



Asbestos Assessment

St. Ann 24 Fiddlers Green Road, Ancaster, ON, L9G 1W1

Prepared for:

Hamilton-Wentworth Catholic District School Board

90 Mulberry Street Hamilton, Ontario, L8N 3R9

August 31, 2023

Pinchin File: 320582.004



Issued to: Issued on: Pinchin File: Issuing Office: Primary Contact: Hamilton-Wentworth Catholic District School Board August 31, 2023 320582.004 Hamilton, ON Emily Balfour, Project Manager, <u>ebalfour@pinchin.com</u>

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EXECUTIVE SUMMARY

Hamilton-Wentworth Catholic District School Board (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials assessment of St. Ann located at 24 Fiddlers Green Road, Ancaster, ON, L9G 1W1.

The objectives of the assessment were to document the locations of asbestos building materials, evaluate their condition and develop corrective action plans as required for the purposes of long-term management. The results of this assessment are not intended for construction, renovation, demolition or project tendering purposes.

SUMMARY OF RECOMMENDATIONS

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

- 1. Maintain the Asbestos Management Program (AMP)
- 2. Perform a re-assessment of asbestos materials on an annual basis.
- Perform a pre-construction assessment and remove all ACM prior to alteration or maintenance work if ACM may be disturbed by the work.
- 4. Follow appropriate safe work procedures when handling or disturbing asbestos.
- Sample any presumed ACM prior to alteration or maintenance work if presumed ACM may be disturbed by the work.
- 6. Update the asbestos inventory report upon completion of any abatement and removal of asbestos-containing materials.

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	INTRO	DUCTION AND SCOPE	1
	1.1	Scope of Assessment	1
2.0	METH	ODOLOGY	1
3.0	BACK	GROUND INFORMATION	1
	3.1 3.2 3.3	Building Year of Construction and Additions Existing Reports Inaccessible Locations	1
4.0	FINDI	NGS	2
	4.1 4.2	Excluded Asbestos Materials Summary of Building Materials	2 3
5.0	RECO	MMENDATIONS	5
	5.1 5.2 5.3	General Remedial Work On-going Management and Maintenance	5
6.0	TERM	S AND LIMITATIONS	6
7.0	REFE	RENCES	6

APPENDICES

APPENDIX I	Drawings
APPENDIX II	Asbestos Analytical Certificates
APPENDIX III	Methodology
APPENDIX IV	Location List
APPENDIX V	Summary Report / Sample Log
APPENDIX VI	HMIS All Data Report



1.0 INTRODUCTION AND SCOPE

Hamilton-Wentworth Catholic District School Board (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials assessment of St. Ann located at 24 Fiddlers Green Road, Ancaster, ON, L9G 1W1.

Pinchin performed the assessment on July 12, 2023.

The objectives of the assessment were to document the locations of asbestos building materials, evaluate their condition and develop corrective action plans as required. This assessment is only to be used for the purposes of long-term management and routine maintenance. The results of this assessment are not to be used for construction, renovation, demolition, or project tendering purposes.

1.1 Scope of Assessment

The assessment was performed to establish the location and type of asbestos building materials incorporated in the structure(s) and its finishes. The **assessed area** consisted of all parts of the building, excluding the roof.

2.0 METHODOLOGY

Pinchin conducted a room-by-room assessment (rooms, corridors, service areas, exterior, etc.) to identify the asbestos-containing building materials as defined in the scope.

The assessment was limited to non-intrusive testing. Concealed spaces such as those above solid ceilings and within shafts and pipe chases were accessed via existing access panels only. Demolition of walls, solid ceilings, structural items, interior finishes or exterior building finishes, to determine the presence of concealed materials was not conducted.

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

3.0 BACKGROUND INFORMATION

3.1 Building Year of Construction and Additions

Item	Details
Year of Construction	1953
Year(s) of Additions	1956, 1994

3.2 Existing Reports

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

• Asbestos Reassessment Report, St. Ann, August 2022, Pinchin File No. 303992.004.



3.3 Inaccessible Locations

Inaccessible locations (rooms or areas), if any, are indicated in the Location List Report in Appendix IV. These locations within the assessed area were not accessible to the surveyor and are therefore not included in the report.

4.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the asbestos-containing materials (ACM) identified and their locations. For details on approximate quantities, condition, friability, accessibility and locations of asbestos materials; refer to the Asbestos Material Summary Report and All Data Report in Appendix V and VI.

4.1 Excluded Asbestos Materials

A number of materials which might contain asbestos were not sampled during this assessment due to limitations in scope and methodology. Where present, these materials are assumed to contain asbestos until otherwise proven by sampling and analysis. These materials are not shown on the drawings in Appendix I. Excluded materials presumed to contain asbestos include:

- Roofing felts and tar, mastics
- Floor levelling compound
- Ceramic tile setting compound
- Electrical components
- Mechanical packing, ropes and gaskets
- Vermiculite
- Adhesives and duct mastics
- Caulking and putties
- Fibre-reinforced paints and coatings
- Paper products
- Soffit and fascia boards
- Fire resistant doors
- Vibration dampers on HVAC equipment
- Terrazzo
- Ropes and gaskets in cast-iron bell and spigot joints
- Sealants on pipe threads



4.2 Summary of Building Materials

This section includes a summary of building materials that have been confirmed asbestos-containing by sample analysis, presumed asbestos-containing by visual identification, or confirmed non-asbestos by sampling or based on the manufacture date and known end of use of asbestos in these products.

The locations of samples from historical assessments performed by Pinchin, have been included on the drawings.

Appendix II presents the asbestos bulk sample analytical results.

Material and Application	Asbestos Type	Photo
Pipes are either uninsulated or insulated with non-asbestos fibreglass or elastomeric insulation (Armaflex).	None	
Based on the date of construction, asbestos-containing pipe insulations may be present in concealed locations.		
Ducts are either uninsulated or insulated with non-asbestos fibreglass (foil-faced or canvas).	None	
Mechanical equipment is either uninsulated or insulated with non- asbestos fibreglass.	None	
All ceiling tiles are presumed to be non-asbestos based on previous sampling, the date of manufacture determined from the date stamp applied to the top of the tiles or the age of the materials determined from the age of the building renovation.	None	
Smooth plaster is present on walls and ceilings.	None	
Drywall joint compound is present on wall and ceiling finishes.	None	



Material and Application	Asbestos Type	Photo
Asbestos in drywall joint compound was banned in Canada in 1980. Drywall joint compound in the 1994 addition was installed after 1986 (1980 plus a reasonable non-compliance period based on our experience) and the drywall joint compound is assumed to contain no asbestos.	None	
Transite board is present as acoustic panels in the Gymnasium (Location 130).	Presumed	
Transite pipe is present as rainwater leaders.	Presumed	
Vinyl sheet flooring is presumed to be non-asbestos based on the date of installation or historical knowledge of the type of flooring (foam) or based on the lack of a paper backing layer (underpad).	None	



Material and Application	Asbestos Type	Photo
Vinyl floor tiles, 12"x12", various colours, are present.	Presumed (tile) Presumed (mastic)	
Remaining vinyl floor tiles and mastic are presumed to be non- asbestos based on historical knowledge of the date of installation or by previous sampling.	None (tile) None (mastic)	

Additional notes on the drywall joint compound discussed above:

 Drywall (gypsum board) and drywall joint compound is present as a wall and ceiling finish throughout the building. As per the methodology, drywall joint compound is sampled at exterior walls, columns or other locations that are unlikely to have been renovated in an attempt to determine the presence of asbestos in the original drywall compound. A total of 9 samples of drywall joint compound were collected (samples S0001A-C, S0003A-C, S0004A-C, lab reference no. 71919570) and it was found that all samples do not contain asbestos. Therefore, drywall joint compound present on drywall finishes should be considered to be non-asbestos.

5.0 RECOMMENDATIONS

5.1 General

Perform a detailed intrusive assessment prior to maintenance work, building renovation or demolition operations. The assessment should include destructive testing (e.g., coring and/or removal of building finishes and components), and other hazardous materials (lead, mercury, PCBs, mould, etc.) and materials not tested in this study (e.g., roofing materials, caulking, mastics).

5.2 Remedial Work

No remedial work is recommended.



5.3 On-going Management and Maintenance

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

Maintain the Asbestos Management Program (AMP).

Perform a reassessment of asbestos materials on an annual basis.

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

Sample presumed ACM prior to alteration or maintenance work if the presumed ACM may be disturbed by the work.

Update the asbestos inventory report upon completion of any abatement and removal of asbestoscontaining materials.

6.0 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.

7.0 REFERENCES

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

- Asbestos on Construction Projects and in Buildings and Repair Operations, Ontario Regulation 278/05.
- 2. Designated Substances, Ontario Regulation 490/09.
- 3. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.

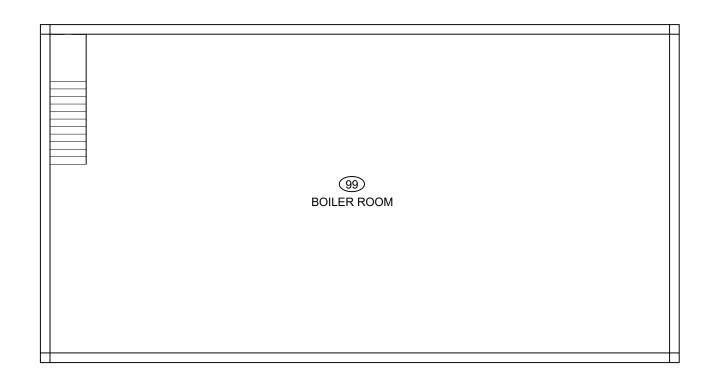
^{\\}PIN-HAM-FS02\job\320000s\0320582.000 HWCDSB,Various2023Projects,ASB,CONS\0320582.004 HWCDSB,AllSites,2023,ASB,ASSMT\Deliverables\St. Ann (Ancaster)\Deliverables\320582.004 Asbestos Asmnt Report St Ann HWCDSB Aug 31 2023.docx

Template: Master Report for Asbestos Assessment, HAZ, July 29, 2021

APPENDIX I Drawings NOT ALL KNOWN OR SUSPECTED ASBESTOS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE ASBESTOS REASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED ASBESTOS BUILDING MATERIALS.

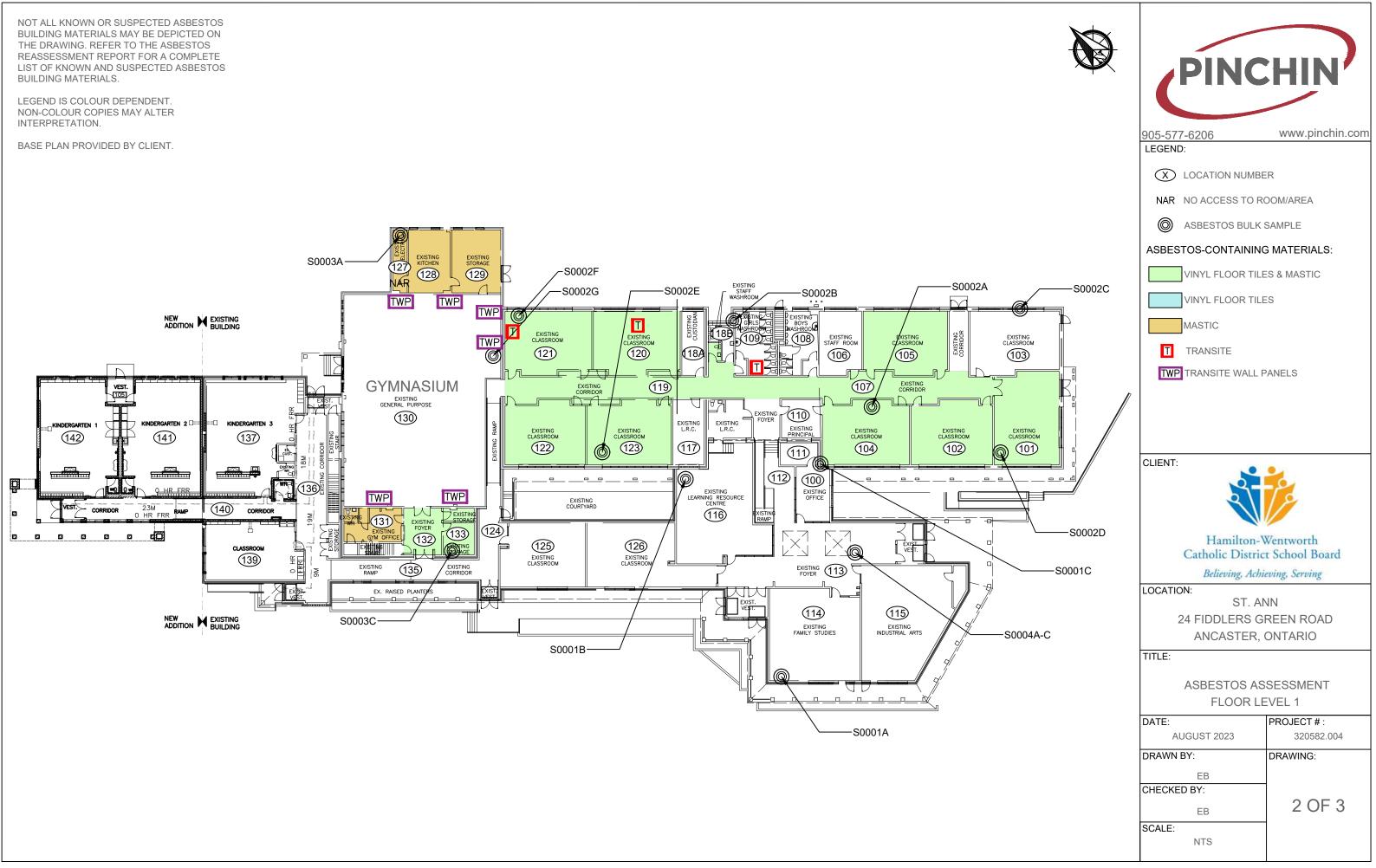
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BASE PLAN PROVIDED BY CLIENT.





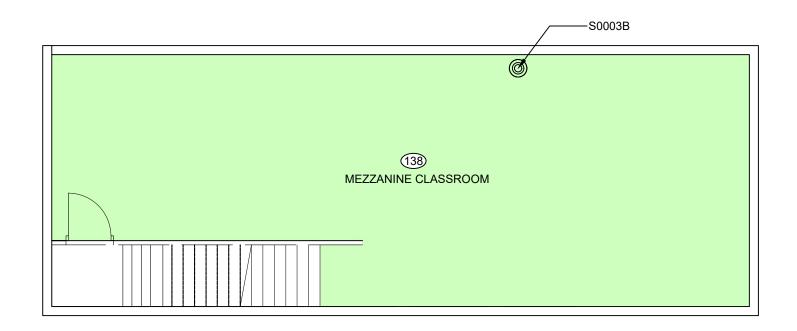
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905-577-6206	www.pinchin.com				
X LOCATION NUMBE	R				
NAR NO ACCESS TO ROOM/AREA					
ASBESTOS BULK S					
ASBESTOS-CONTAINING					
VINYL FLOOR TILE	S & MASTIC				
VINYL FLOOR TILE	S				
MASTIC					
T TRANSITE					
TWP TRANSITE WALL P	ANELS				
CLIENT:					
Hamilton-V Catholic Distric					
Believing, Achie	a sustained that he statements				
LOCATION: ST. AN 24 FIDDLERS GI ANCASTER, (TITLE:	REEN ROAD				
ASBESTOS ASSESSMENT BASEMENT					
DATE: AUGUST 2023	PROJECT # : 320582.004				
DRAWN BY: EB CHECKED BY: EB SCALE: NTS	drawing: 1 OF 3				



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

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

BASE PLAN PROVIDED BY CLIENT.





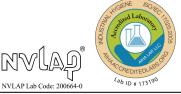
PINC	HIN			
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T TRANSITE				
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Hamilton-' Catholic Distric				
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LOCATION: ST. AN 24 FIDDLERS G ANCASTER, 0	REEN ROAD			
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DRAWN BY:	DRAWING:			
EB CHECKED BY:				
EB	3 OF 3			
SCALE: NTS				

APPENDIX II Asbestos Analytical Certificates



Bulk Asbestos Analysis

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E



NV

Customer:	Pinchin Ltd.	Attn: Emily Balfour	Lab Order ID	: 71919570
	6-875 Main St West	Michael Maiorana	Analysis ID:	71919570_PLM
	Suite 200 Hamilton, Ontario L8S 4P9		Date Received	: 7/25/2019
D rojosti	,	American Optimical Hamilton Wentermath Catholic	Date Reported	1: 7/30/2019

Project: 230748,24 Fidlers Green Road, Ancaster, Ontario, Hamilton-Wentworth Catholic School Board, ST. Ann (Ancaster) Catholic Elementary School

Sample ID	Description	A all and a m	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Asbestos	Components	Components	Treatment
S0001A	Drywall joint compound on wall, Classroom, Location 114	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_1	-				Crushed
S0001B	Drywall joint compound on wall, Library, Location 116	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_2	-				Crushed
S0001C	Drywall joint compound on wall, Main Office, Location 100	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_3	-				Crushed
S0002A - A	Smooth plaster on wall, Classroom, Location 104	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_4	finish				Crushed
S0002A - B	Smooth plaster on wall, Classroom, Location 104	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_17	base				Crushed
S0002B - A	Smooth plaster on wall, Girl's Washroom, Location 109	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_5	finish				Crushed
S0002B - B	Smooth plaster on wall, Girl's Washroom, Location 109	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_18	base				Crushed
S0002C - A	Smooth plaster on wall, Classroom, Location 103	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_6	finish				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reporded, except in full, without the written Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Bart Huber (23)

Analyst

w 4 **Approved Signatory**

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888



Bulk Asbestos Analysis

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E



Customer:Pinchin Ltd.Attn:Emily BalfourL6-875 Main St WestMichael MaioranaASuite 200DHamilton, Ontario L8S 4P9D

 Lab Order ID:
 71919570

 Analysis ID:
 71919570_PLM

 Date Received:
 7/25/2019

 Date Reported:
 7/30/2019

RV

NVLAP Lah

Project: 230748,24 Fidlers Green Road, Ancaster, Ontario, Hamilton-Wentworth Catholic School Board, ST. Ann (Ancaster) Catholic Elementary School

Sample ID	Description	A shoutes	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Asbestos	Components	Components	Treatment
S0002C - B	Smooth plaster on wall, Classroom, Location 103	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_19	base				Crushed
S0002D - A	Smooth plaster on wall, Classroom, Location 101	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_7	finish				Crushed
S0002D - B	Smooth plaster on wall, Classroom, Location 101	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_20	base				Crushed
S0002E - A	Smooth plaster on wall, Classroom, Location 123	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_8	finish				Crushed
S0002E - B	Smooth plaster on wall, Classroom, Location 123	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_21	base				Crushed
S0002F - A	Smooth plaster on wall, Classroom, Location 120	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_9	finish				Crushed
S0002F - B	Smooth plaster on wall, Classroom, Location 120	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_22	base				Crushed
S0002G - A	Smooth plaster on wall, Gymnasium, Location 130	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_10	finish				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Bart Huber (23)

Analyst

w Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888



Bulk Asbestos Analysis

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E



Customer:Pinchin Ltd.Attn:Emily BalfourLa6-875 Main St WestMichael MaioranaAnSuite 200DaHamilton, Ontario L8S 4P9Da

 Lab Order ID:
 71919570

 Analysis ID:
 71919570_PLM

 Date Received:
 7/25/2019

 Date Reported:
 7/30/2019

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Project: 230748,24 Fidlers Green Road, Ancaster, Ontario, Hamilton-Wentworth Catholic School Board, ST. Ann (Ancaster) Catholic Elementary School

Sample ID	Description	AL	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Asbestos	Components	Components	Treatment
S0002G - B	Smooth plaster on wall, Gymnasium, Location 130	None Detected		100% Other	Gray Non Fibrous Heterogeneous
71919570PLM_23	base				Crushed
S0003A	Drywall joint compound on wall, Electrical Room, Location 127	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_11	-				Crushed
S0003B	Drywall joint compound on wall, Mezzanine Classroom, Location 138	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_12	-				Crushed
S0003C	Drywall joint compound on wall, Gym Foyer, Location 132	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_13					Crushed
S0004A	Drywall joint compound on ceiling, Entrance, Location 113	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_14	-				Crushed
S0004B	Drywall joint compound on ceiling, Entrance, Location 113	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_15	-				Crushed
S0004C	Drywall joint compound on ceiling, Entrance, Location 113	None Detected		100% Other	White Non Fibrous Homogeneous
71919570PLM_16	-				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Bart Huber (23)

Analyst

w Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Client: Pinchin Ltd. *Instructions: Version 1-15-2012 Contact: **Emily Balfour** Use Column "B" for your contact info 6-875 Main Street West, Suite 200, Hamilton ON L8S 4P9 Address: 905-577-6206 Phone: To See an Example Click the Invoice to: 905-577-6207 bottom Example Tab. Fax: ap@pinchin.com Email: ebalfour@pinchin.com mmaiorana@pinchin.com Enter samples between "<<" and ">>" 230748,24 Fiddlers Green Road, Ancaster, Ontario, Hamilton-Wentworth Catholic School Board, St. Ann (Ancaster) Catholic Elementary Project: School Begin Samples with a "<< "above the first sample Scientific and end with a ">>" below the last sample. Analytical **Client Notes:** Only Enter your data on the first sheet "Sheet1" Institute P.O. #. 230748 Note: Data 1 and Data 2 are optional 4604 Dundas Dr. Date Submitted: July 24,2019 fields that do not show up on the official Greensboro, NC 27407 report, however they will be included Phone: 336.292.3888 PLM - Stop Positive Analysis: Fax: 336.292.3313 in the electronic data returned to you TurnAroundTime: 4days to facilitate your reintegration of the report data. Email: lab@sailab.com

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Sample Number	Data 1 (Lab use only)	Sample Description Data 2	2 (Lab use only)
<<			
S0001A		Drywall joint compound on wall, Classroom, Location 114	All ADR.
S0001B		Drywall joint compound on wall, Library, Location 116	, NOW , Real S
S0001C		Drywall joint compound on wall, Main Office, Location 100	
S0002A		Smooth plaster on wall, Classroom, Location 104	atter
S0002B		Smooth plaster on wall, Girl's Washroom, Location 109	KV.
S0002C		Smooth plaster on wall, Classroom, Location 103	Y
S0002D		Smooth plaster on wall, Classroom, Location 101	Contractor of the
S0002E		Smooth plaster on wall, Classroom, Location 123	
S0002F		Smooth plaster on wall, Classroom, Location 120	Accepted
S0002G		Smooth plaster on wall, Gymnasium, Location 130	LAI
S0003A	,	Drywall joint compound on wall, Electrical Room, Location 127	7
S0003B		Drywall joint compound on wall, Mezzanine Classroom, Locat	ion 100
S0003C		Drywall joint compound on wall, Gym Foyer, Location 132	Rejected
S0004A		Drywall joint compound on ceiling, Entrance, Location 113	
S0004B		Drywall joint compound on ceiling, Entrance, Location 113	
S0004C		Drywall joint compound on ceiling, Entrance, Location 113	
>>			

APPENDIX III Methodology



1.0 GENERAL

An inspection was conducted to identify the asbestos-containing materials (ACM) incorporated in the structure and its finishes as defined by the scope of work.

Information regarding the location and condition of ACM 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 (where performed) was conducted in accordance with our Standard Operating Procedures.

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.

Where samples were collected, 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.

Where samples were collected, 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.

Where samples were collected, 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 asbestoscontaining, 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.

Where samples were collected, 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.

Where samples were collected, analytical results were compared to the following criteria.



Jurisdiction*	Friable	Non-Friable
Ontario	0.5%	0.5%

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 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).

For a complete description of the Evaluation Criteria and Basis of Recommendations, refer to Annex A.

METHODOLOGY ANNEX A EVALUATION CRITERIA



EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS

The detailed asbestos assessment provides information regarding the location, condition, accessibility and friability of the asbestos-containing materials (ACM). In order to make recommendations for compliance with current regulations, Pinchin developed the following criteria.

EVALUATION OF CONDITION

Friable Sprayed or Trowelled Fireproofing, Thermal Insulation and Texture Finishes (Surfacing Materials)

To evaluate the condition of ACM sprayed or trowelled on fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, the following criteria are applied:

Good	Surface of material shows no significant signs of damage, deterioration or delamination. Good condition includes unencapsulated or unpainted fireproofing or texture finishes, where no or limited delamination or damage is observed, or encapsulated fireproofing or texture finishes where the encapsulant or paint has been applied after the damage or fallout occurred.
Poor	A sprayed material that shows signs of significant damage or is significantly delaminating or deteriorating. This may be limited to surface delamination or some portion of the substrate may be exposed.

In Locations where damage exists in isolated areas, both good and poor condition may be applicable.

The extent of each condition will be recorded. Fair condition is not utilized in the evaluation of ACM sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes.

The evaluation of the above products above ceilings may be limited by the number of observations and by building components such as ducts or full height walls that obstruct the above ceiling observations.

Friable Mechanical or Thermal System Insulation (TSI)

To evaluate the condition of mechanical insulation on vessels, boilers, breeching, ducts, pipes, fan units, equipment etc. the following criteria are applied:

Good	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (i.e. scuffs or stains), but the jacketing is not penetrated.
Fair	Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired.



Poor Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. Includes components where insulation may have been removed incompletely.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is often not possible to observe each foot of mechanical insulation from all angles.

Potentially Friable Materials and Miscellaneous Friable Materials

Potentially friable ACM are products that are basically non-friable while in place but have the potential to generate friable dust upon removal or if significantly disturbed without appropriate procedures. These products may become friable if damaged. Potentially friable materials include materials such as acoustic ceiling tiles and plaster. To evaluate the condition of potentially friable materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.
Fair	Showing signs of some cracking or breakage, but is not deteriorating (e.g. cracked plaster, broken but in place ceiling tile, missing tile or section of plaster etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material has deteriorated to a point it has become friable. Normally potentially friable ACM in Poor condition is not repairable and requires at least localized removal and replacement.

Non-Friable Materials

Non-friable ACM cover a wide range of products with a wide variation in their tendency to release dust or asbestos fibres to the air. Many of these materials, (particularly where the matrix is an unweathered bitumen, asphalt or tar material) do not release fibres except in very unusual circumstances or during significant disturbance (e.g. use of abrasive power tools). Others with a cementitious matrix (asbestos-cement products) can more readily release dust due to abrasion, demolition, weathering, etc. The potential for asbestos release from non-friable ACM is always lower than from friable ACM. To evaluate the condition of non-friable Materials, the following criteria are applied:

0000	significant damage or deterioration. Still serving its intended use as a building terial or finish.
------	---



Fair	Showing signs of some cracking or breakage but is not deteriorating (e.g. cracked vinyl floor tile, missing piece of tile or transite, etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material to the point at which it cannot be repaired, and it will require at least local removal. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material may have deteriorated to a point where traffic or disturbance may cause it to become friable.

Evaluation of ACM Debris

The identification of the exact location or presence of debris on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations.

The presence of fallen or dislodged ACM is noted separately from the ACM source and is referred to as Debris. Debris may be friable if from a friable ACM source or a badly deteriorated non-friable ACM source. Debris may also be non-friable (such as fallen pieces of transite sheet or mastic fittings, or broken, dislodged floor tiles).

Debris Debris may be friable or non-friable but is always identified as debris.

Evaluation of Presumed Asbestos-Containing Material (PACM)

Presumed asbestos-containing materials (PACM), are building materials that may contain asbestos but were not sampled or analyzed due to inaccessibility or the need to perform destructive testing to obtain a reasonable sample set. Evaluation of these materials is based on the assumption that these PACM are asbestos-containing.

A list of PACM is provided in the report and they are generally not included in the detailed room by room reports. Typically, they are excluded because they are inaccessible or present in very small quantities. If PACM are evaluated, Pinchin uses the criteria that correspond with the type (and friability) of the material listed above.



EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)	Common areas of the building within reach of all building users (approximately 8 '- 9' from floor or standard ceiling height). Includes other areas where occupant activities may result in disturbance of material that is not normally within reach from floor level, but may be disturbed by common activities (e.g. gymnasiums, workshops, warehouses)
Access (B)	Areas of the building accessed primarily by Maintenance/Caretaking/Janitorial Staff and within reach without use of a ladder. Includes areas within reach in Boiler Rooms, Electrical Rooms, Janitors Closets, Elevator Rooms, Mechanical Rooms, etc. Includes materials within reach from fixed ladders or catwalks, mezzanines, and accessible pipe chases.
Access (C) and Visible	Areas of the building above 8' - 9' where use of a ladder or scaffold is required to reach the ACM. Only includes ACM that are visible to view without the removal or opening of other building components such as ceiling tiles or service access panels. Visible column on HMIS sheets will say YES.
Access (C) and not Visible	Areas of the building above 8' - 9' where use of a ladder or scaffold is required to reach the ACM. Includes ACM that are not visible to view and require the removal of a building component to see, such as ceilings tiles or access panels to view and access. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points. Visible column on HMIS sheets will say NO.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls or equipment etc. where demolition of the ceiling, wall or equipment etc. is required to reach the ACM. Material inaccessible due to height or location or is only accessed under unusual situations. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in Access D.

ACTION MATRIX AND DEFINITIONS

Pinchin's evaluation of the viability of a specific asbestos control option is based on the consideration of the friability, condition, accessibility and visibility of a material. The logic used is that damaged ACM located in an area frequently accessed by all building occupants is of a higher priority than damaged ACM located in an infrequently accessed service area. The action matrix considers the potential for fibre release (primarily from friable ACM) and the possible concerns from regulatory bodies and many building occupants to all damaged ACM (including non-friable).

In any building with asbestos, many current regulations require an Asbestos Management Program be implemented. Depending on the condition and the accessibility, more active measures such as repair or removal may be recommended. The following matrix provides guidance for recommended Actions in the absence of renovation or demolition. In the event of construction or maintenance activity which will disturb ACM more aggressive control or removal will be required.



Action Matrix

The following tables outline the action decisions based on the relationship of assessed factors. Table I applies to friable ACM. Table II applies to non-friable ACM.

Table I Decision Matrix for Friable ACM

		Condition		
Access	Good	Fair	Poor	Debris
(A)	Action 5 ¹	Action 5 ²	Action 3	Action 1
(B)	Action 7	Action 6 ³	Action 3	Action 1
(C) Visible	Action 7	Action 6	Action 3	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

Table II Decision Matrix for Potentially Friable and Non-Friable ACM

	Condition			
Access	Good	Fair	Poor	Debris
(A)	Action 7	Action 7 ⁴	Action 3	Action 1
(B)	Action 7	Action 7	Action 3	Action 1
(C) Visible	Action 7	Action 7	Action 4	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

Action Definitions

The following are the definitions in the Action Matrix Table presented above:

Action Definitions	
Action 1	Clean-Up of ACM Debris Restrict access that is likely to cause a disturbance of the ACM Debris and clean up ACM Debris. Utilize appropriate asbestos precautions.

¹ If friable ACM in access (A)/Good condition is not proactively removed Action 7 (Manage) is recommended.

² If friable ACM in access (A)/Fair condition is not proactively removed repair is recommended.

 ³ If friable ACM in access (B)/Fair condition is likely to be disturbed after repair proactive removal is recommended.
 ⁴ Action 7 is recommended for all non-friable ACM in Fair condition however some clients may wish to repair or take some action primarily for cosmetic reasons



Action Definitions	
Action 2	Precautions for Access Which may Disturb ACM Debris Use appropriate means to isolate the debris or to limit entry to the area which may disturb the material. At locations where ACM Debris can remain in place in lieu of removal or clean-up (e.g. Debris on top of ceiling tiles or behind lockable door), Utilize appropriate asbestos precautions to enter the area if this will disturb debris. The precautions will be required until the ACM Debris has been cleaned up.
Action 3	ACM Removal Remove ACM. Utilize asbestos procedures appropriate to the scope of the removal work. Until it is removed, restrict access to the material so it is not disturbed.
Action 4	Precautions for Work Which may Disturb ACM in Poor Condition. Utilize appropriate asbestos precautions if ACM may be disturbed by work on or near ACM. This does not require restricting access to the area, only control of work which may contact or disturb the ACM. Removal is the only viable option if work will disturb ACM.
Action 5	Proactive ACM Removal Remove friable ACM where the presence of friable asbestos in Good condition is not desirable. If friable ACM in Fair condition is not removed, then Repair friable ACM.
Action 6	ACM Repair Repair friable ACM in Fair condition which is not likely to be damaged again or disturbed by normal use of the area or room. Pinchin recommends proactive removal if friable ACM is likely to be damaged or disturbed during normal use of the area or room
Action 7	Asbestos Management Program with Routine Surveillance Implement an Asbestos Management Program, including routine surveillance of ACM. Reassess materials regularly (typically once per year).

APPENDIX IV Location List





Client:Hamilton-Wentworth Catholic District Sch Building Name: St. Ann (Ancaster) Survey Date:

Building Phases: A: 1953

Site: 24 Fiddlers Green Road, Ancaster, ON

Last Re-Assessment: 2023-07-12

Location No.	Name or Description	Area ft ²	Floor No.	Bldg. Phase	Notes
1	Presumed Asbestos-Containing	0	0	А	Where present, these materials are assumed to contain
	Materials	_	-		asbestos until otherwise proven by sampling and analysis.
99	Boiler Room	0	1	A	
100	Main Office	0	1	A	
101	Classroom 1	0	1	A	
102	Classroom 2	0	1	A	
103	Classroom 3	0	1	A	
104	Classroom 4	0	1	A	
105	Classroom 5	0	1	A	
106	Staff Room	0	1	A	
107	Corridor	0	1	A	
108	Boys Washroom	0	1	A	
109	Girls Washroom	0	1	A	
110	Principal's Office	0	1	A	
111	Office	0	1	A	
112	Main Foyer	0	1	A	
113	Entrance	0	1	A	
114	Classroom 17	0	1	A	
115	Classroom 18	0	1	A	
116	Library	0	1	A	
117	Learning Resources	0	1	A	
118	Mens/Womans Staff Washroom, room no. A/B	0	1	A	Locations 118A and 118B
119	Corridor	0	1	А	
120	Classroom 10	0	1	А	
121	Clasroom 11	0	1	А	
122	Classroom 12	0	1	А	
123	Classroom 9	0	1	А	
124	Corridor	0	1	А	
125	Classroom 13	0	1	А	
126	Computer Lab	0	1	А	
127	Electrical Room	0	1	А	NO ACCESS - Locked
128	Storage	0	1	А	
129	Storage	0	1	А	
130	Gymnasium	0	1	А	
131	Janitors Room	0	1	А	
132	Gym Foyer	0	1	А	
133	Supply Room	0	1	А	
135	Corridor	0	1	А	
136	Corridor	0	1	А	
137	Kindergarten	0	1	A	
138	Mezzanine Classroom	0	1	А	
139	Classroom	0	1	A	
140	Corridor	0	1	А	
141	Kindergarten 2	0	1	А	
142	Kindergarten 1	0	1	A	

APPENDIX V Summary Report / Sample Log



HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG



Client:Ham District Sch	ilton-Wentworth (Catholic Site: 15 Saint Ann St, Hamilton	n, ON Building Name: St. Ann (Hami	ilton)					Survey Date	e: 2018-07-2	5
HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Туре	Positive	Friability
Asbestos	V9500	Other N/a Roofing Tars And Mastics, Mechanical Gaskets, Vermiculite, Adhesives And Mastics, Caulking And Putties, Sealants On Pipe Threads	0	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V0000	Ceiling All Ceiling Tiles (lay-in) 2x4 Pinhole And Flecks (2013)	1001	А	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Floor Vinyl Floor Tile And Mastic 12" X 12", Grey Flecks (2013)	1001	А	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Floor Vinyl Floor Tile And Mastic 12" X 12", Brown Flecks (2013)	1001	А	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Floor All Vinyl Sheet Flooring	1001	А	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Structure All Fireproofing (fibrous) (2013)	1001	А	0	0	0	100	Non Asbestos	No	



HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG



Legend:

- Sample number S#### Asbestos sample collected
- L#### Paint sample collected
- P#### PCB sample collected
- M#### Mould sample collected
- V#### Material visually similar to numbered sample collected
- V0000 Known non Hazardous Material
- V9000 Material is visually identified as Hazardous Material
- V9500 Material is presumed to be Hazardous Material
- [Loc. Abated Material No.]

- Units SF Square feet
- SF Square feet LF Linear feet
- EA Each

%

Percentage

- NF Non Friable material.
- F Friable material
- PF Potentially Friable material

APPENDIX VI HMIS All Data Report



ALL DATA REPORT



Client: Hamilton-Wentworth Catholic District Sch Site: Elementary Building Name: St. Ann (Hamilton)																
Location: #0 : Presumed Asbestos-Containing Materials Floor: 0				Room #: Area (sqft): 0												
Survey Date: 2018-07-25 Last Re-Assessment: 2023-07-17																
ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other		N/A, Roofing Tars And Mastics, Mechanical Gaskets, Vermiculite, Adhesives And Mastics, Caulking And Putties, Sealants On Pipe Threads			D	N		100(7)			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Where pres	sent, these ma	terials are assumed to contain asbes	stos until otherwis	se proven by	sampl	ing ar	nd analy	ysis.								
Client: Hamilton-Wentworth Catholic District Sch Site: Elementary Location: #1001 : Entire Building Floor: ALL Survey Date: 2018-07-25				Building Name: St. Ann (Hamilton) Room #: Area (sqft): 0 Last Re-Assessment: 2023-07-17												
								BESTOS								
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	All	Wood			С	Y										
Ceiling	All	Ceiling Tiles (lay-in), 2x4 pinhole and flecks (2013)			С	Y		100			%	V0000	Non-Asbestos		None	
Duct	All	Not Insulated			С	Y										
Duct		Fibreglass			В	Y										
Floor		Vinyl Floor Tile and Mastic, 12" x 12", brown flecks (2013)			В	Y		100			%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic, 12" x 12", Grey flecks (2013)			Α	Y		100			%	V0000	Non-Asbestos		None	
Floor	All	Concrete (poured)			В	Y										
Floor	All	Vinyl Sheet Flooring			Α	Y		100			%	V0000	Non-Asbestos		None	
Floor	All	Ceramic Tiles			Α	Y										
Floor	All	Carpet			Α	Y										
Floor	All	Laminate			A	Y										
Mechanical Equipment	All	Armaflex			В	Y										
Mechanical Equipment		Fibreglass			В	Y										
Piping		Not Insulated			В	Y										
Piping	All	Fibreglass			В	Y										
Piping	Rain Water Leader	Fibreglass			С	Y										
Structure	All	Steel			С	Y										
Structure	All	Fireproofing (Fibrous), (2013)			С	Y		100			%	V0000	Non-Asbestos		None	
Wall	All	Masonry			Α	Y										
Wall	All	Glass			Α	Y										



ALL DATA REPORT



leaend.

LUY	21141						
Sample n	umber	Units			Other		
S####	Asbestos sample collected	SF	Square feet			Α	Access
V####	Material visually similar to numbered sample collected	LF	Linear feet			v	Visible
V0000	Known non-asbestos material	EA	Each			AP	Air Plenum
V9000	Visually identified as an asbestos material	%	Percentage			F	Friable material
V9500	Material is presumed to be an asbestos material					NF	Non Friable material
						PF	Potentially Friable material
Access				Condition			

Good

Fair

Poor

Air Plenum

No visible damage or deterioration

- А Accessible to all building occupants
- в Accessible to maintenance and operations staff without a ladder
- Accessible to maintenance and operations staff with a ladder. Also rarely entered, С locked areas
- D Not normally accessible

Visible

- The material is visible when standing on the floor of the room, without the removal or Υ opening of other building components (e.g. ceiling tiles or access panels).
 - The material is not visible to view when standing on the floor of the room and requires
- the removal of a building component (e.g. ceilings tiles or access panels) to view and Ν access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Colour Coding

The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code). The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

Action

- (1) (4)
- (7) Management program and surveillance

- The material is in a return air plenum or in a direct airstream or there is evidence of air Yes erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This or No

Minor, repairable damage, cracking, delamination or deterioration

Irreparable damage or deterioration with exposed and missing material

field is only completed where Air Plenum consideration is required by regulation.

Clean up of ACM Debris	(2)	Precautions for Access Which may Disturb ACM Debris	(3)	ACM removal
Precautions for Work Which may Disturb ACM in Poor Condition	(5)	Proactive ACM removal (Minimum repair required for fair condition)	(6)	ACM repair