

Project #: 13916

**ASBESTOS ASSESSMENT
Cartier Court
Memorial University of Newfoundland
St. John's, NL**

Prepared for:

**Sheila Miller
Director, Department of Health and Safety
Memorial University of Newfoundland
208 Elizabeth Avenue
St. John's, NL
A1B 1T5**

Prepared by:



**151 Crosbie Rd. St. John's NL, A1B 4B4
Tel: (709) 754-4146 Fax: (709) 754-4194**

September 2011

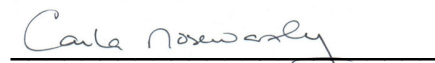
EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited conducted an Asbestos Assessment at Cartier Court, located at Memorial University of Newfoundland (MUN), St. John's, NL. The objective of the assessment was to determine the presence of asbestos containing materials throughout the building. It was determined that:

- Eighteen (18) of the thirty-four (34) suspect asbestos samples collected contained asbestos greater than 1%. (*Newfoundland and Labrador Regulation 111/98, Asbestos Abatement Regulations, 1998 under the Occupational Health and Safety Act.*)
- One of two types of pipe fitting insulation was sampled and found to contain 25% Chrysotile asbestos.
- Drywall joint compound was found to contain 2 - 3% Chrysotile asbestos.
- Vinyl sheet flooring was sampled and found to contain 15 – 20% Chrysotile asbestos.
- 1' x 1' vinyl floor tiles, and/or their mastics, sampled from various locations were found to contain between 3 - 8% Chrysotile asbestos.
- Transite panels were observed at the exterior of the main entrance of the building and on select heater panels in washrooms were both sampled and both were found to contain 25% Chrysotile asbestos.
- Light fixture heat shields were sampled and found to contain 80% Chrysotile asbestos.

This summary is not to be used alone. This report must be reviewed in its entirety.

Thank you,



Carla Noseworthy, C.E.T.
Environmental Consultant

ALL-TECH Environmental Services Limited

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1.0 INTRODUCTION

ALL-TECH Environmental Services Limited was contracted by Sheila Miller, Director – Department of Health and Safety, Memorial University of Newfoundland (MUN), to complete an Asbestos Assessment at Cartier Court located at Memorial University of Newfoundland, St. John's, NL. The purpose of the assessment was to identify the presence of asbestos containing materials located throughout the building. The assessment was conducted in August 2011.

2.0 ASBESTOS ASSESSMENT

Asbestos is a general term which is used to describe a group of fibrous mineral silicates. The six major types of asbestos are; chrysotile (white asbestos), crocidolite (blue), amosite (brown), anthophyllite, tremolite and actinolite. Commercially, asbestos has been used widely in such applications as fireproofing, textiles, friction products, reinforcing materials (i.e. cement pipes, sheets) and insulation (both thermal and acoustic).

Asbestos materials can be found in one of two forms; friable or non-friable. Friable asbestos material refers to material that when dry, can be crumbled, pulverized or reduced to a powder by hand pressure thus releasing fibers into the air. This type of asbestos material is hazardous due to its potential to become airborne if damaged or disturbed. Friable asbestos building products used in the past were sprayed acoustic & fire protection insulations, ceiling/wall finishes, drywall joint compounds, mechanical insulations on pipes, tanks, boilers, vessels, etc. Non-friable building products used in the past were vinyl floor tiles, gaskets, transite panels, and transite shingles. Non-friable materials if handled improperly during removal or renovations, such as cutting transite panels with an electrical tool, can cause high fiber release. Also, non-friable asbestos products can become friable if damaged through years of aging (water damage, general deterioration of materials, etc.).

Asbestos containing materials (ACM) can be properly managed and left in place depending on their location, condition, and friability. Non-friable materials receive less attention than friable materials due to the fact that the asbestos fibers in the non-friable material are bound or held tightly together, reducing the chance of fibers becoming airborne. This makes the non-friable products safer and easier to manage.

The mere presence of asbestos in building materials is not necessarily a problem; however, inhaling asbestos fibers can cause associated health problems. The hazards of asbestos exposure are directly related to the degree to which fibers are released (become airborne). Intact and undisturbed asbestos do not pose a health risk.

2.1 Scope of Work

Representative suspect asbestos containing materials were sampled from wall finishes, various types of flooring, and exterior finishes located throughout the building.

The asbestos assessment involved a visual investigation of representative building structures, wall & ceiling finishes, and flooring for the presence of asbestos materials. If these materials were suspected to contain asbestos, a bulk sample was collected of the representative material.

It should be noted that asbestos containing materials such as piping straight runs & fittings may be present behind existing drywall walls, ceilings, columns, shafts, etc. Since no destructive testing was performed during this assessment, additional care should be taken during renovations/demolition to ensure that no asbestos containing materials are to be disturbed.

2.2 Methodology

A total of thirty-four (34) suspect asbestos bulk samples were collected from the building. Representative suspect asbestos bulk material samples from floors, wall finishes, ceiling tiles, pipe fitting insulation, light fixture heat shields and suspect transite panels were carefully collected and placed into labeled sealable plastic bags and transported to the EMSL Analytical Inc. in New Jersey, USA, for Polarized Light Microscopy/ Dispersion Staining (PLM/DS) analysis. The EPA test method for bulk analysis (EPA/600/R-93/116) states in paragraph 2.2.2 that *“the detection limit for visual estimation is a function of the quantity of the sample analyzed, the nature of matrix interference, sample preparation, and fiber size and distribution. Asbestos may be detected in concentrations of less than one percent by area if sufficient material is analyzed. Samples may contain fibers too small to be resolved by PLM (< 0.25 µm in diameter) so detection of those fibers by this method may not be possible.”*

2.3 Applicable Standards

The province defines Asbestos material as “material containing greater than 1% asbestos by dry weight.” Materials identified as ACM must be managed, handled and disposed of as per the Newfoundland and Labrador Regulation 111/98, *Asbestos Abatement Regulations, 1998* under the *Occupational Health and Safety Act* (O.C. 98-730).

Also, the Province of Newfoundland and Labrador have set standards for exposure to airborne asbestos fibres to as low as is reasonably achievable (ALARA) but in any case shall not exceed Threshold Limit Values (TLVs) as published by the American Conference of Governmental Industrial Hygienists (ACGIH) and are primarily used for the occupational exposure to employees and workers who from day to day come in contact with asbestos. ACGIH guidelines state the airborne asbestos limit as follows:

- Asbestos (all forms) 0.1 fibres per cubic centimetre (f/cc) as determined by air sampling following the NIOSH 7400 Asbestos and Other Fibres by Phase Contrast Microscopy.

The *Newfoundland Asbestos Abatement Regulations 111/98* requires that all employers, building owners and principal contractors follow this Regulation when handling or using asbestos in their workplace. This Regulation applies to every workplace covered under the Occupational Health and Safety Legislation where asbestos or materials containing asbestos, is likely to be handled, dealt with, disturbed or removed and includes every project, project owner, contractor, employer and employee engaged in or on the project. An owner/contractor to whom this Regulation applies shall take every reasonable precaution to ensure that every worker who is not an employee of the owner/contractor and who works in the workplace of the owner/contractor is protected and every such worker shall comply with the requirements of this Regulation.

2.4 Survey Findings

Laboratory analysis confirmed that eighteen (18) of the thirty-four (34) bulk samples collected from the building contained asbestos greater than 1%. Table 1.0 below illustrates the results of this sampling. **See Appendix II - Laboratory Asbestos Results.**

Table 1.0
Summary of Suspect Asbestos Containing Materials Tested
Cartier Court
Memorial University of Newfoundland
St. John's, NL

Sample No.	Sample Description and Location	Asbestos Results
CR-1	1' x 1' Vinyl Floor Tile, light brown with dark brown, orange – Room CR311, living room	6% Chrysotile
	Mastic	3% Chrysotile
CR-2	1' x 1' Vinyl Floor Tile, white with brown – Room CR311, living room	None Detected
CR -3	1' x 1' Vinyl Floor Tile, grey with black dots – Room CR311, living room	None Detected
	Mastic	None Detected
CR -4	Vinyl Sheet Flooring, pink and blue square pattern – Room CR311, washroom	15% Chrysotile
CR -5	1' x 1' Vinyl Floor Tile, green with white – Room CR311, entrance	8% Chrysotile
	Mastic	3% Chrysotile

CR -6	1' x 1' Vinyl Floor Tile, brown stripes – Room CR311, entrance	None Detected
	Mastic	None Detected
CR -7	1' x 1' Vinyl Floor Tile, grey with black – Room CR311, entrance	None Detected
	Mastic	4% Chrysotile
CR -8	1' x 1' Vinyl Floor Tile, light grey with medium grey – Room CR310, living room	6% Chrysotile
CR -9	Vinyl Sheet Flooring, brown and red square pattern – Room CR310, washroom	20% Chrysotile
CR -10	1' x 1' Vinyl Floor Tile, olive green with white – Room CR309, living room	7% Chrysotile
CR -11	1' x 1' Vinyl Floor Tile, grey mix – Room CR309, living room	None Detected
	Mastic	<1% Chrysotile
CR -12	1' x 1' Vinyl Floor Tile, light grey with white – Room CR309, entrance	None Detected
	Mastic	None Detected
CR -13	Vinyl Sheet Flooring, grey mix – Room CR309, washroom	None Detected
	Mastic	None Detected
CR -14	Light Fixture Heat Shield – Room CR309	None Detected
CR 15	Pipe Fitting Insulation – Hallway CR3C03	None Detected
CR -16	Transite Heater Panel – Room CR308, washroom	25% Chrysotile
CR -17	Light Fixture Heat Shield – Room CR308	None Detected
CR -18	2' x 4' Ceiling Tile, pinhole – Room CR312	None Detected
CR -19	2' x 4' Ceiling Tile, fissure and pinhole – Room CR312	None Detected
	Mastic	None Detected
CR -20	Vinyl Sheet Flooring, light brown square pattern – Room CR306, washroom	20% Chrysotile

CR -21	Drywall Joint Compound – Room CR306	2% Chrysotile
CR -22	1' x 1' Vinyl Floor Tile, blue mix – Room CR206, entrance	None Detected
	Mastic	3% Chrysotile
CR -23	Pipe Fitting Insulation – Room CR207, closet	25% Chrysotile
CR -24	Drywall Joint Compound – Room CR208	2% Chrysotile
CR -25	Light Fixture Heat Shield – Room CR211	None Detected
CR -26	Vinyl Sheet Flooring, brown mix – Room CR108	None Detected
	Mastic	None Detected
CR -27	1' x 1' Vinyl Floor Tile, white with black – Room CR303, bedroom	None Detected
	Mastic	None Detected
CR -28	1' x 1' Vinyl Floor Tile, blue with white – Room CR301, entrance	4% Chrysotile
CR -29	Light Fixture Heat Shield	80% Chrysotile
CR -30	1' x 1' Vinyl Floor Tile, blue mix – Room CR203	None Detected
CR -31	1' x 1' Vinyl Floor Tile, brown with white mix – Room CR103	None Detected
	Mastic	None Detected
CR -32	Drywall Joint Compound – Room CR103	3% Chrysotile
CR -33	1' x 1' Vinyl Floor Tile, white with grey – Room CR102	None Detected
	Mastic	2% Chrysotile
CR -34	Exterior of Room CR101, green transite panels	25% Chrysotile

Mechanical and Pipe Material

Pipe fitting insulation which could potentially contain asbestos was observed in select areas throughout the building during this assessment. Samples collected from the hallways and from the closets were analyzed for asbestos content using the PLM method of detection. The sample from the hallway was identified as non-asbestos containing. The sample from the closet was found to contain 25% Chrysotile asbestos (see samples CR-15, CR-23 in Appendix II, Photographs 1 - 3, Appendix I)

However, it should be noted that asbestos containing pipe insulation may be located behind fixed wall cavities and ceiling plenums that were inaccessible at the time of assessment. During demolition precautionary measures must be taken to avoid disturbing any potential ACM in these areas.

Acoustic and Thermal Insulating Products

No acoustic or thermal insulation products were observed within the building during the assessment.

Friable Acoustic Texture Coats and Plaster Finishes

Drywall joint compound (DJC) finishes were observed in select locations within the building during the assessment. Three (3) samples were collected and analyzed for asbestos content using the PLM method of detection. The samples were found to contain between 2 – 3% Chrysotile (see samples CR-21, CR-24, CR-32 in Appendix II).

Due to the uncertainty of when and where a specific type of drywall joint compound was used, it is to be assumed that ALL drywall in the building contains asbestos unless proven otherwise by subsequent sampling.

Friable Acoustic and Thermal Fireproofing Products

No acoustic or thermal fireproofing products were observed within the building during the assessment.

Friable Ceiling Tiles / Ceiling Tile Adhesives

Two styles of 2' x 4' ceiling tiles were observed on the walls in Room CR312 during the assessment. Two (2) samples of 2' x 4' ceiling tile, one with pinhole / fissure pattern with pink backing and one with a pinhole pattern, were sampled and analyzed for asbestos content using the PLM method of detection. The samples were both identified as non-asbestos containing. (see samples CR-18, CR-19 in Appendix II)

The mastic associated with the above mentioned ceiling tiles was also sampled and analyzed for asbestos using the PLM method of detection. The sample was identified as non-asbestos containing (see sample CR-19 in Appendix II)

Vinyl Sheet/Linoleum Flooring

Various vinyl sheet floorings which could potentially contain asbestos were identified in the building during the assessment. Five (5) samples of this flooring were sampled and analyzed for asbestos content using the PLM method of detection. Three (3) of the samples were found to contain between 15 – 20% Chrysotile asbestos. (see samples CR-4, CR-9, CR-13, CR-26, CR-20 in Appendix II, Photographs 4 – 6 in Appendix I)

Non-Friable Vinyl Floor Tiles/ Floor Tile Adhesives

Vinyl floor tiles which could potentially contain asbestos were identified during the assessment. Sixteen (16) samples of 1' x 1' vinyl floor tiles were sampled and analyzed for asbestos content using the PLM method of detection. Eight (8) tiles and / or their associated mastics were found to contain between 3 – 8% Chrysotile asbestos. One tile, sample CR-11, was analyzed and its mastic was found to contain <1% Chrysotile asbestos. As such, in accordance with the *Newfoundland Asbestos Abatement Regulations 111/98*, it is not considered to be asbestos containing. (see samples CR-1, CR-2, CR-3, CR-5, CR-6, CR-7, CR-8, CR-10, CR-11, CR-12, CR-22, CR-27, CR-28, CR-30, CR-31, CR-33 in Appendix II, see Photographs 7 - 14 Appendix I)

Non-Friable Transite Panels, Sheeting and Shingles

Suspect asbestos containing transite paneling was observed on the exterior widows panels. One (1) sample was collected and analyzed for asbestos content using the PLM method of detection. The sample was found to contain 25% Chrysotile asbestos. As such, based on the composition and similarity of the construction of these residences, it is suspected that the panels at the other residences of Burton's Pond are also asbestos containing. (see sample CR-34 in Appendix II, Photographs 15 of Appendix I)

Suspect asbestos containing transite paneling on washroom heaters was also observed during the assessment. One (1) sample was collected and analyzed for asbestos content using the PLM method of detection. The sample was found to contain 25% Chrysotile asbestos. (see sample CR-16 in Appendix II, Photograph 16 of Appendix I)

Non-Friable Transite Piping

Transite piping was not observed during the assessment.

Electrical Wiring/ Lighting

Four (4) types of light fixture heat shields were observed throughout the building. Samples were collected and analyzed for asbestos content using the PLM method of detection. One (1) sample was found to contain 80% Chrysotile asbestos (see samples CR-14, CR-17, CR-25, CR-29 in Appendix II, see Photographs 17 - 18 in Appendix I).

Roofing Materials

Access to the roof was not available at the time of the assessment.

Other Materials

No window caulking, interior or exterior, was not sampled during the assessment.

No other materials are suspected to contain asbestos.

2.5 Recommendations

The assessment identified that numerous materials contained a concentration of asbestos equal to or greater than 1% by dry weight. According to regulations, the owner of any building/ residence is required to implement and maintain specific health and safety measures, therefore the following recommendations are provided:

- All materials listed in fair and/or poor condition are to be repaired or removed immediately. See APPENDIX III – Asbestos Building Survey Information for materials condition and locations.
- Ensure that prior to and during any major renovations/demolition extreme caution is implemented to make certain that asbestos containing materials are not disturbed. It should be noted that asbestos containing materials may be concealed behind fixed walls/ceiling plenums and under existing sub-floors.
- Ensure that when disturbing asbestos materials, the asbestos removal contractor follows all federal and provincial regulations in accordance to the Newfoundland and Labrador Regulation 111/98.
- Retain a copy of this report on-site for future reference of friable and non-friable asbestos products.
- Provide asbestos air monitoring and inspection during the removal of asbestos to ensure that all government guidelines and regulations are followed throughout the removal process.

3.0 DISCLAIMER

This report was prepared by ALL-TECH Environmental Services Limited for the sole benefit of our client Ms. Sheila Miller. The information in the report is based on information provided or obtained by ALL-TECH. The report is based on ALL-TECH's best judgment with the information provided at the time of the assessment. Any use and/or conclusions used by any third party, is the responsibility of that third party. ALL-TECH accepts no liability and/or damages occurred by any third party that uses information obtained in this report.

If you have any questions regarding this report, please do not hesitate to call me at (709) 754-4146.

Thank You,



Carla Noseworthy, CET
Environmental Consultant
ALL-TECH Environmental Services Limited

Reviewed by:



Orven Newhook, B.Sc.
Project Manager
ALL-TECH Environmental Services Limited

APPENDIX I
PHOTOGRAPHS OF ASBESTOS CONTAINING MATERIALS



Photograph 1: Pipe fitting insulation debris in the closet of Room CR209, in poor condition.



Photograph 2: Pipe fitting insulation debris in the closet of Room CR210, in poor condition.

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Photograph 3: Pipe fitting insulation debris in the closet of Room CR108, in poor condition.

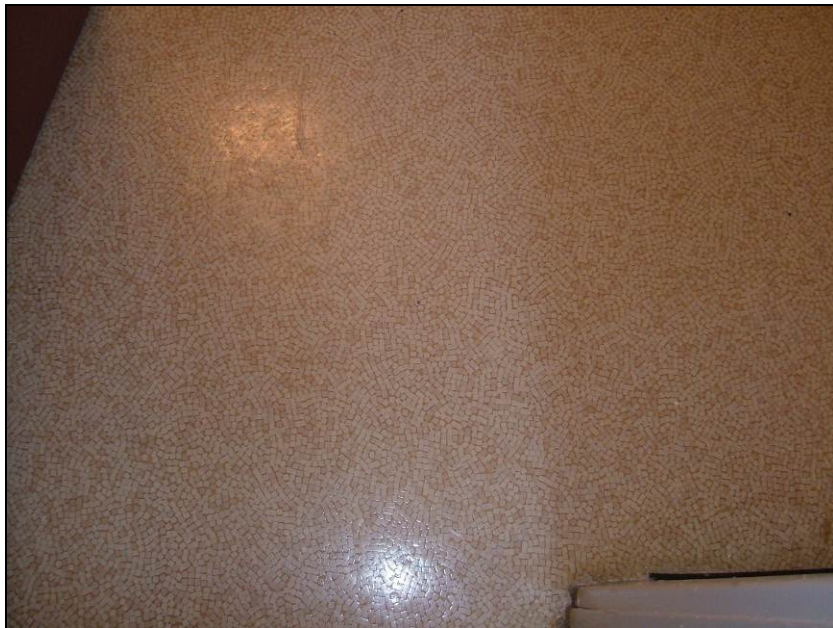


Photograph 4: Sample CR-4, asbestos containing vinyl sheet flooring.

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Photograph 5: Sample CR-9, asbestos containing vinyl sheet flooring.



Photograph 6: Sample CR-20, asbestos containing vinyl sheet flooring.

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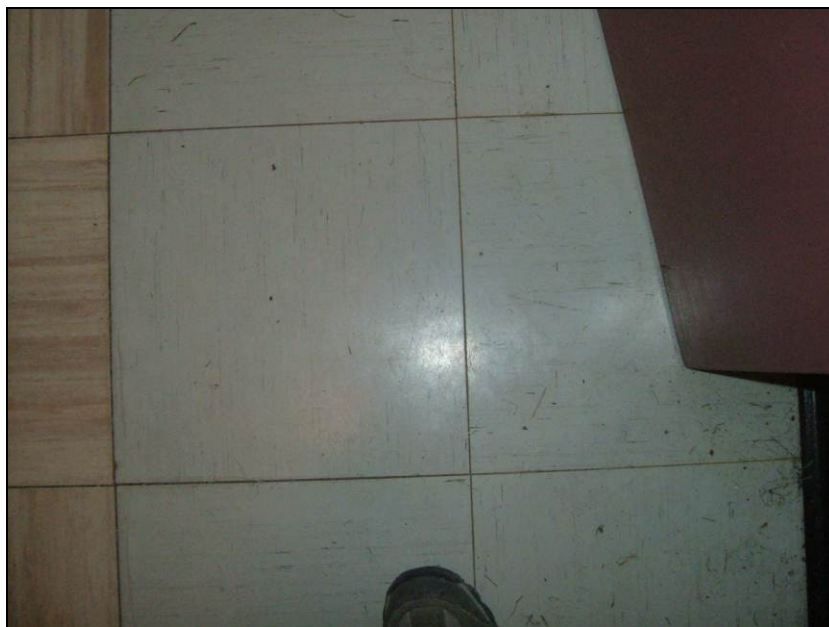


Photograph 7: Sample CR-1 asbestos containing vinyl floor tile and mastic.



Photograph 8: Sample CR-5 asbestos containing vinyl floor tile and mastic.

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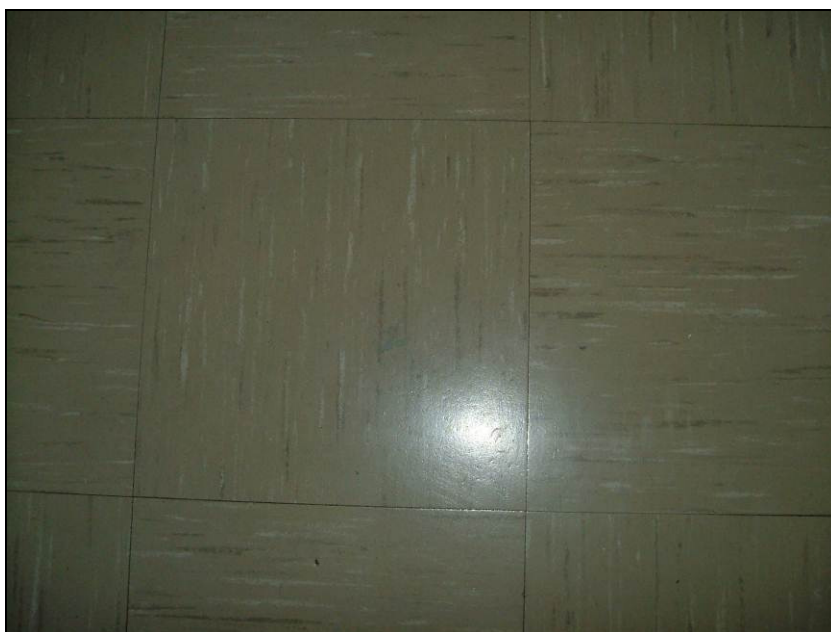


Photograph 9: Sample CR-7 asbestos containing mastic associated with the non-asbestos containing tile.



Photograph 10: Sample CR-8 asbestos containing vinyl floor tile.

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Photograph 11: Sample CR-10 asbestos containing vinyl floor tile.



Photograph 12: Sample CR-22 asbestos containing mastic associated with the non-asbestos containing tile.

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Photograph 13: Sample CR-28 asbestos containing vinyl floor tile and mastic.



Photograph 14: Sample CR-33 asbestos containing mastic associated with the non-asbestos containing tile.

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Photograph 15: Sample CR-34. Asbestos containing transite panels at the exterior of the building. Suspected to be similar material on all exteriors of Burtons Pond residences.



Photograph 16: Sample CR-16. Asbestos containing transite on heaters in washrooms.

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Photograph 17: Sample CR-29. Asbestos containing light fixture heat shield.



Photograph 18: Sample CR-29. Light globe associated with asbestos containing light fixture heat shield.

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APPENDIX II
LABORATORY ASBESTOS RESULTS

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: cinnaslab@EMSL.com

Attn: **Carla Noseworthy**
All-Tech Environmental Services Limited
151 Crosbie Road
Suite 402
St. John's, NL A1B 4B4

Customer ID: ATES44D
Customer PO:
Received: 08/31/11 9:30 AM
EMSL Order: 041123660

Fax:
Project: 13916- CARTIER

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 9/7/2011

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-1-Floor Tile 041123660-0001	CR311-LR - 1' X 1' VINYL FLOOR TILE, LT BROWN WITH DK BROWN, ORNAGE	Tan Non-Fibrous Heterogeneous		94% Non-fibrous (other)	6% Chrysotile
CR-1-Mastic 041123660-0001A	CR311-LR - 1' X 1' VINYL FLOOR TILE, LT BROWN WITH DK BROWN, ORNAGE	Black Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CR-2 041123660-0002	CR311-NR - 1' X 1' VINYL FLOOR TILE, WHITE WITH BROWN	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
insufficient amount of mastic					
CR-3-Floor Tile 041123660-0003	CR311-LR - 1' X 1' VINYL FLOOR TILE, GREY WITH BLACK DOTS	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Report Amended: 09/07/2011 15:10:21 Replaces Report Amended: 09/02/2011 12:26:28. Reason Code: Data Entry-Results Changed

Analyst(s)

Garret Vliet (1)
Naadira Carter (45)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: cinnaslab@EMSL.com

Attn: **Carla Noseworthy**
All-Tech Environmental Services Limited
151 Crosbie Road
Suite 402
St. John's, NL A1B 4B4

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EMSL Proj:
Analysis Date: 9/7/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>	
			%	Fibrous	% Non-Fibrous	% Type
CR-3-Mastic 041123660-0003A	CR311-LR - 1' X 1' VINYL FLOOR TILE, GREY WITH BLACK DOTS	Black Non-Fibrous Heterogeneous	5%	Cellulose	95% Non-fibrous (other)	None Detected
CR-4 041123660-0004	CR311-WR - VINYL SHEET FLOORING, PINK/ BLUE SQUARE PATTERN	Various Fibrous Heterogeneous	25%	Cellulose	60% Non-fibrous (other)	15% Chrysotile
CR-5-Floor Tile 041123660-0005	CR311- ENTRANCE - 1' X 1' VINYL FLOOR TILE, GREEN WITH WHITE	Green Fibrous Heterogeneous			92% Non-fibrous (other)	8% Chrysotile
CR-5-Mastic 041123660-0005A	CR311- ENTRANCE - 1' X 1' VINYL FLOOR TILE, GREEN WITH WHITE	Black Non-Fibrous Heterogeneous	5%	Cellulose	92% Non-fibrous (other)	3% Chrysotile

Report Amended: 09/07/2011 15:10:21 Replaces Report Amended: 09/02/2011 12:26:28. Reason Code: Data Entry-Results Changed

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Fax:
Project: 13916- CARTIER

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 9/7/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-6 041123660-0006	CR311- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BROWN STRIPES	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
insufficient amount of mastic					
CR-7-Floor Tile 041123660-0007	CR311- ENTRANCE - 1' X 1' VINYL FLOOR TILE, GREY WITH BLACK	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-7-Mastic 041123660-0007A	CR311- ENTRANCE - 1' X 1' VINYL FLOOR TILE, GREY WITH BLACK	Black Non-Fibrous Heterogeneous		96% Non-fibrous (other)	4% Chrysotile
CR-8 041123660-0008	CR310-LR - 1' X 1' VINYL FLOOR TILE, LT GREY WITH MED GREY	Gray Fibrous Heterogeneous		94% Non-fibrous (other)	6% Chrysotile
insufficient amount of mastic					

Report Amended: 09/07/2011 15:10:21 Replaces Report Amended: 09/02/2011 12:26:28. Reason Code: Data Entry-Results Changed

Analyst(s)

Garret Vliet (1)
Naadira Carter (45)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: cinnaslab@EMSL.com

Attn: **Carla Noseworthy**
All-Tech Environmental Services Limited
151 Crosbie Road
Suite 402
St. John's, NL A1B 4B4

Customer ID: ATES44D
Customer PO:
Received: 08/31/11 9:30 AM
EMSL Order: 041123660

Fax:
Project: 13916- CARTIER

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 9/7/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-9 041123660-0009	CR310-WR - VINYL SHEET FLOORING- BROWN/ RED SQUARE PATTERN	Red Fibrous Heterogeneous	30% Cellulose	50% Non-fibrous (other)	20% Chrysotile
CR-10 041123660-0010	CR309-LR - 1' X 1' VINYL FLOOR TILE, OLIVE GREEN WITH WHITE	Olive Non-Fibrous Heterogeneous		93% Non-fibrous (other)	7% Chrysotile
insufficient amount of mastic					
CR-11-Floor Tile 041123660-0011	CR309-LR - 1' X 1' VINYL FLOOR TILE, GREY MIX	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-11-Mastic 041123660-0011A	CR309-LR - 1' X 1' VINYL FLOOR TILE, GREY MIX	Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
CR-12 041123660-0012	CR309- ENTRANCE - 1' X 1' VINYL FLOOR TILE, LT GREY WITH WHITE	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	%	<u>Non-Asbestos</u>		<u>Asbestos</u>
				Fibrous	% Non-Fibrous	% Type
CR-13-Flooring 041123660-0013	CR309-WR - VINYL SHEET FLOORING, GREY MIX	Beige Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
CR-13-Mastic 041123660-0013A	CR309-WR - VINYL SHEET FLOORING, GREY MIX	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
CR-14 041123660-0014	CR309 - LIGHT FIXTURE HEAT SHIELD	Tan/Silver Fibrous Heterogeneous	70% 10%	Cellulose Glass	20% Non-fibrous (other)	None Detected
CR-15 041123660-0015	CR3C03 - PIPE FITTING INSULATION	Gray Non-Fibrous Heterogeneous	45%	Min. Wool	55% Non-fibrous (other)	None Detected
CR-16 041123660-0016	CR30-WR - TRANSITE HEATER	Gray Fibrous Heterogeneous			75% Non-fibrous (other)	25% Chrysotile
CR-17 041123660-0017	CR308 - LIGHT FIXTURE HEAT SHIELD	Tan/Silver Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected

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Attn: **Carla Noseworthy**
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Suite 402
St. John's, NL A1B 4B4

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Analysis Date: 9/7/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos	
			%	Fibrous	% Non-Fibrous	% Type
CR-18 041123660-0018	CR312 - 2' X 4' CEILING TILE, PINHOLE	Gray/White Fibrous Heterogeneous	50% 30%	Cellulose Min. Wool	20% Non-fibrous (other)	None Detected
CR-19 041123660-0019	CR312 - 2' X 4' CEILING TILE, PINHOLE, FISSURE & MASTIC	Tan/White Fibrous Heterogeneous	50% 30%	Cellulose Min. Wool	20% Non-fibrous (other)	None Detected
CR-19A-Mastic 041123660-0019A	CR312 - MASTIC ASSOC/W 2' X 4' CEILING TILE, PINHOLE, FISSURE	Tan/Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
CR-20 041123660-0020	CR306 - VINYL SHEET FLOORING, LT BROWN SQUARE PATTERN	Tan Fibrous Heterogeneous	15%	Cellulose	65% Non-fibrous (other)	20% Chrysotile
CR-21 041123660-0021	CR306 - DRYWALL JOINT COMPOUND	White Non-Fibrous Heterogeneous			98% Non-fibrous (other)	2% Chrysotile

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**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-22-Floor Tile 041123660-0022	CR20- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BLUE MIX	Blue Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-22-Mastic 041123660-0022A	CR20- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BLUE MIX	Black Non-Fibrous Heterogeneous	4% Cellulose	93% Non-fibrous (other)	3% Chrysotile
CR-23 041123660-0023	CR207 - PIPE FITTING INSULATION	White Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile
CR-24 041123660-0024	CR208 - DRYWALL JOINT COMPOUND	White Non-Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
CR-25 041123660-0025	CR211- ENTRANCE - LIGHT FIXTURE HEAT SHIELD	Brown Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
CR-26-Flooring 041123660-0026	CR108 - VINYL SHEET FLOORING, BROWN MIX	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: cinnaslab@EMSL.com

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St. John's, NL A1B 4B4

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**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-26-Mastic 041123660-0026A	CR108 - VINYL SHEET FLOORING, BROWN MIX	Tan Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
CR-27-Floor Tile 041123660-0027	CR303-BR - 1' X 1' VINYL FLOOR TILE, WHITE WITH BLACK	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-27-Mastic 041123660-0027A	CR303-BR - 1' X 1' VINYL FLOOR TILE, WHITE WITH BLACK	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-28 041123660-0028	CR301- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BLUE WITH WHITE	Blue Non-Fibrous Heterogeneous		96% Non-fibrous (other)	4% Chrysotile
insufficient amount of mastic					
CR-29 041123660-0029	CR201 - LIGHT FIXTURE HEAT SHIELD	White Fibrous Heterogeneous		20% Non-fibrous (other)	80% Chrysotile

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: cinnaslab@EMSL.com

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All-Tech Environmental Services Limited
151 Crosbie Road
Suite 402
St. John's, NL A1B 4B4

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Fax:
Project: 13916- CARTIER

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-30 041123660-0030	CR203 - 1' X 1' VINYL FLOOR TILE, BLUE MI X	Blue Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
insufficient amount of mastic					
CR-31-Floor Tile 041123660-0031	CR1036- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BROWN WITH WHITE MIX	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-31-Mastic 041123660-0031A	CR1036- ENTRANCE - 1' X 1' VINYL FLOOR TILE, BROWN WITH WHITE MIX	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CR-32 041123660-0032	CR103 - DRYWALL JOINT COMPOUND	White Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CR-33-Floor Tile 041123660-0033	CR102- ENTRANCE - 1' X 1' VINYL FLOOR TILE, WHITE WITH GREY	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CR-33-Mastic 041123660-0033A	CR102- ENTRANCE - 1' X 1' VINYL FLOOR TILE, WHITE WITH GREY	Black Non-Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
CR-34 041123660-0034	EXTERIOR OF ROOM C101 - EXTERIOR WALL PANELS	White/Green Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile

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APPENDIX III
ASBESTOS BUILDING SURVEY INFORMATION

Asbestos Bldg Survey Information

Room #	Bldg. System	Component	Material Type	Access	Conditions			Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor					
Throughout Building			Drywall Joint Compound						CR-21, CR-24, CR-32			2 - 3% Chrysotile
Exterior, Throughout			Transite Panels						CR-34	Exterior of Room CR101	Grey Cement Board, painted green	25% Chrysotile
CR101			Pipe Fitting Insulation	A	X			6	CR-23		Grey Insulation	25% Chrysotile
CR101			Transite Heater Panel (washroom)	A	X			1	CR-16		Grey Cement Board	25% Chrysotile
CR101			Vinyl Sheet Flooring	A	X			~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR102			Vinyl Floor Tile	A	X			~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR102			Pipe Fitting Insulation	A	X			6	CR-23		Grey Insulation	25% Chrysotile
CR102			Transite Heater Panel (washroom)	A	X			1	CR-16		Grey Cement Board	25% Chrysotile
CR102			Mastic	A	X			~ 30ft ²	CR-33	Floor, entrance, Room CR102	1' x 1' Vinyl Floor Tile, white with grey	2% Chrysotile
CR103			Vinyl Floor Tile & Mastic	A	X			~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR103			Mastic	A	X			~ 10 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR103			Pipe Fitting Insulation	A	X			4	CR-23		Grey Insulation	25% Chrysotile
CR103			Vinyl Sheet Flooring	A	X			~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR104			Vinyl Floor Tile	A	X			~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR104			Pipe Fitting Insulation	A	X			7	CR-23		Grey Insulation	25% Chrysotile
CR104			Transite Heater Panel (washroom)	A	X			1	CR-16		Grey Cement Board	25% Chrysotile
CR105			Vinyl Floor Tile	A	X			~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR105			Vinyl Sheet Flooring (found underneath newer flooring)	A	X				~ 20 ft ²	CR-20		Light brown square pattern	20% Chrysotile
CR106			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR106			Mastic	A	X				~ 15 ft ² + ~ 20 ft ² + ~ 10 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR106			Pipe Fitting Insulation	A	X				1	CR-23		Grey Insulation	25% Chrysotile
CR106			Pipe Fitting Insulation	A			X		1	CR-23		Grey Insulation	25% Chrysotile
CR106			Transite Heater Panel (washroom)	A	X				1	CR-16		Grey Cement Board	25% Chrysotile
CR107			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR107			Mastic	A	X				~ 15 ft ² + ~ 20 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR107			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR108			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR108			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR108			Pipe Fitting Insulation	A			X		1	CR-23		Grey Insulation	25% Chrysotile
CR109			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR109			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR109			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR109			Transite Heater Panel (washroom)	A	X				2	CR-16		Grey Cement Board	25% Chrysotile
CR110			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR110			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions			Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed				
CR110			Vinyl Sheet Flooring	A	X				CR-4		Pink / Blue square pattern	15% Chrysotile
CR201			Vinyl Floor Tile & Mastic	A	X				CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR201			Pipe Fitting Insulation	A	X				CR-23		Grey insulation	25% Chrysotile
CR201			Vinyl Sheet Flooring	A	X				CR-9		Brown / Red square pattern	20% Chrysotile
CR201			Light Fixture Heat Shield	A			X		CR-29	Ceiling, Room CR201	Grey insulation	80% Chrysotile
CR202			Vinyl Floor Tile	A	X				CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR202			Pipe Fitting Insulation	A	X				CR-23		Grey insulation	25% Chrysotile
CR202			Vinyl Sheet Flooring	A	X				CR-4		Pink / Blue square pattern	15% Chrysotile
CR203			Vinyl Floor Tile	A	X				CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR203			Mastic	A	X				CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR203			Pipe Fitting Insulation	A	X				CR-23		Grey insulation	25% Chrysotile
CR203			Vinyl Sheet Flooring	A	X				CR-20		Light brown square pattern	20% Chrysotile
CR203			Transite Heater Panel (washroom)	A	X				CR-16		Grey Cement Board	25% Chrysotile
CR204			Vinyl Floor Tile & Mastic	A	X				CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR204			Mastic	A	X				CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR204			Vinyl Floor Tile & Mastic	A	X				~ 15 ft ²	CR-5		1' x 1' Vinyl Floor Tile, green with white	8% Chrysotile, Mastic 3% Chrysotile
CR204			Pipe Fitting Insulation	A	X				5	CR-23		Grey Insulation	25% Chrysotile
CR204			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR205			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR205			Pipe Fitting Insulation	A	X				3	CR-23		Grey Insulation	25% Chrysotile
CR205			Transite Heater Panel (washroom)	A	X				2	CR-16		Grey Cement Board	25% Chrysotile
CR205			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR205			Vinyl Floor Tile	A	X				~ 30 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR205			Mastic	A	X				~ 5 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR205			Light Fixture Heat Shield	A			X		1	CR-29		Grey Insulation	80% Chrysotile
CR206			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR206			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-20		Light brown square pattern	20% Chrysotile
CR206			Mastic	A	X				~ 30 ft ²	CR-22	Floor, entrance, Room CR206	1' x 1' Vinyl Floor Tile, blue mix	2% Chrysotile
CR207			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR207			Pipe Fitting Insulation	A	X				4	CR-23	Closet, Room CR207	Grey Insulation	25% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR207			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR208			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR208			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR209			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR209			Mastic	A	X				~ 15 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR209			Pipe Fitting Insulation	A			X		debris	CR-23		Grey Insulation	25% Chrysotile
CR209			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-20		Light brown square pattern	20% Chrysotile
CR210			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR210			Pipe Fitting Insulation	A	X				3	CR-23		Grey Insulation	25% Chrysotile
CR210			Pipe Fitting Insulation	A			X		1	CR-23		Grey Insulation	25% Chrysotile
CR210			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR211			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR211			Pipe Fitting Insulation	A	X				3	CR-23		Grey Insulation	25% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR211			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR211			Mastic	A	X				~ 10 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR301			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR301			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-20		Light brown square pattern	20% Chrysotile
CR301			Pipe Fitting Insulation	A	X				6	CR-23		Grey Insulation	25% Chrysotile
CR301			Transite Heater Panel (washroom)	A	X				1	CR-16		Grey Cement Board	25% Chrysotile
CR301			Vinyl Floor Tile	A	X				~ 5 ft ²	CR-28	Floor, entrance, Room CR301	1' x 1' Vinyl Floor Tile, blue with white	4% Chrysotile
CR302			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR302			Pipe Fitting Insulation	A	X				3	CR-23		Grey Insulation	25% Chrysotile
CR302			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR302			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CR-5		1' x 1' Vinyl Floor Tile, green with white	8% Chrysotile, Mastic 3% Chrysotile
CR302			Mastic	A	X				~ 10 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR302			Transite Heater Panel (washroom)	A	X				1	CR-16		Grey Cement Board	25% Chrysotile
CR303			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR303			Pipe Fitting Insulation	A	X				6	CR-23		Grey Insulation	25% Chrysotile
CR303			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR304			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR304			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR304			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-20		Light brown square pattern	20% Chrysotile
CR305			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR305			Pipe Fitting Insulation	A	X				3	CR-23		Grey Insulation	25% Chrysotile
CR305			Transite Heater Panel (washroom)	A	X				2	CR-16		Grey Cement Board	25% Chrysotile
CR305			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR306			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-10		1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR306			Mastic	A	X				~ 30 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR306			Transite Heater Panel (washroom)	A	X				2	CR-16		Grey Cement Board	25% Chrysotile
CR306			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-20	Floor, Washroom, Room CR306	Light brown square pattern	20% Chrysotile
CR307			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8		1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CR307			Pipe Fitting Insulation	A	X				1	CR-23		Grey Insulation	25% Chrysotile
CR307			Mastic	A	X				~ 30 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR307			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9		Brown / Red square pattern	20% Chrysotile
CR308			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CR-1		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR308			Mastic	A	X				~ 30 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR308			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR308			Transite Heater Panel (washroom)	A	X				1	CR-16	Washroom wall, Room CR308	Grey Cement Board	25% Chrysotile
CR308			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-4		Pink / Blue square pattern	15% Chrysotile
CR309			Vinyl Floor Tile	A	X				~ 200 ft ²	CR-10	Floor, living room, Room CR309	1' x 1' Vinyl Floor Tile, olive green with white	7% Chrysotile
CR309			Pipe Fitting Insulation	A	X				1	CR-23		Grey Insulation	25% Chrysotile
CR310			Vinyl Floor Tile	A	X				~ 300 ft ²	CR-8	Floor, living room, Room CR310	1' x 1' Vinyl Floor Tile, light grey with medium grey	6% Chrysotile
CR310			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CR-9	Floor, washroom, Room CR310	Brown / Red square pattern	20% Chrysotile
CR310			Mastic	A	X				~ 10 ft ²	CR-7		1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile
CR310			Pipe Fitting Insulation	A	X				2	CR-23		Grey Insulation	25% Chrysotile
CR311			Vinyl Floor Tile & Mastic	A	X				~ 250 ft ²	CR-1	Floor, living room, Room CR311	1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	6% Chrysotile, Mastic 3% Chrysotile
CR311			Pipe Fitting Insulation	A	X				1	CR-23		Grey Insulation	25% Chrysotile
CR311			Transite Heater Panel (washroom)	A	X				1	CR-16		Grey Cement Board	25% Chrysotile

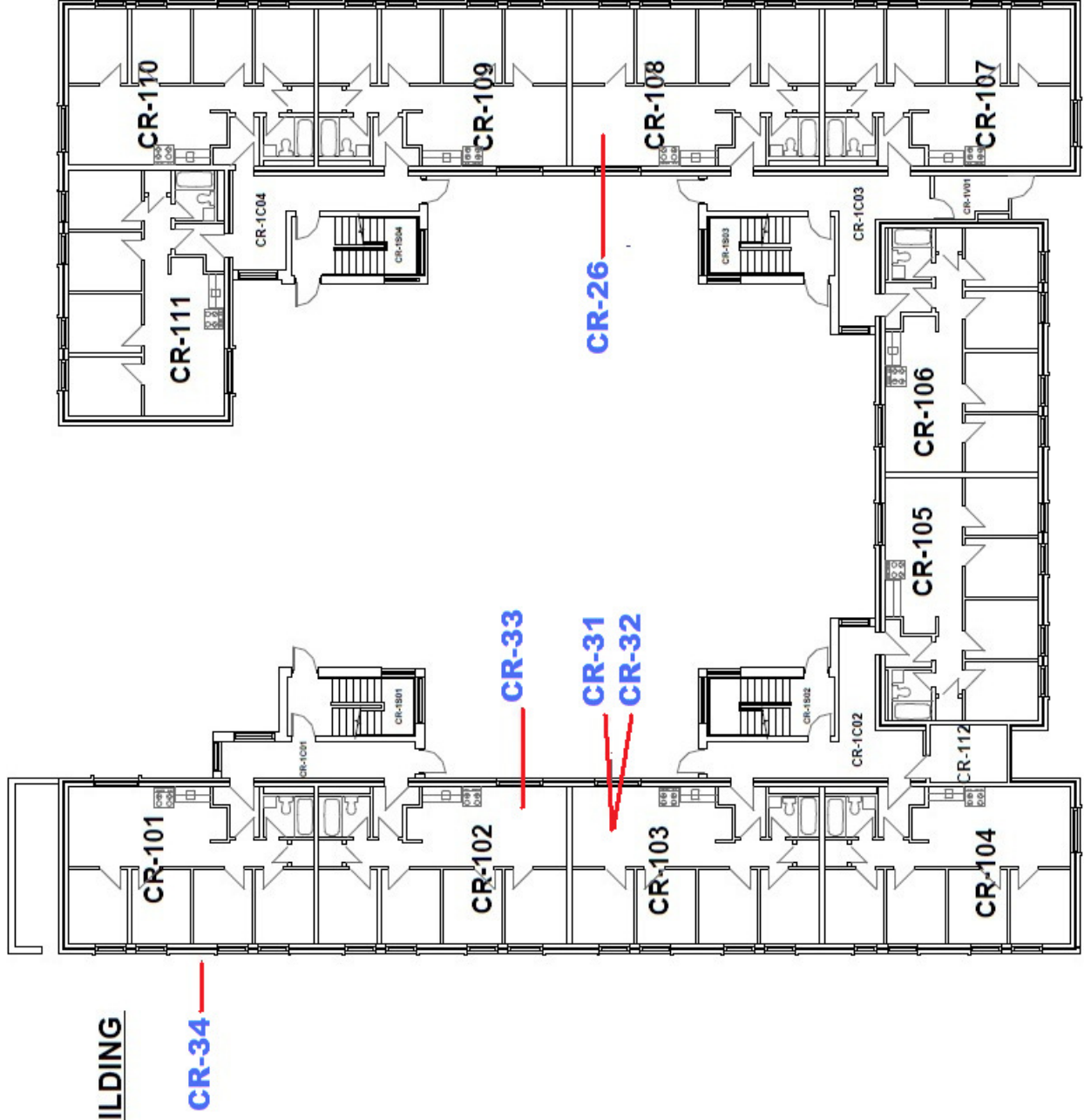
Room #	Bldg. System	Component	Material Type	Access	Conditions			Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed				
CR311			Vinyl Sheet Flooring	A	X				CR-4	Floor, washroom, Room CR311	Pink / Blue square pattern	15% Chrysotile
CR311			Vinyl Floor Tile & Mastic	A	X				CR-5	Floor, entrance, Room CR311	1' x 1' Vinyl Floor Tile, green with white	8% Chrysotile, Mastic 3% Chrysotile
CR311			Mastic	A	X				CR-7	Floor, entrance, Room CR311	1' x 1' Vinyl Floor Tile, grey with black	4% Chrysotile

No Access was available to the following rooms: CR111, CR112, CR213, CR313

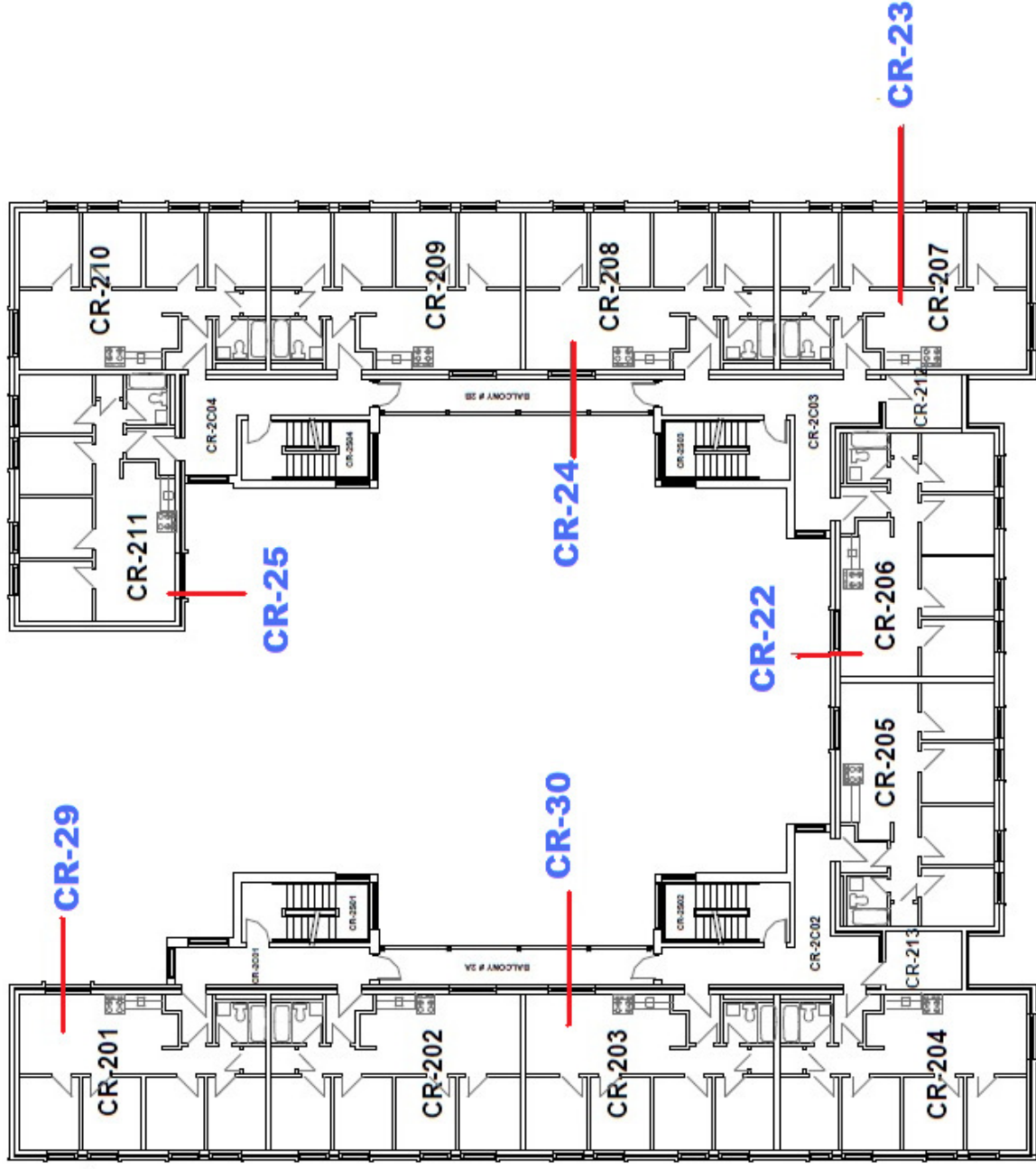
Access: *A* - Areas within reach from the floor. *B* - Frequently entered maintenance areas floor level. *C* - exposed / concealed above 8 ft, crawl space, etc. *D* - Inaccessible

APPENDIX IV
FLOOR PLANS SHOWING SAMPLING LOCATIONS

CARTIER BUILDING
LEVEL -1



CARTIER BUILDING
LEVEL - 2



CARTIER BUILDING
LEVEL - 3

