Room, Loc. 1-02
S	0009	A	Roof, Built-up roof, Loc. 0-00
S	0009	B	Roof, Built-up roof, Loc. 0-00
S	0009	C	Roof, Built-up roof, Loc. 0-00

Pinchin Staff; Save COC to project file and include hard copy with samples.
PWL, PLEL, LGGPP; Include a hard copy with samples and email to **asbestossamples@pinchin.com** (Asbestos Samples Submissions in Global Address Book)

APPENDIX II-B

Lead Analytical Certificates

Your Project #: 331484
Your C.O.C. #: n/a

Attention: Andres Gimenez

Pinchin Ltd
2360 Meadowpine Blvd
Unit # 2
Mississauga, ON
CANADA L5N 6S2

Report Date: 2023/09/14
Report #: R7812874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3R7422
Received: 2023/09/11, 09:34

Sample Matrix: Solid
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Metals in Paint	4	2023/09/13	2023/09/14	CAM SOP-00408	EPA 6010D m

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, results relate to the supplied samples tested.

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.

Your Project #: 331484
Your C.O.C. #: n/a

Attention: Andres Gimenez

Pinchin Ltd
2360 Meadowpine Blvd
Unit # 2
Mississauga, ON
CANADA L5N 6S2

Report Date: 2023/09/14
Report #: R7812874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3R7422
Received: 2023/09/11, 09:34

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
14 Sep 2023 19:15:28

Please direct all questions regarding this Certificate of Analysis to:
Nilushi Mahathantila, Project Manager
Email: Nilushi.Mahathantila@bureauveritas.com
Phone# (905) 817-5700

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas 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 ServiceGroup specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3R7422
Report Date: 2023/09/14

Pinchin Ltd
Client Project #: 331484
Sampler Initials: RR

ELEMENTS BY ATOMIC SPECTROSCOPY (SOLID)

Bureau Veritas ID		WYI067		WYI068		WYI069		
Sampling Date		2023/09/07		2023/09/07		2023/09/07		
COC Number		n/a		n/a		n/a		
	UNITS	L0001,YELLOW PAINT ON METAL PIPE,ROOF,LOC.0-00	RDL	L0002,GREY PAINT ON MASONRY WALL,LOC.1-02	RDL	L0003,BLACK PAINT ON METAL DOOR,EXTERIOR,LOC.0-00	RDL	QC Batch
Metals								
Lead (Pb)	%	<0.00060	0.00060	0.00019	0.00010	<0.00060	0.00060	8914434

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WYI070		
Sampling Date		2023/09/07		
COC Number		n/a		
	UNITS	L0004,LIGHT GREY PAINT ON CONCRETE FLOOR,LOC.1-02	RDL	QC Batch
Metals				
Lead (Pb)	%	0.00042	0.00026	8914434

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3R7422
Report Date: 2023/09/14

Pinchin Ltd
Client Project #: 331484
Sampler Initials: RR

TEST SUMMARY

Bureau Veritas ID: WYI067 **Collected:** 2023/09/07
Sample ID: L0001,YELLOW PAINT ON METAL PIPE,ROOF,LOC. 0-00 **Shipped:**
Matrix: Solid **Received:** 2023/09/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Paint	ICP	8914434	2023/09/13	2023/09/14	Medhat Nasr

Bureau Veritas ID: WYI068 **Collected:** 2023/09/07
Sample ID: L0002,GREY PAINT ON MASONRY WALL, LOC.1-02 **Shipped:**
Matrix: Solid **Received:** 2023/09/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Paint	ICP	8914434	2023/09/13	2023/09/14	Medhat Nasr

Bureau Veritas ID: WYI069 **Collected:** 2023/09/07
Sample ID: L0003,BLACK PAINT ON METAL DOOR,EXTERIOR,LOC.0-00 **Shipped:**
Matrix: Solid **Received:** 2023/09/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Paint	ICP	8914434	2023/09/13	2023/09/14	Medhat Nasr

Bureau Veritas ID: WYI070 **Collected:** 2023/09/07
Sample ID: L0004,LIGHT GREY PAINT ON CONCRETE FLOOR,LOC.1-02 **Shipped:**
Matrix: Solid **Received:** 2023/09/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Paint	ICP	8914434	2023/09/13	2023/09/14	Medhat Nasr

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

GENERAL COMMENTS

Metals Analysis: Due to limited amount of sample available for analysis, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3R7422
Report Date: 2023/09/14

QUALITY ASSURANCE REPORT

Pinchin Ltd
Client Project #: 331484
Sampler Initials: RR

			Matrix Spike		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8914434	Lead (Pb)	2023/09/14	100	75 - 125	<0.00010	%	21	35	99	75 - 125

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3R7422
Report Date: 2023/09/14

Pinchin Ltd
Client Project #: 331484
Sampler Initials: RR

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas 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 Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2}{3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266
CAM FCD-01191/6

CHAIN OF CUSTODY RECORD

Page ____ of ____

Invoice Information	Report Information (if differs from invoice)	Project Information (where applicable)	Turnaround Time (TAT) Required
Company Name: Pinchin Ltd.	Company Name: Pinchin Ltd.	Quotation #:	[x] Regular TAT (5-7 days) Most analyses
Contact Name: Rashmi Rai	Contact Name: Andres Gimenez	P.O. #/ AFE#:	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Address:	Address:	Project #: 331484	Rush TAT (Surcharges will be applied)
		Site Location:	[ ] 1 Day [ ] 2 Days [ ] 3-4 Days
Phone: 647.282.6414 Fax:	Phone: Fax:	Site #:	
Email: rrai@pinchin.com	Email: agimenez@pinchin.com	Site Location Province: ____ ON	Date Required: 19 September 2023
		Sampled By: Rashmi Rai	Rush Confirmation #:

Regulation 153	Other Regulations
[ ] Table 1 [ ] Res/Park [ ] Med/ Fine	[ ] CCME [ ] Sanitary Sewer Bylaw
[ ] Table 2 [ ] Ind/Comm [ ] Coarse	[ ] MISA [ ] Storm Sewer Bylaw
[ ] Table 3 [ ] Agri/ Other	[ ] PWQO Region:
[ ] Table ____	[ ] Other (Specify)
FOR RSC (PLEASE CIRCLE) Y / N	[ ] REG 558 (MIN. 3 DAY TAT REQUIRED)
	[ ] REG 406 Table ____

Include Criteria on Certificate of Analysis: Y / N

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Analysis Requested

SAMPLE IDENTIFICATION	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	MATRIX	# OF CONTAINERS SUBMITTED	FIELD FILTERED (CIRCLE) Metals / Hg / Cr VI	BTEX/ PHC F1	PHCs F2 - F4	VOCs	REG 153 METALS & INORGANICS	REG 153 ICPMS METALS	REG 153 METALS (Hg, Cr VI, ICPMS Metals, HWS - B)	Lead (Pb) in Paints	PCBs							HOLD- DO NOT ANALYZE
L0001, Yellow paint on metal pipe, Roof, Loc. 0-00	9/7/2023		BULK									x								
L0002, Grey paint on masonry wall, Loc. 1-02	9/7/2023		BULK									x								
L0003, Black paint on metal door, Exterior, Loc. 0-00	9/7/2023		BULK									x								
L0004, light grey paint on concrete floor, Loc. 1-03	9/7/2023		BULK									x								

LABORATORY USE ONLY

CUSTODY SEAL Y / N Present	Intact	COOLER TEMPERATURES
N	N	

COOLING MEDIA PRESENT: Y / (N)

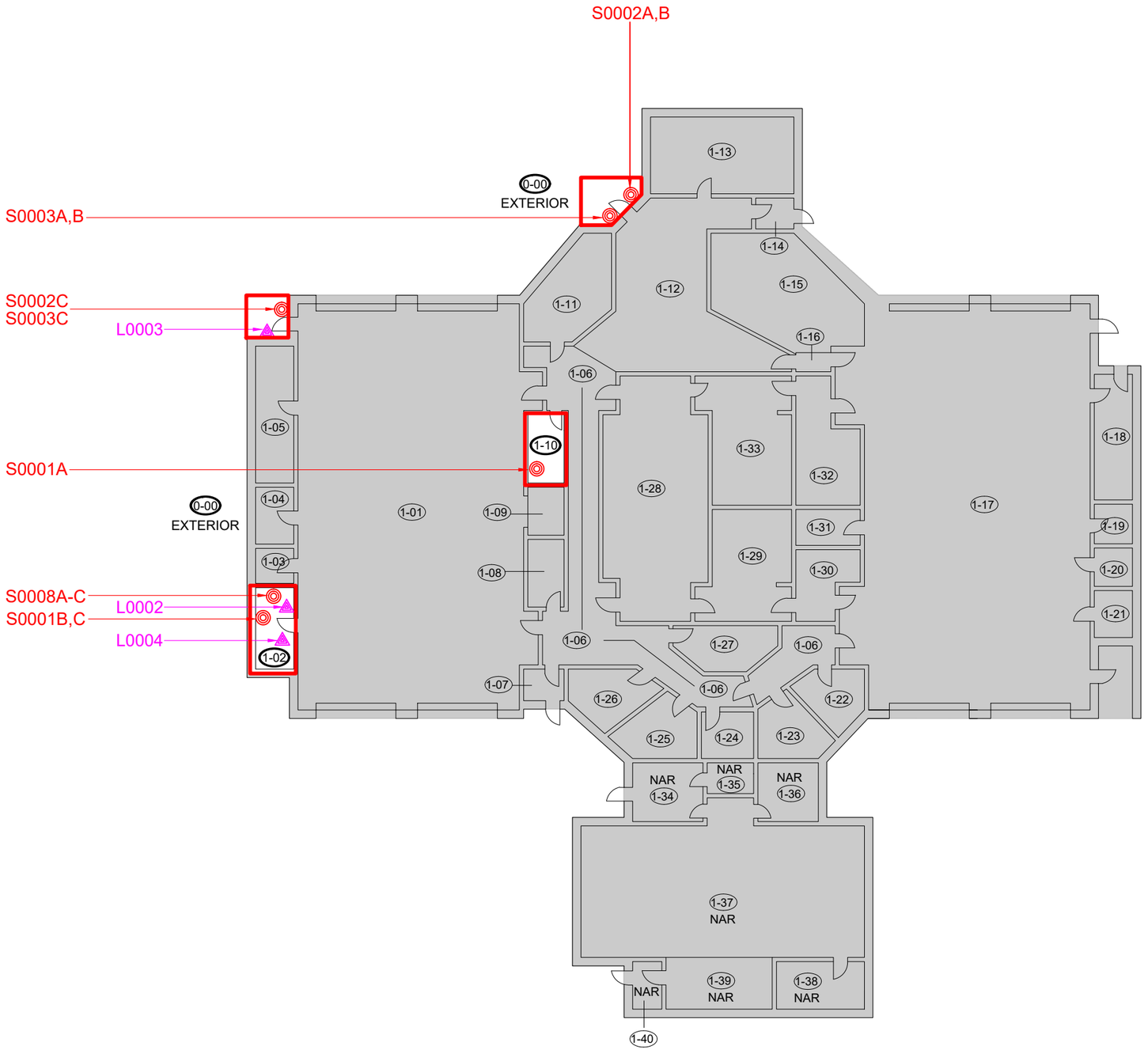
COMMENTS

RELINQUISHED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	RECEIVED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	BV JOB #
			Twinkle Kaura TWINKLE KAURA	2023/09/11	09:34	

11-Sep-23 09:34
Nilushi Mahathantila
C3R7422
AN4 ENV-1270

APPENDIX III

Drawings



N

LEGEND

- PINCHIN LOCATION NUMBER
- SURVEY BOUNDARY/ASSESSED AREA
- OUTSIDE ASSESSMENT SCOPE
- ASBESTOS BULK SAMPLE
- LEAD BULK SAMPLE

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.

BASE PLAN PROVIDED BY CLIENT.

TORONTO

PINCHIN

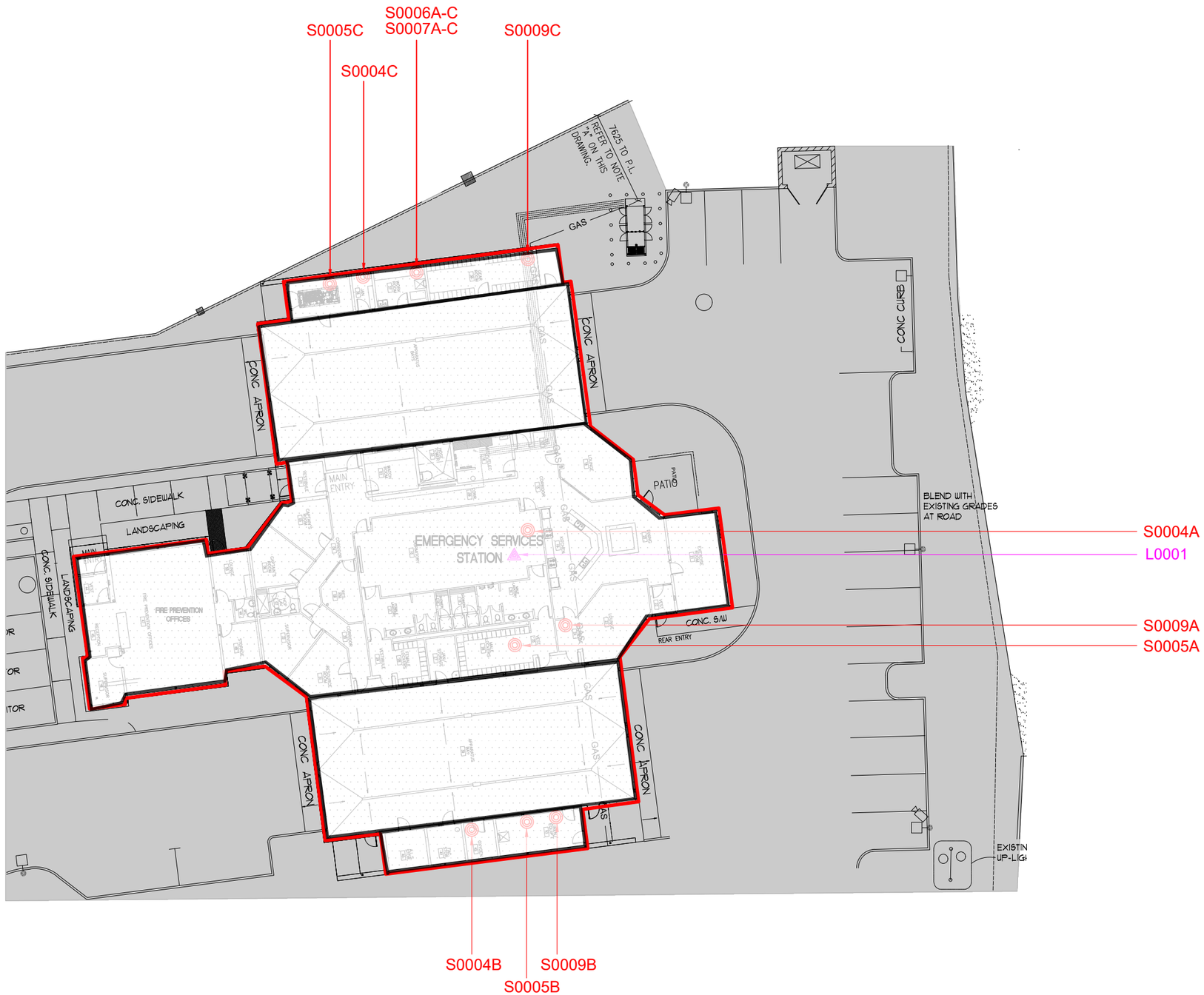
PROJECT NAME:
HAZARDOUS BUILDING MATERIALS ASSESSMENT (PRE-CONSTRUCTION)

CLIENT NAME:
CITY OF TORONTO

PROJECT LOCATION:
TORONTO PARAMEDIC SERVICES STATION 25
8500 SHEPPARD AVENUE EAST
TORONTO, ONTARIO

FIGURE NAME:
GROUND FLOOR

PROJECT NUMBER:	SCALE:
331484.000	NOT TO SCALE
DRAWN BY: DP	REVIEWED BY: RR
DATE: SEPTEMBER 2023	FIGURE NUMBER: 1 OF 2



LEGEND

- PINCHIN LOCATION NUMBER
- SURVEY BOUNDARY/ASSESSED AREA
- OUTSIDE ASSESSMENT SCOPE
- ASBESTOS BULK SAMPLE
- LEAD BULK SAMPLE

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.

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BASE PLAN PROVIDED BY CLIENT.

TORONTO

PINCHIN

PROJECT NAME:
HAZARDOUS BUILDING MATERIALS ASSESSMENT (PRE-CONSTRUCTION)

CLIENT NAME:
CITY OF TORONTO

PROJECT LOCATION:
TORONTO PARAMEDIC SERVICES STATION 25
8500 SHEPPARD AVENUE EAST
TORONTO, ONTARIO

FIGURE NAME:
ROOF

PROJECT NUMBER:	SCALE:
331484.000	NOT TO SCALE
DRAWN BY:	REVIEWED BY:
DP	RR
DATE:	FIGURE NUMBER:
SEPTEMBER 2023	2 OF 2

APPENDIX IV
Methodology

1.0 GENERAL

An inspection was conducted to identify the type of Hazardous Building Materials incorporated in the structure and its finishes.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities were recorded. The locations of any samples collected were recorded on small-scale plans. As-built drawings and previous reports were referenced where provided.

Sample collection was conducted in accordance with our Standard Operating Procedures.

1.1 Asbestos

The inspection for asbestos included 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 was 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 were determined by visual examination and available information on the phases of construction and prior renovations.

Samples were collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy was 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 were visually identified without sample confirmation.

The asbestos analysis was completed using a stop-positive approach. Only one result meeting the regulated criteria was 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 stopped 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 were analyzed if no asbestos is detected. In some cases, all samples were analyzed in the sample set regardless of result.

The analysis was 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 were compared to the following criteria.

Jurisdiction*	Friable	Non-Friable
Ontario	0.5%	0.5%

* If there is a conflict between federal and provincial criteria, the more stringent will apply.

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. Additionally, these terms are used for materials which historically are known to not include asbestos in their manufacturing.

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

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible);
- Visibility (whether the material is obscured by other building components).
- 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).

1.2 Lead

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

Analysis for lead in paints or surface coatings was performed in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption.

Analytical results were compared to the following criteria.

Jurisdiction*	Units (%)	Units (ppm) / (mg/kg)
Ontario	0.1	1000

* If there is a conflict between federal and provincial criteria, the more stringent will apply.

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

1.3 Silica

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

1.4 Mercury

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

1.5 Visible Mould

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

Template: Methodology for Hazardous Building Materials Assessment, HAZ, January 26, 2023