

Project #: 13916

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

Prepared for:

**Sheila Miller
Director, Department of Health and Safety
Memorial University of Newfoundland
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Prepared by:



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September 2011

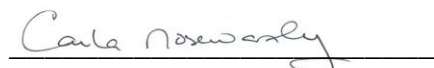
EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited conducted an Asbestos Assessment at Cabot 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:

- Sixteen (16) of the twenty-nine (29) 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.*)
- Drywall joint compound was sampled and found to contain 3% Chrysotile asbestos.
- Ceiling tile adhesive was sampled and found to contain 10% Chrysotile asbestos.
- Vinyl sheet flooring was sampled and found to contain 20% Chrysotile asbestos.
- 1' x 1' vinyl floor tiles, and/or their mastics, sampled from various locations were found to contain between 2 – 8% Chrysotile asbestos.
- Light fixture heat shields were sampled and found to contain 20% Chrysotile asbestos.
- Two types of suspect asbestos containing pipe fitting insulation was observed in select locations within the building. Material in the hallways was sampled and identified as non-asbestos containing. Visually distinguishable fittings were not sampled, however based on their age they must be considered to be asbestos containing until proven otherwise.
- Exterior green panels are suspected to be asbestos containing transite material (sampled from Cartier Court, sample #CR-34)

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 Cabot 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 twenty-nine (29) suspect asbestos bulk samples were collected from the building. Representative suspect asbestos bulk material samples from floors, wall finishes, pipe fitting insulation, ceiling tiles and their adhesive, and light fixture heat shields 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 sixteen (16) of the twenty-nine (29) 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
Cabot Court
Memorial University of Newfoundland
St. John's, NL

Sample No.	Sample Description and Location	Asbestos Results
CT-1	Pipe Fitting Insulation – Hallway CT3C01	None Detected
CT -2	1' x 1' Vinyl Floor Tile, grey mix – Room CT311	None Detected
	Mastic	2% Chrysotile
CT -3	1' x 1' Vinyl Floor Tile, light brown with dark brown, orange – Room CT311	5% Chrysotile
CT -4	1' x 1' Vinyl Floor Tile, white with brown – Room CT311	None Detected
CT -5	Light Fixture Heat Shield – Room CT311	None Detected
CT -6	Vinyl Sheet Flooring, brown and red square pattern – Room CT311	20% Chrysotile
CT -7	1' x 1' Vinyl Floor Tile, white with brown – Room CT310	5% Chrysotile

CT -8	Vinyl Sheet Flooring, light brown square pattern – Room CT311	20% Chrysotile
CT -9	1' x 1' Vinyl Floor Tile, olive green with white – Room CT309	5% Chrysotile
	Mastic	3% Chrysotile
CT -10	Vinyl Sheet Flooring, pink and blue square pattern – Room CT309	20% Chrysotile
CT -11	Light Fixture Heat Shield – Room CT 309	None Detected
CT -12	Light Fixture Heat Shield – Room CT308	20% Chrysotile
CT -13	1' x 1' Vinyl Floor Tile, light grey with medium grey – Room CT307	8% Chrysotile
CT -14	2' x 4' Ceiling Tile, pinhole and fissure, pink backing – Room CT312	None Detected
CT -15	2' x 4' Ceiling Tile, pinhole – Room CT312	None Detected
CT -16	Ceiling Tile Adhesive – Room CT312	10% Chrysotile
CT -17	1' x 1' Vinyl Floor Tile, grey with black dots – Room CT208	None Detected
	Mastic	None Detected
CT -18	Vinyl Sheet Flooring, brown square pattern – Room CT209	20% Chrysotile
	Mastic	None Detected
CT -19	Drywall Joint Compound – Room CT210	3% Chrysotile
CT -20	1' x 1' Vinyl Floor Tile, white with black – Room CT211	None Detected
	Mastic	3% Chrysotile
CT -21	1' x 1' Vinyl Floor Tile, brown stripes – Room CT211	None Detected
CT -22	Drywall Joint Compound – Room CT106	3% Chrysotile
CT -23	1' x 1' Vinyl Floor Tile, dark green with white – Room CT106	8% Chrysotile
	Mastic	3% Chrysotile

CT -24	1' x 1' Vinyl Floor Tile, blue mix – Room CT305	None Detected
	Mastic	None Detected
CT -25	Vinyl Sheet Flooring, grey mix – Room CT304	None Detected
	Mastic	None Detected
CT -26	Drywall Joint Compound – Room CT304	None Detected
CT -27	1' x 1' Vinyl Floor Tile, blue with white – Room CT301	2% Chrysotile
	Mastic	5% Chrysotile
CT -28	1' x 1' Vinyl Floor Tile, light grey with white, black – Room CT105	None Detected
	Mastic	None Detected
CT -29	1' x 1' Vinyl Floor Tile, dark grey mix – Room CT101	None Detected
	Mastic	2% Chrysotile

Mechanical and Pipe Material

Two types of pipe fitting insulation which could potentially contain asbestos were observed in select areas throughout the building during this assessment. Samples were collected of fitting insulation in the hallways and analyzed for asbestos content using the PLM method of detection. These samples were identified as non-asbestos containing. The fittings identified in closets of the residence rooms and the mechanical room is visually distinguishable and appears to be older than those in the hallway. Those fittings must be considered to be asbestos containing until proven otherwise (see sample CT-1 in Appendix II, Photographs 1, 2, Appendix I)

It should also 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

Acoustic and thermal insulating products were not 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. Two (2) of the three (3) samples

were both found to contain 3% Chrysotile asbestos. (see samples CT-19, CT-22, CT-26 in Appendix II).

It should be noted that 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 joint compound present in the building contains asbestos.

Friable Acoustic and Thermal Fireproofing Products

Friable acoustic and thermal fireproofing products were not 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 CT312 during the assessment. Both samples, one with a pinhole and fissure pattern with a pink backing and the other with a pinhole pattern were sampled and analyzed for asbestos content using the PLM method of detection. Both samples were identified as non-asbestos containing. (see samples CT-14, CT-15 in Appendix II)

Ceiling tile adhesive associated with the above mentioned ceiling tiles was sampled and analyzed for asbestos content using the PLM method of detection. The sample was found to contain 10% Chrysotile asbestos. (see sample CT-16 in Appendix II, Photograph 3 in Appendix I)

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. Four (4) samples of the flooring were each found to contain 20% Chrysotile asbestos. (see samples CT-6, CT-8, CT-10, CT-18, CT-25 in Appendix II, Photographs 4 - 7 in Appendix I)

Non-Friable Vinyl Floor Tiles/ Floor Tile Adhesives

Vinyl floor tiles which could potentially contain asbestos were identified during the assessment. Fourteen (14) samples of 1' x 1' vinyl floor tiles were sampled and analyzed for asbestos content using the PLM method of detection. Nine (9) tiles and/or their associated mastics were found to contain between 2 – 8% Chrysotile asbestos. (see samples CT-2, CT-3, CT-4, CT-7, CT-9, CT-13, CT-17, CT-20, CT-21, CT-23, CT-24, CT-27, CT-28, CT-29 in Appendix II, see Photographs 8 - 16, Appendix I)

Non-Friable Transite Panels, Sheeting and Shingles

Exterior green panels are suspected to be asbestos containing transite materials. Visually similar panels were sampled from Cartier Court (sample # CR-34) and were

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 Cabot Court are also asbestos containing.

Non-Friable Transite Piping

Transite piping was not observed during the assessment.

Electrical Wiring/ Lighting

Three (3) 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) of the three (3) samples was found to contain 20% Chrysotile asbestos (see samples CT-5, CT-11, CT-12 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

Window caulking, interior or exterior, was not sampled during this assessment.

No other materials suspected of containing asbestos were observed during the assessment.

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: Suspect asbestos containing pipe fitting insulation in Room CT112, mechanical room, in poor condition.

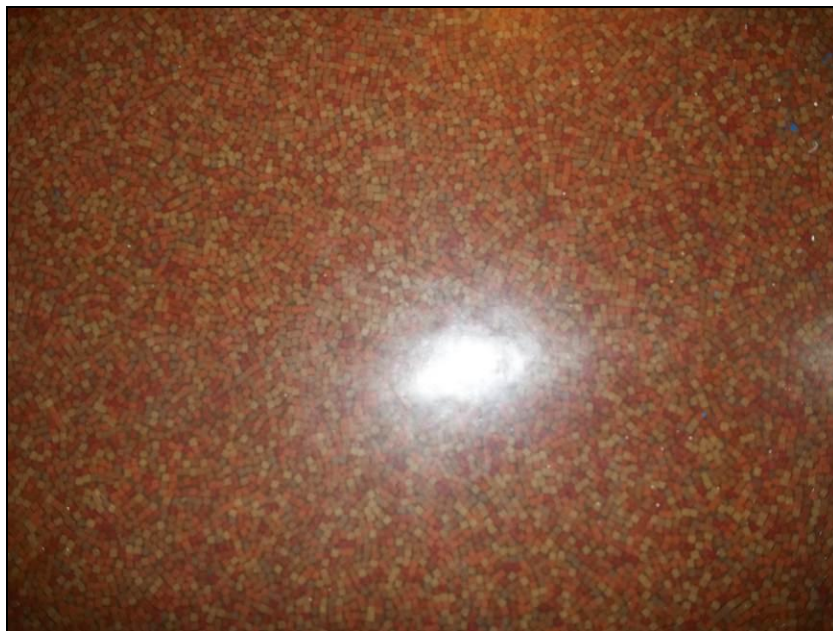


Photograph 2: Suspect asbestos containing pipe fitting insulation in Room CT112, mechanical room, in poor condition.

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Photograph 3: Sample CT-16. Asbestos containing ceiling tile adhesive on the walls of Room CT312.

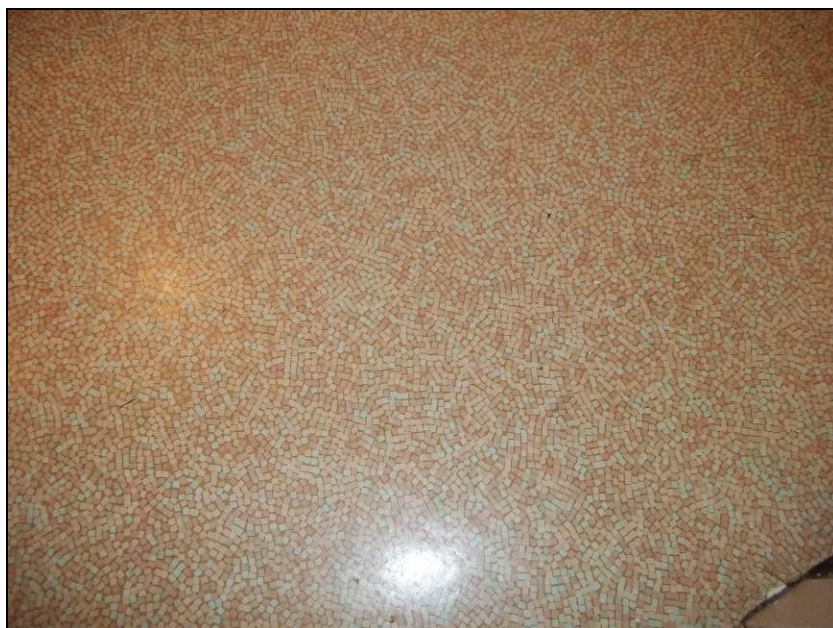


Photograph 4: Sample CT-6. The flooring was found to contain 20% Chrysotile asbestos.

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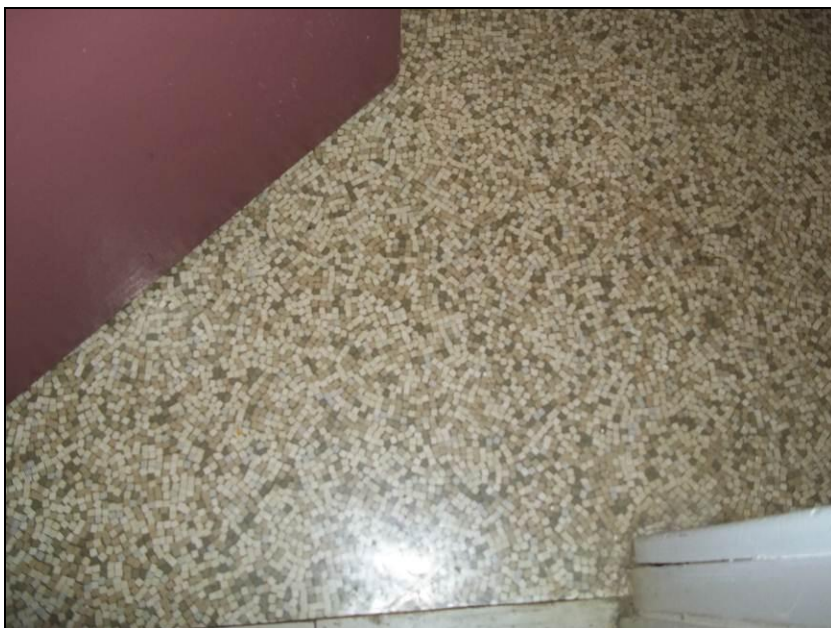


Photograph 5: Sample CT-8. The flooring was found to contain 20% Chrysotile asbestos.



Photograph 6: Sample CT-10. The flooring was found to contain 20% Chrysotile asbestos.

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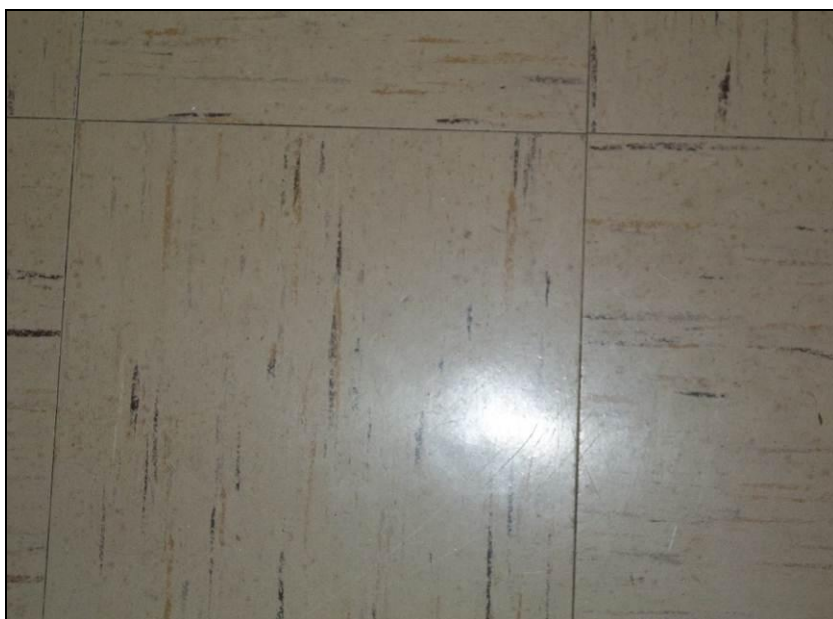


Photograph 7: Sample CT-18. The flooring was found to contain 20% Chrysotile asbestos.

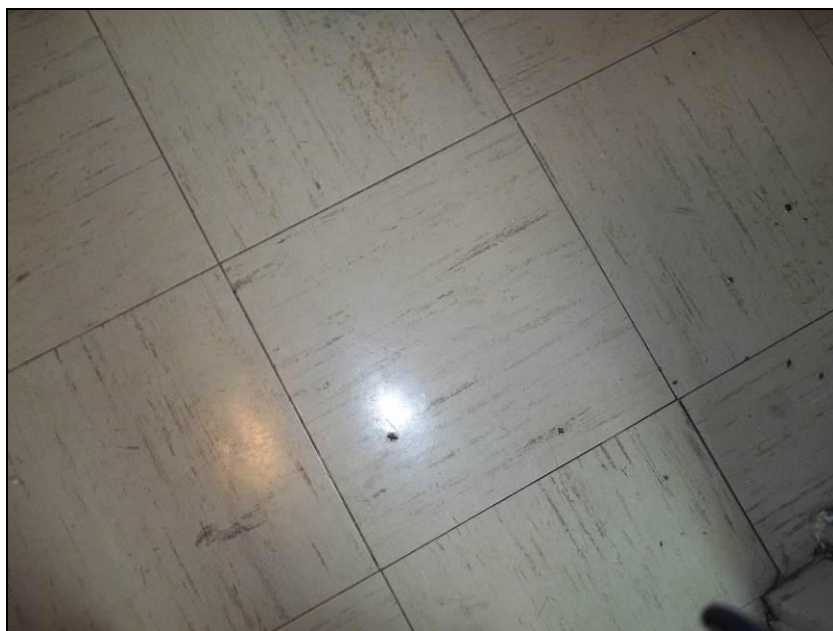


Photograph 8: Sample CT-2. The vinyl floor tile was identified as non-asbestos containing. The mastic was found to contain 5% Chrysotile asbestos.

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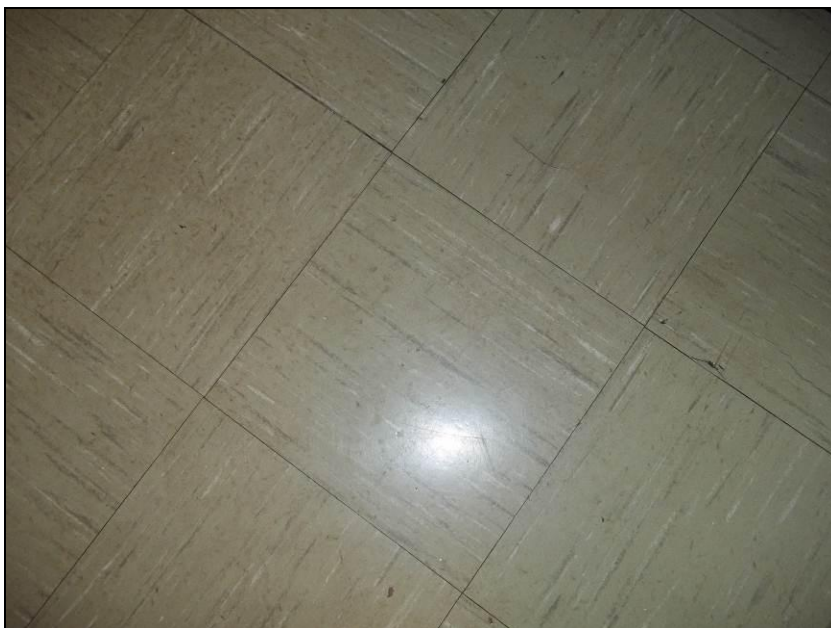


Photograph 9: Sample CT-3. The vinyl floor tile was found to contain 5% Chrysotile asbestos.



Photograph 10: Sample CT-7. The vinyl floor tile was found to contain 5% Chrysotile asbestos.

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Photograph 11: Sample CT-9. The vinyl floor tile was found to contain 5% Chrysotile asbestos, and the mastic was found to contain 3% Chrysotile asbestos.



Photograph 12: Sample CT-13. The vinyl floor tile was found to contain 8% Chrysotile asbestos.

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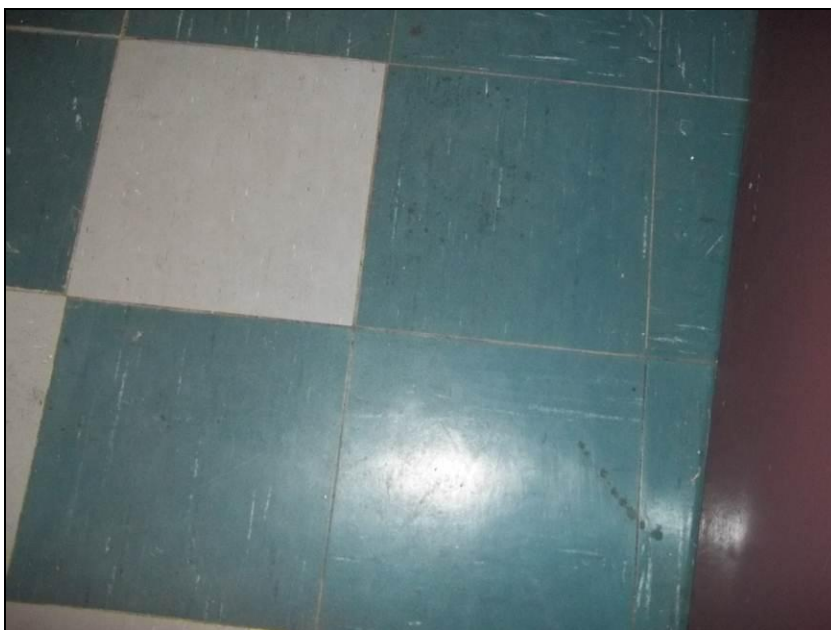


Photograph 13: Sample CT-20. The vinyl floor tile was identified as non-asbestos containing. The mastic was found to contain 3% Chrysotile asbestos.

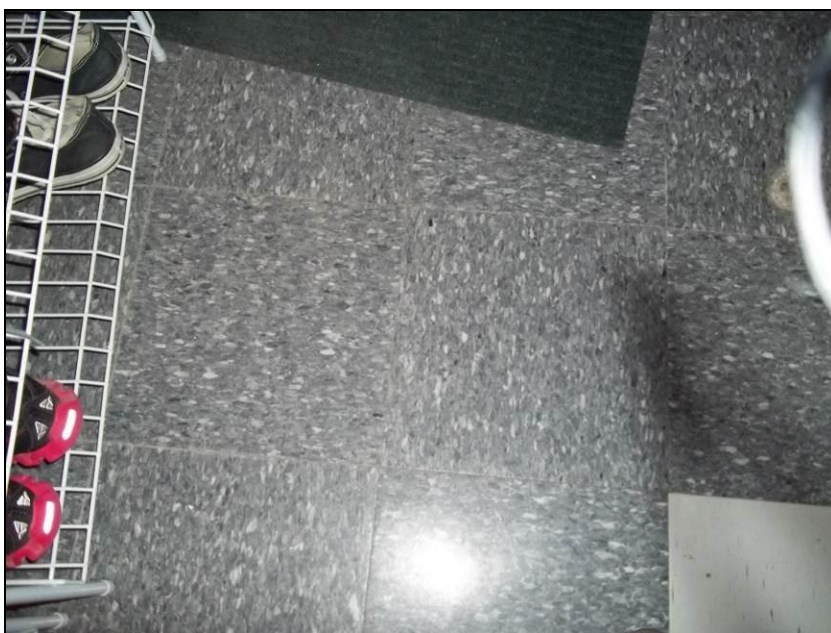


Photograph 14: Sample CT-23. The vinyl floor tile was found to contain 8% Chrysotile asbestos, and the mastic was found to contain 3% Chrysotile asbestos.

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Photograph 15: Sample CT-27. The vinyl floor tile was found to contain 2% Chrysotile asbestos, and the mastic was found to contain 5% Chrysotile asbestos.



Photograph 16: Sample CT-29. The vinyl floor tile was identified as non-asbestos containing. The mastic was found to contain 2% Chrysotile asbestos.

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Photograph 17: Sample CT-12. Asbestos containing light fixture heat shield.



Photograph 18: Sample CT-12. 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**
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Customer PO:
Received: 06/29/11 10:15 AM
EMSL Order: 041123389

Fax:
Project: 13916- CABOT

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 6/30/2011

**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
CT-1 041123389-0001	CT3C01 - PIPE FITTING INSULATION	Gray Fibrous Heterogeneous	10% Cellulose 20% Min. Wool	70% Non-fibrous (other)	None Detected
CT-2-Floor Tile 041123389-0002	CT 311/ ENTRANCE - 1 X 1 VT- GREY MIX	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-2-Mastic 041123389-0002A	CT 311/ ENTRANCE - 1 X 1 VT- GREY MIX	Black Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
CT-3 041123389-0003	CT 311/L.R. - 1 X 1 VT- LT BROWN W/ DK BROWN, ORANGE	Brown Non-Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
CT-4 041123389-0004	CT 311/ BR - 1 X 1 VT- WHITE W/ BROWN	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-5 041123389-0005	CT 311 - LIGHT FIXTURE HEAT SHIELD	Tan/Silver Fibrous Heterogeneous	60% Cellulose 10% Glass	30% Non-fibrous (other)	None Detected

Initial report from 06/30/2011 07:27:13

Analysis(s)

Chris Little (38)

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-D, AHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Test Report PLM-7.23.0 Printed: 6/30/2011 7:27:13 AM

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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

Attn: **Carla Noseworthy**
All-Tech Environmental Services Limited
151 Crosbie Road
Suite 402
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Customer ID: ATE544D
Customer PO:
Received: 06/29/11 10:15 AM
EMSL Order: 041123389

Fac:
Project: 13916- CABOT

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 8/30/2011

**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
CT-6 041123389-0006	CT 311/ W.R. - VSF. BROWN/ RED SQUARE PATTERN	Brown/Red Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
CT-7 041123389-0007	CT 310/ L.R. - 1 X 1 VT- LT GREY W/ MED GREY	Gray Non-Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
CT-8 041123389-0008	CT 311/ W.R. - VSF. LT BROWN SQUARE PATTERN	Brown/Gray Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
CT-9-Floor Tile 041123389-0009	CT 309/ L.R. - 1 X 1 VT- OLIVE GREEN W/ WHITE	Green Non-Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
CT-9-Mastic 041123389-0009A	CT 309/ L.R. - 1 X 1 VT- OLIVE GREEN W/ WHITE	Black Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CT-10 041123389-0010	CT 309/ W.R. - VSF. PINK/ BLUE SQUARE PATTERN	Various Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile

Initial report from 08/30/2011 07:27:13

Analysis(s)

Chris Little (38)

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, AHA-LAP, LLC-ILAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Test Report PLM-7.23.0 Printed: 8/30/2011 7:27:13 AM

**EMSL Analytical, Inc.**

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Customer ID: ATE544D
Customer PO:
Received: 08/29/11 10:15 AM
EMSL Order: 041123389

Fax:
Project: 13916- CABOT

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 8/30/2011

**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
CT-11 041123389-0011	CT 309 - LIGHT FIXTURE HEAT SHIELD	Various Fibrous Heterogeneous	35% Glass	65% Non-fibrous (other)	None Detected
CT-12 041123389-0012	CT 308 - LIGHT FIXTURE HEAT SHIELD	Gray/White Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
CT-13 041123389-0013	CT 307/ L.R. - 1 X 1 VT- LT. GREEN W/ MED GREY	Gray Non-Fibrous Heterogeneous		92% Non-fibrous (other)	8% Chrysotile
CT-14 041123389-0014	CT 312 - 2 X 4 CT- PH/ FISSURE, PINK BACKING	Gray/White Fibrous Heterogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (other)	None Detected
Suggest TEM					
CT-15 041123389-0015	CT 312 - 2 X 4 CT- PH	Gray/White Fibrous Heterogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (other)	None Detected
CT-16 041123389-0016	CT 312 - CEILING TILE ADHESIVE	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile

Initial report from 08/30/2011 07:27:13

Analyst(s)

Chris Little (38)

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, AHA-LAP, LLC-ILAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Test Report: PLM-7.23.0 Printed: 8/30/2011 7:27:13 AM

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Received: 05/29/11 10:15 AM
EMSL Order: 041123389

Fax:
Project: 13916- CABOT

Phone: (709) 754-4146

EMSL Proj:
Analysis Date: 5/30/2011

**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
CT-17-Floor Tile 041123389-0017	CT 205/ ENTRANCE - 1 X 1 VT- GREY W/ BLACK DOTS	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-17-Mastic 041123389-0017A	CT 205/ ENTRANCE - 1 X 1 VT- GREY W/ BLACK DOTS	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-18-Underlayment 041123389-0018	CT 209/ W.R. - VSF. BROWN/ SQUARE PATTERN	Brown/Gray Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
CT-18-Mastic 041123389-0018A	CT 209/ W.R. - VSF. BROWN/ SQUARE PATTERN	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
CT-19 041123389-0019	CT 210 - DJC	White Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CT-20-Floor Tile 041123389-0020	CT 211/ ENTRANCE - 1 X 1 VT- WHITE W/ BLACK	Grayish Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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EMSL Proj:
Analysis Date: 6/30/2011

**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
CT-20-Mastic 041123399-00204	CT 211/ ENTRANCE - 1 X 1 VT- WHITE W/ BLACK	Black Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CT-21 041123399-0021	CT 211/ ENTRANCE - 1 X 1 VT- BROWN STRIPES	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-22 041123399-0022	CT 106 - DJC	White Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CT-23-Floor Tile 041123399-0023	CT 106/ ENTRANCE - 1 X 1 VT- DK GREEN W/WHITE	Green Non-Fibrous Heterogeneous		92% Non-fibrous (other)	8% Chrysotile
CT-23-Mastic 041123399-00234	CT 106/ ENTRANCE - 1 X 1 VT- DK GREEN W/WHITE	Black Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
CT-24-Floor Tile 041123399-0024	CT 305/ B.R. - 1 X 1 VT- BLUE MIX	Blue/Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101045-0, AHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10873, NJ DEP 03036

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Project: 13916- CABOT

EMSL Proj:
Analysis Date: 5/30/2011

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
CT-24-Mastic 041123359-0024A	CT 305/ B.R. - 1 X 1 VT- BLUE MIX	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-25-Linoleum 041123359-0025	CT 304/ W.R. - VSF- GREY MIX	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-25-Mastic 041123359-0025A	CT 304/ W.R. - VSF- GREY MIX	White/Grayish Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CT-26 041123359-0026	CT 304 - DJC	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Suggest TEM					
CT-27-Floor Tile 041123359-0027	CT 301/ ENTRANCE - 1 X 1 VT- BLUE W/ WHITE	Blue Non-Fibrous Heterogeneous		95% Non-fibrous (other)	2% Chrysotile
CT-27-Mastic 041123359-0027A	CT 301/ ENTRANCE - 1 X 1 VT- BLUE W/ WHITE	Black Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile

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

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EMSL Proj:
Analysis Date: 5/30/2011

**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
CT-25-Floor Tile 041123399-0028	CT 105/ ENTRANCE - 1 X 1 VT- LT. GREY W/ WHITE, BLACK	Gray Non-Fibrous Heterogeneous		100% Non-Fibrous (other)	None Detected
CT-25-Mastic 041123399-0025A	CT 105/ ENTRANCE - 1 X 1 VT- LT. GREY W/ WHITE, BLACK	Black Non-Fibrous Heterogeneous		100% Non-Fibrous (other)	None Detected

Initial report from 05/30/2011 07:27:13

Analyst(s)

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101045-0, AHA-LAP, LLC-IHLAP Lab 100104, NYS ELAP 10872, NJ DEP 03036

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EMSL Proj:
Analysis Date: 5/30/2011

**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
CT29-ile 041123415-0001	G 101 Entrance - 1x1 VT- Dark Grey Mix	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
CT29-Mastle 041123415-0001A	G 101 Entrance - 1x1 VT- Dark Grey Mix	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	2% Chrysotile

Initial report from 05/30/2011 13:34:51

Analyst(s)

Dave Poltras (2)

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Sample analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101045-0, APMA-LAP, LLC-PLAP Lab 100194, NYS ELAP 10872, NJ DEP 53036

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1

APPENDIX III
ASBESTOS BUILDING SURVEY INFORMATION

Asbestos Bldg Survey Information -- Cabot Court

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
Exterior			³ Exterior Green Panels									Suspect Transite	
Throughout Building			Drywall Joint Compound	A		X				CT-19, CT-22	Wall, Room CT210, CT106		3% Chrysotile
CT101			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9		1' x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT101			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT101			¹ Pipe Fitting Insulation	A	X				4				
CT101			Mastic	A	X				~ 20 ft ²	CT-29	Floor, entrance, Room CT101	1' x 1' Vinyl Floor Tile, dark grey mix	2% Chrysotile
CT102			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT102			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10		Pink, blue square pattern flooring	20% Chrysotile
CT102			¹ Pipe Fitting Insulation	A	X				4				
CT103			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT103			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT103			² Suspect Light Fixture Heat Shield	A					1				
CT103			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT103			¹ Pipe Fitting Insulation	A	X				6				

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT104			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT104			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-18		Brown and green square pattern flooring	20% Chrysotile
CT104			² Suspect Light Fixture Heat Shield	A					1				
CT104			¹ Pipe Fitting Insulation	A	X				4				
CT105			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT105			¹ Pipe Fitting Insulation	A	X				3				
CT106			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT106			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT106			Flooring Mastic (entrance)	A	X				~ 8 ft ²	CT-20		Black	3% Chrysotile
CT106			Vinyl Floor Tile & Mastic	A	X				~ 4 ft ²	CT-23	Floor, entrance, Room CT106	1' x 1' Vinyl Floor Tile, green with white & Mastic	8% Chrysotile, Mastic 3% Chrysotile
CT106			¹ Pipe Fitting Insulation	A		X			1				
CT107			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9		1' x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT107			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT107			¹ Pipe Fitting Insulation	A		X			1				
CT108			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT108			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT108			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT108			¹ Pipe Fitting Insulation	A		X			3				
CT109			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1'x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT109			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT109			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT109			¹ Pipe Fitting Insulation	A		X			1				
CT109			¹ Pipe Fitting Insulation	A	X				3				
CT110			Vinyl Floor Tile & Mastic	A	X				~ 320 ft ²	CT-9		1'x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT110			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-18		Brown and green square pattern flooring	20% Chrysotile
CT110			Flooring Mastic (entrance)	A	X				~ 25 ft ²	CT-20		Black	3% Chrysotile
CT110			¹ Pipe Fitting Insulation	A	X				1				
CT111			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1'x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT111			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT111			Flooring Mastic (living room)	A	X				~ 8 ft ²	CT-20		Black	3% Chrysotile
CT111			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT112			¹ Pipe Fitting Insulation	A			X		5				
CT201			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1'x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT201			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT201			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-23		1' x 1' Vinyl Floor Tile, green with white & Mastic	8% Chrysotile, Mastic 3% Chrysotile
CT201			¹ Pipe Fitting Insulation	A	X				2				
CT203			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT203			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT203			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-27		1' x 1' Vinyl Floor Tile, blue with white	2% Chrysotile, Mastic 5% Chrysotile
CT204			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT204			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT204			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-23		1' x 1' Vinyl Floor Tile, green with white & Mastic	8% Chrysotile, Mastic 3% Chrysotile
CT204			¹ Pipe Fitting Insulation	A	X				3				
CT205			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT205			¹ Pipe Fitting Insulation	A	X				3				
CT206			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT206			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT206			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT206			¹ Pipe Fitting Insulation	A	X				4				
CT207			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1'x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT207			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT207			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT207			¹ Pipe Fitting Insulation	A	X				1				
CT208			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9		1'x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT208			Light Fixture Heat Shield	A			X		1	CT-12		Grey Insulation with Foil Backing	20% Chrysotile
CT208			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10		Pink, blue square pattern flooring	20% Chrysotile
CT208			¹ Pipe Fitting Insulation	A	X				1				
CT209			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1'x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT209			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-18	Floor, Washroom, Room CT209	Brown and green square pattern flooring	20% Chrysotile
CT209			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT209			¹ Pipe Fitting Insulation	A	X				2				

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT210			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1`x 1` Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT210			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT210			¹ Pipe Fitting Insulation	A	X				3				
CT211			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9	Floor, living room, Room CT309	1`x 1` Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT211			Light Fixture Heat Shield	A			X		1	CT-12		Grey Insulation with Foil Backing	20% Chrysotile
CT211			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10	Floor, washroom, Room CT309	Pink, blue square pattern flooring	20% Chrysotile
CT211			Flooring Mastic (entrance)	A	X				~ 25 ft ²	CT-20	Floor, entrance, Room CT211	Black	3% Chrysotile
CT211			¹ Pipe Fitting Insulation	A	X				2				
CT301			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1`x 1` Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT301			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT301			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-27	Floor, Entrance, Room CT301	1`x 1` Vinyl Floor Tile, blue with white	2% Chrysotile, Mastic 5% Chrysotile
CT301			¹ Pipe Fitting Insulation	A	X				2				
CT302			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1`x 1` Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT302			Light Fixture Heat Shield	A			X		1	CT-12		Grey Insulation with Foil Backing	20% Chrysotile
CT302			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT302			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-23		1'x 1' Vinyl Floor Tile, green with white & Mastic	8% Chrysotile, Mastic 3% Chrysotile
CT302			¹ Pipe Fitting Insulation	A	X				2				
CT303			Vinyl Floor Tile & Mastic	A	X				~ 320 ft ²	CT-9		1'x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT303			Light Fixture Heat Shield	A			X		1	CT-12		Grey Insulation with Foil Backing	20% Chrysotile
CT303			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10		Pink, blue square pattern flooring	20% Chrysotile
CT303			¹ Pipe Fitting Insulation	A	X				2				
CT304			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13		1'x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT304			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT304			¹ Pipe Fitting Insulation	A	X				1				
CT305			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1'x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT305			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT305			Vinyl Floor Tile & Mastic	A	X				~ 20 ft ²	CT-23		1'x 1' Vinyl Floor Tile, green with white & Mastic	8% Chrysotile, Mastic 3% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT305			¹ Pipe Fitting Insulation	A	X				2				
CT306			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9		1' x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT306			Light Fixture Heat Shield	A			X		1	CT-12		Grey Insulation with Foil Backing	20% Chrysotile
CT306			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10		Pink, blue square pattern flooring	20% Chrysotile
CT306			¹ Pipe Fitting Insulation	A	X				1				
CT307			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-13	Floor, Living Room, Room CT307	1' x 1' Vinyl Floor Tile, light grey with medium grey	8% Chrysotile
CT307			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8		Light Brown square pattern flooring	20% Chrysotile
CT307			¹ Pipe Fitting Insulation	A	X				1				
CT308			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3		1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT308			Light Fixture Heat Shield	A			X		1	CT-12	Ceiling, Room CT308	Grey Insulation with Foil Backing	20% Chrysotile
CT308			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6		Brown and red square pattern flooring	20% Chrysotile
CT308			Flooring Mastic (entrance)	A	X				~ 25 ft ²	CT-2		Black	5% Chrysotile
CT308			¹ Pipe Fitting Insulation	A	X				2				
CT309			Vinyl Floor Tile & Mastic	A	X				~ 300 ft ²	CT-9	Floor, living room, Room CT309	1' x 1' Vinyl Floor Tile, olive green with white	5% Chrysotile, Mastic 3% Chrysotile
CT309			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-10	Floor, washroom, Room CT309	Pink, blue square pattern flooring	20% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CT309			¹ Pipe Fitting Insulation	A	X				2				
CT310			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-7	Floor, living room, Room CT310	1' x 1' Vinyl Floor Tile, light grey with medium grey	5% Chrysotile
CT310			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-8	Floor, living room, Room CT310	Light Brown square pattern flooring	20% Chrysotile
CT310			¹ Pipe Fitting Insulation	A	X				2				
CT311			Vinyl Floor Tile	A	X				~ 300 ft ²	CT-3	Floor, living room, Room CT311	1' x 1' Vinyl Floor Tile, light brown with dark brown, orange	5% Chrysotile
CT311			Vinyl Sheet Flooring	A	X				~ 20 ft ²	CT-6	Floor, washroom, Room CT311	Brown and red square pattern flooring	20% Chrysotile
CT311			Flooring Mastic (Entrance)	A	X				~ 25 ft ²	CT-2	Floor, entrance, Room CT311	Black	5% Chrysotile
CT311			¹ Pipe Fitting Insulation	A	X				1				
CT312			Ceiling Tile Adhesive	A	X				~ 50 ft ²	CT-16	Wall, Room CT312	Black	10% Chrysotile

No Access was available to the following rooms: CT202, CT213, CT313, washroom of CT205

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

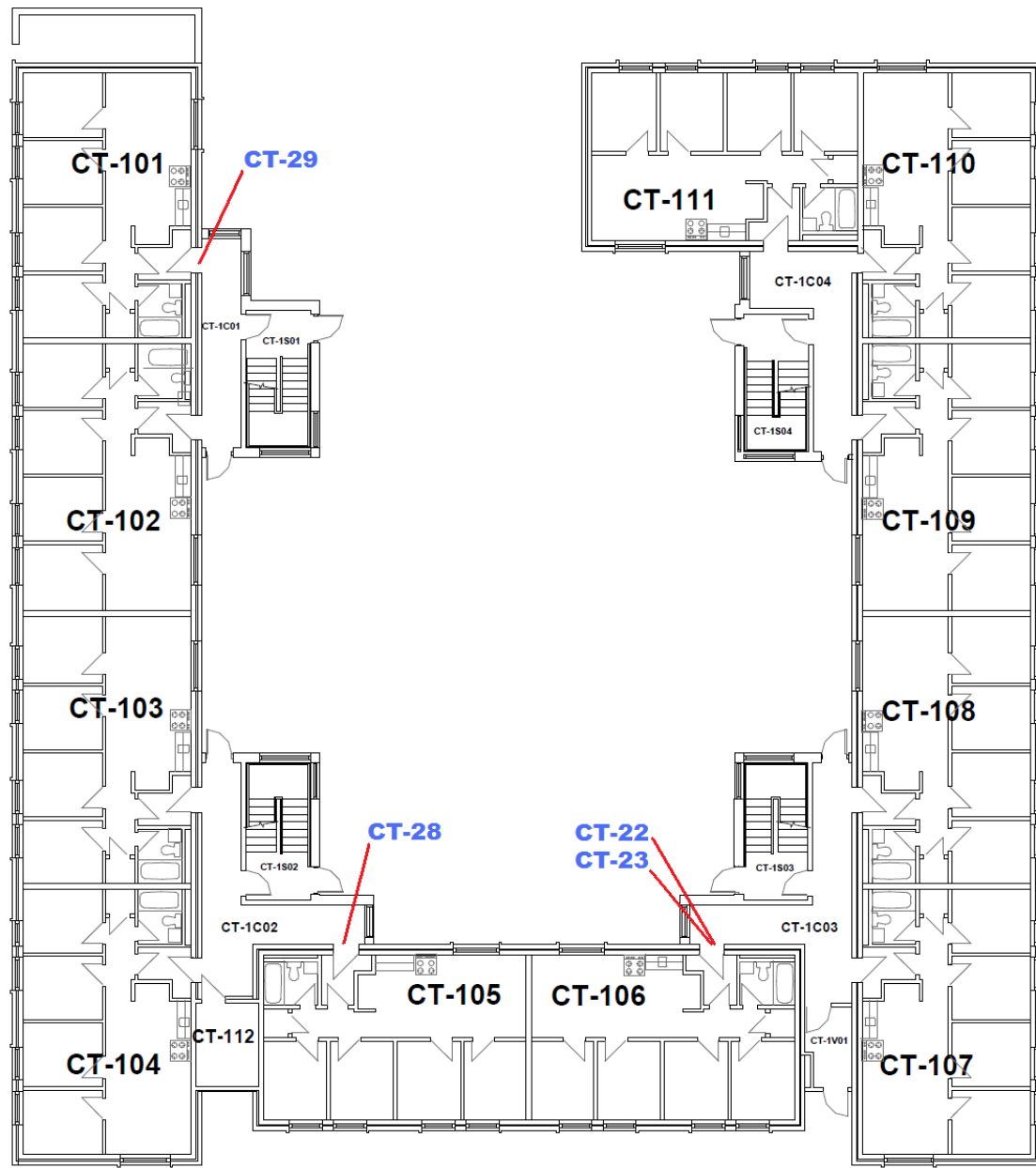
¹Suspect asbestos containing insulation. Visually distinguishable fitting from sample CT-1 (found to be non-asbestos containing).

² Suspect asbestos containing light fixture heat shield. Unable to open globe from fixture.

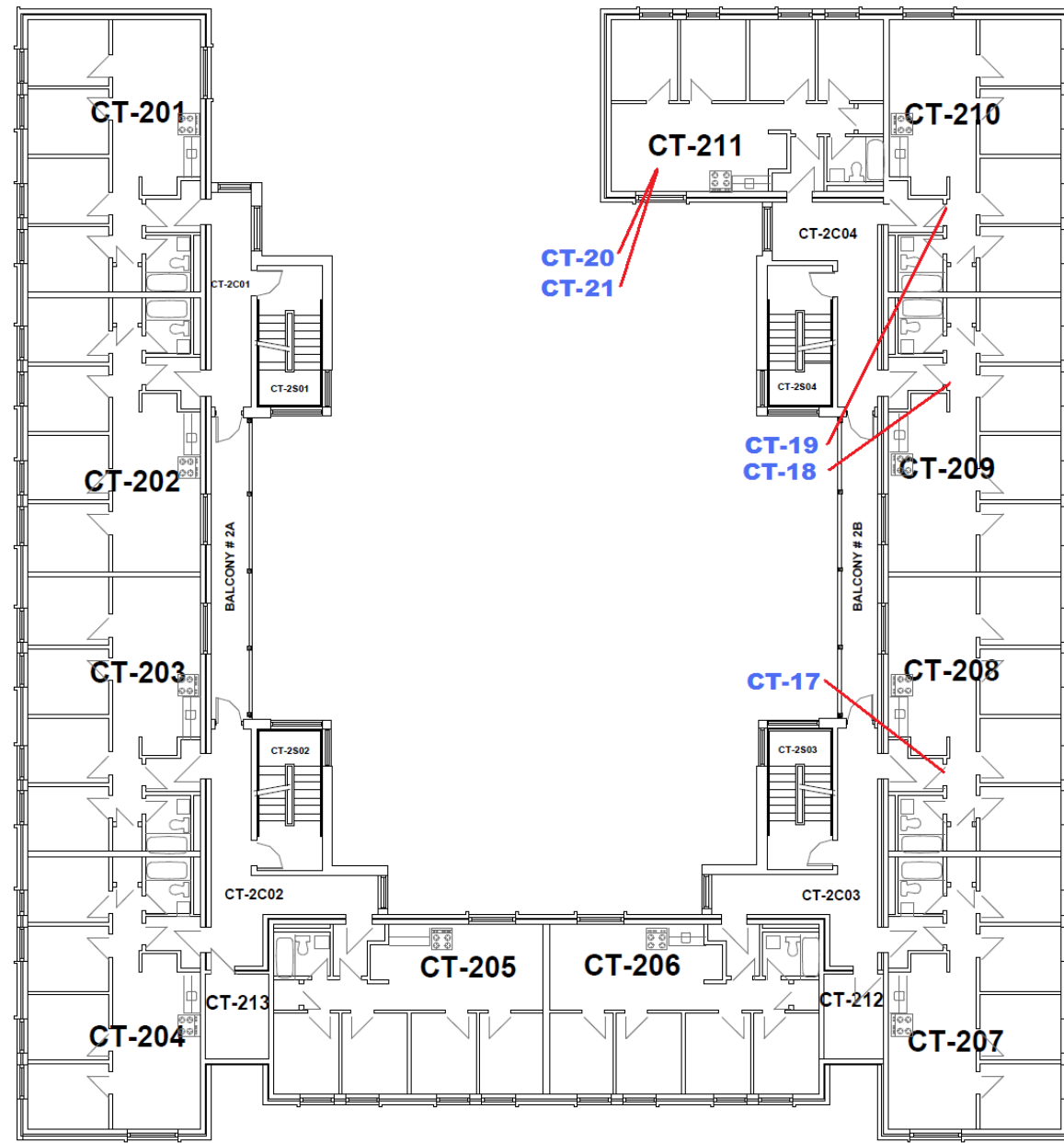
³Suspect asbestos containing transite. Visually similar material sampled at Cartier Court (sample #CR34)

APPENDIX IV
FLOOR PLANS SHOWING SAMPLING LOCATIONS

CABOT BUILDING
LEVEL -1



CABOT BUILDING
LEVEL - 2



**CABOT BUILDING
LEVEL - 3**

