

**Project #: 13916**

**ASBESTOS ASSESSMENT  
Hatcher House  
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**

**August 2011**


## EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited conducted an Asbestos Assessment at Hatcher House, 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:

- Seventeen (17) of the thirty-nine (39) 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.*)
- Ceiling texture coat was found to contain 3% Chrysotile asbestos
- 9" x 9" and 1' x 1' vinyl floor tiles, and their mastics, sampled from various locations were found to contain between 2 – 10% Chrysotile asbestos.
- Pipe fitting insulation was sampled and found to contain 60% Chrysotile asbestos.
- Light fixture heat shields were sampled and found to contain 40 - 50% Chrysotile asbestos.
- Duct insulation and tank insulation were sampled and both were found to contain 35% Chrysotile asbestos.
- Tar sealant was sampled and found to contain 10% Chrysotile asbestos.
- Exterior window caulking was sampled and found to contain 2% Chrysotile asbestos.
- Suspect asbestos containing transite panels were observed at the exterior of the main entrance of the building. This material was not sampled.

**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**

## TABLE OF CONTENTS

|            |                                  |           |
|------------|----------------------------------|-----------|
| <b>1.0</b> | <b>INTRODUCTION .....</b>        | <b>1</b>  |
| <b>2.0</b> | <b>ASBESTOS ASSESSMENT .....</b> | <b>1</b>  |
| 2.1        | Scope of Work .....              | 1         |
| 2.2        | Methodology .....                | 2         |
| 2.3        | Applicable Standards .....       | 2         |
| 2.4        | Survey Findings .....            | 3         |
| 2.5        | Recommendations .....            | 9         |
| <b>3.0</b> | <b>DISCLAIMER .....</b>          | <b>10</b> |

### LIST OF APPENDICES:

|                           |   |
|---------------------------|---|
| <b>APPENDIX I -----</b>   | <b>Photographs</b>                            |
| <b>APPENDIX II -----</b>  | <b>Laboratory Asbestos Results</b>            |
| <b>APPENDIX III -----</b> | <b>Asbestos Building Survey Report</b>        |
| <b>APPENDIX IV -----</b>  | <b>Floor Plans Showing Sampling Locations</b> |

## **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 Hatcher House 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-nine (39) suspect asbestos bulk samples were collected from the building. Representative suspect asbestos bulk material samples from floors, wall finishes, ceiling tiles, pipe fitting insulation, sprayed insulation, tar sealants, light fixture heat shields and exterior caulking 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 seventeen (17) of the thirty-nine (39) 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**  
**Hatcher House**  
**Memorial University of Newfoundland**  
**St. John's, NL**

| Sample No. | Sample Description and Location                          | Asbestos Results |
|------------|--|------------------|
| HA-1       | 9" x 9" Vinyl Floor Tile – dark grey with white – HA5S03 | 8% Chrysotile    |
|            | Mastic   | 5% Chrysotile    |
| HA-2       | 2' x 2' Ceiling Tile, fissure / pinhole - HA5C01         | None Detected    |
| HA-3       | Plaster – HA5C01   | None Detected    |
| HA-4       | 9" x 9" Vinyl Floor Tile – white with green – HA537      | 6% Chrysotile    |
|            | Mastic   | 3% Chrysotile    |
| HA-5       | Light Fixture Heat Shield – HA537                        | 40% Chrysotile   |
| HA-6       | Light Fixture Heat Shield – HA532                        | 40% Chrysotile   |
| HA-7       | Plaster – HA532  | None Detected    |

|               |   |                       |
|---------------|---|-----------------------|
| HA-8          | 1' x 1' Vinyl Floor Tile – grey mix – HA5C01<br>Common Area                 | None Detected         |
|               | Mastic  | None Detected         |
| HA-9          | Tar Sealant on Fibreglass Pipe – HA5C01                                     | None Detected         |
| HA-10         | Spray Fireproofing – HA5C01   | None Detected         |
| <b>HA-11</b>  | <b>Pipe Fitting Insulation – HA507</b>                                      | <b>60% Chrysotile</b> |
| <b>HA-12</b>  | <b>Duct Insulation – HA519</b>  | <b>35% Chrysotile</b> |
| <b>HA-13</b>  | <b>9" x 9" Vinyl Floor Tile – blue with white – HA4C03</b>                  | <b>8% Chrysotile</b>  |
|               | <b>Mastic</b>   | <b>3% Chrysotile</b>  |
| HA-14         | 1' x 1' Ceiling Tile – fissures – HA4C03                                    | None Detected         |
| HA-15         | 1' x 1' Vinyl Floor Tile – HA401  | None Detected         |
|               | Mastic  | None Detected         |
| <b>HA-15A</b> | <b>9" x 9" Vinyl Floor Tile – medium grey with white, dark grey – HA403</b> | <b>10% Chrysotile</b> |
|               | Mastic  | None Detected         |
| HA-16         | 1' x 1' Vinyl Floor Tile – beige with brown – HA409                         | None Detected         |
|               | Mastic  | None Detected         |
| HA-17         | Vinyl Sheet Flooring – brown mix – HA415                                    | None Detected         |
|               | Mastic  | None Detected         |
| HA-18         | 1' x 1' Vinyl Floor Tile – green mix – HA414A                               | None Detected         |
| HA-19         | Drywall Joint Compound – HA415  | None Detected         |
| HA-20         | 1' x 1' Vinyl Floor Tile – light grey mix – HA431                           | None Detected         |
| HA-21         | Plaster – HA321   | None Detected         |
| HA-22         | Vinyl Sheet Flooring - green – HA311  | None Detected         |
|               | Mastic  | None Detected         |
| <b>HA-23</b>  | <b>1' x 1' Vinyl Floor Tile – cream with brown, white – HA304</b>           | <b>None Detected</b>  |
|               | <b>Mastic</b>   | <b>3% Chrysotile</b>  |

|              |   |                       |
|--------------|---|-----------------------|
| <b>HA-24</b> | <b>Light Fixture Heat Shield – HA3C01</b>                             | <b>50% Chrysotile</b> |
| HA-25        | 1' x 1' Vinyl Floor Tile – white with black – HA3S01                  | None Detected         |
|              | Mastic  | None Detected         |
| HA-26        | 2' x 4' Ceiling Tile – square pattern – HA2C01                        | None Detected         |
| HA-27        | Plaster – HA2C01  | None Detected         |
| <b>HA-28</b> | 1' x 1' Vinyl Floor Tile – dark grey with white – HA2S02              | None Detected         |
|              | <b>Mastic</b>   | <b>3% Chrysotile</b>  |
| HA-29        | Spray Fireproofing - HA208  | None Detected         |
| HA-30        | Vinyl Sheet Flooring – brown mix – HA211                              | None Detected         |
| <b>HA-31</b> | <b>Texture Coat – HA211</b>   | <b>3% Chrysotile</b>  |
| HA-32        | 1' x 1' Vinyl Floor Tile – cream mix – HA207                          | None Detected         |
|              | Mastic  | None Detected         |
| <b>HA-33</b> | <b>Tar Sealant on Fiberglass Duct – HA1C02</b>                        | <b>10% Chrysotile</b> |
| <b>HA-34</b> | <b>Tank Insulation – HA114</b>  | <b>35% Chrysotile</b> |
| <b>HA-35</b> | <b>9" x 9" Vinyl Floor Tile - Red – HA114</b>                         | <b>10% Chrysotile</b> |
|              | <b>Mastic</b>   | <b>4% Chrysotile</b>  |
| <b>HA-36</b> | <b>1' x 1' Vinyl Floor Tile – light grey with medium grey – HA117</b> | <b>2% Chrysotile</b>  |
|              | Mastic  | None Detected         |
| <b>HA-37</b> | <b>Exterior Window Caulking</b>                                       | <b>2% Chrysotile</b>  |
| HA-38        | Wall Cavity Plaster – HA411   | None Detected         |

### **Mechanical and Pipe Material**

Pipe fitting insulation which could potentially contain asbestos was observed in select areas throughout the building during this assessment. Samples were collected and analyzed for asbestos content using the PLM method of detection and found to contain 60% Chrysotile asbestos (see sample HA-11 in Appendix II, Photographs 1-8, Appendix I)

Duct seam insulation was observed in select locations throughout the building during the assessment. Samples were collected and analyzed for asbestos content using the PLM method of detection and found to contain 35% Chrysotile asbestos. The duct insulation



that was sampled in Room HA519 was observed to be in poor condition. (see sample HA-12 in Appendix II,)

Duct insulation observed in Room HA-218 was too high to access for visual inspection or sample collection, thus it must be considered to be asbestos containing until proven otherwise. (see Photograph 9, Appendix I)

Tank insulation observed in Room HA-114 was sampled and analyzed for asbestos content using the PLM method of detection. The sample was found to contain 35% Chrysotile asbestos. The insulation was observed to be in good condition. (see sample HA-34 in Appendix II, Photograph 10, 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**

Two tar sealants were observed during the building assessment. One (1) sample of the sealant was observed on linear fiberglass pipe above the ceiling tiles located in HA5C01. The tar sealant was collected and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. One (1) sample of tar sealant was observed on foil on duct insulation found above the ceiling tiles located in HA1C02. The tar sealant was collected and analyzed for asbestos content using the PLM method of detection. The sample was found to contain 10% Chrysotile asbestos. Tar sealants throughout the building must be considered to be asbestos containing (see samples HA-9 and HA-33 in Appendix II, Photograph 11, Appendix I,)

### **Friable Acoustic Texture Coats and Plaster Finishes**

Plaster finishes were observed throughout the building during the assessment. Five (5) samples of this material were sampled and analyzed for asbestos content using the PLM method of detection. The samples were identified as non-asbestos containing. (see samples HA-3, HA-7, HA-21, HA-27, HA-38 in Appendix II).

Drywall joint compound (DJC) finishes were observed in select locations within the building during the assessment. One (1) sample was collected and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample HA-19 in Appendix II).

Texture coating on ceilings were observed in select locations within the building 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 3% Chrysotile asbestos. (see sample HA-31 in Appendix II, Photograph 12 in Appendix I).

*It should be noted that due to the uncertainty of when and where a specific type of texture coating was used, it is to be assumed that texture coating present in the building contains asbestos.*

### **Friable Acoustic and Thermal Fireproofing Products**

Two locations of sprayed fireproofing were observed during the building survey. Samples were collected from both locations and analyzed for asbestos content using the PLM method of detection. The samples were identified as non-asbestos containing. (see samples HA-10, HA-29 in Appendix II)

### **Friable Ceiling Tiles / Ceiling Tile Adhesives**

1' x 1' ceiling tiles were observed in select areas of the building during the assessment. One (1) sample of this material was collected and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample HA-14 in Appendix II).

2' x 2' ceiling tiles were observed in select areas of the building during the assessment. One (1) sample of this material was collected and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample HA-2 in Appendix II)

2' x 4' ceiling tiles were observed in select areas of the building during the assessment. Many of these tiles contained a date stamp located on the back of the tile, indicating the manufacturing date. Based on this date, they were not suspected to contain asbestos. One (1) additional sample of 2' x 4' ceiling tile with a large square pattern was sampled and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample HA-26 in Appendix II)

### **Vinyl Sheet/Linoleum Flooring**

Various vinyl sheet floorings which could potentially contain asbestos were identified in the building during the assessment. Three (3) samples of this flooring were sampled and analyzed for asbestos content using the PLM method of detection. The samples and their associated mastics were identified as non-asbestos containing. (see samples HA-17, HA-22, HA-30 in Appendix II)

### **Non-Friable Vinyl Floor Tiles/ Floor Tile Adhesives**

Vinyl floor tiles which could potentially contain asbestos were identified during the assessment. Nine (9) samples of 1' x 1' vinyl floor tiles were sampled and analyzed for asbestos content using the PLM method of detection. One (1) tile was found to contain 2% Chrysotile asbestos. Two (2) of the associated mastics were identified as containing 3% Chrysotile asbestos (See samples HA-8, HA-15, HA-16, HA-18, HA-20, HA-23, HA-25, HA-28, HA-32, HA-36 in Appendix II, see Photograph 13, Appendix I)

Five (5) samples of 9" x 9" vinyl floor tiles were sampled and analyzed for asbestos content using the PLM method of detection. All of the samples were identified as containing between 6 and 10% Chrysotile asbestos. Four (4) of their associated mastics were identified as containing between 3 and 5% Chrysotile asbestos. (See samples HA-1, HA-4, HA-13, HA-15A, HA-35 in Appendix II, Photographs 14 - 18, Appendix I)

### **Non-Friable Transite Panels, Sheeting and Shingles**

Suspect asbestos containing transite paneling was observed on the exterior overhang and the main entrance of the building. This material was not sampled, as doing so would compromise the integrity of the material. As such, it must be considered to be asbestos containing until proven otherwise. (see Photograph 19, Appendix I)

### **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, and were found to contain 40 - 50% Chrysotile asbestos (see samples HA-5, HA-6, HA-24 in Appendix II, see Photograph 19 - 21 in Appendix I).

### **Roofing Materials**

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

### **Other Materials**

One (1) sample of exterior window caulking was collected from the front of the building, was analyzed for asbestos content using the PLM method of detection. The sample was found to contain 2% Chrysotile asbestos. (see sample HA-37 in Appendix II)

Interior window caulking was not sampled 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



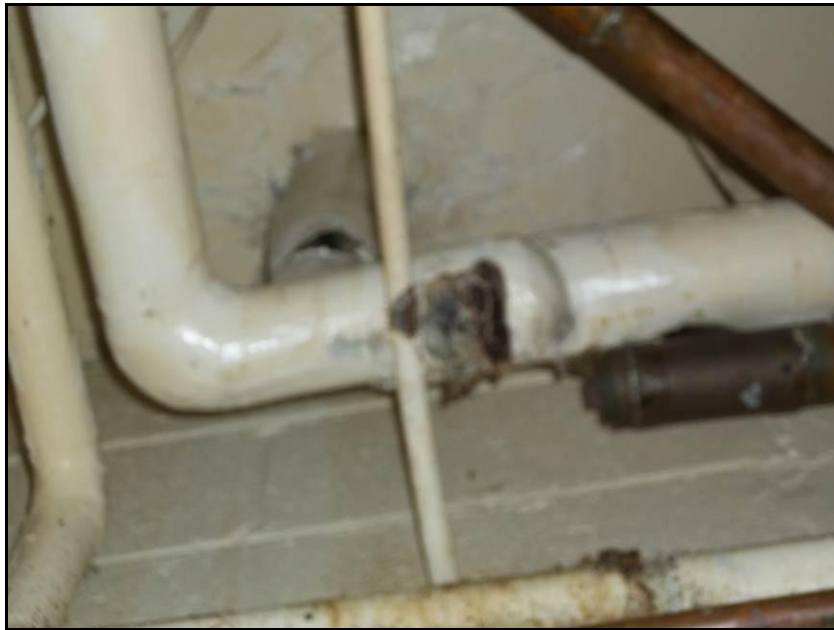
**Photograph 1: Pipe fitting insulation in the Corridor HA1C03, in poor condition. Limited viewing was available above the ceiling tiles.**



**Photograph 2: Pipe fitting insulation in Stairway HA1S03, in poor condition.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 18, 2011 |
|---|--|---------------------------------|





**Photograph 3: Pipe fitting insulation in Room HA101, in poor condition.**



**Photograph 4: Pipe fitting insulation in Room HA208, in poor condition.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 18, 2011 |
|---|--|---------------------------------|



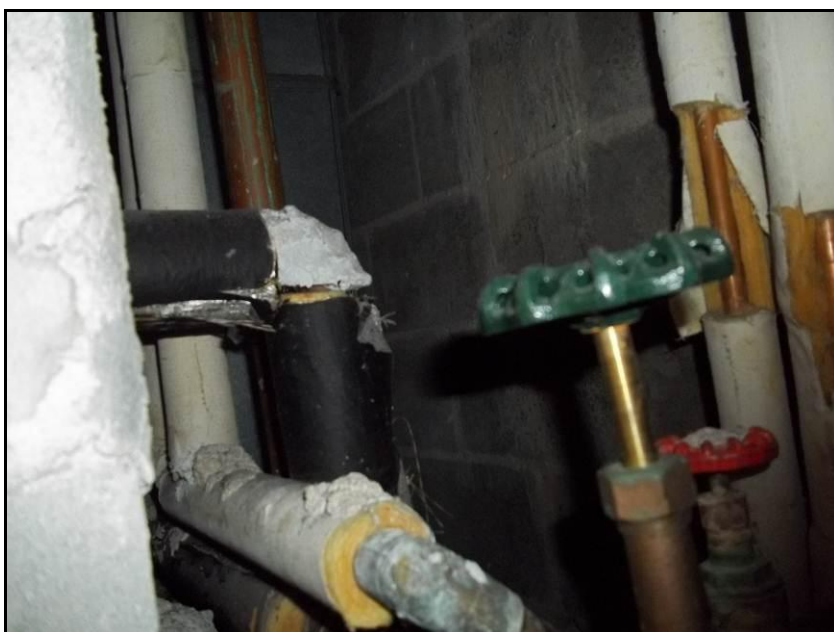


**Photograph 5: Pipe fitting insulation in Stairway HA3S03, in poor condition.**



**Photograph 6: Pipe fitting insulation in the access hatch in Room HA321, in poor condition.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|



**Photograph 7: Pipe fitting insulation in the access hatch in Room HA422 in poor condition.**



**Photograph 8: Pipe fitting insulation in the shower of Room HA507 in poor condition..**

|  |   |                          |
|--|---|--------------------------|
| Consultant:<br>Carla Noseworthy, CET<br>ALL-TECH Environmental | Building:<br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | Date:<br>August 19, 2011 |
|--|---|--------------------------|



**Photograph 9: Duct in Room HA208, too high to assess. As such it must be considered to be asbestos containing until proven otherwise.**



**Photograph 10: Asbestos containing tank insulation in Room HA114.**

|  |  |   |
|--|--|---|
| <p><b>Consultant:</b><br/>Carla Noseworthy, CET<br/>ALL-TECH Environmental</p> | <p><b>Building:</b><br/>Hatcher House<br/>Memorial University of Newfoundland<br/>St. John's, NL</p> | <p><b>Date:</b><br/>August 19, 2011</p> |
|--|--|---|



**Photograph 11: Asbestos containing tar sealant on fiberglass duct above the ceiling tiles in Corridor HA1C02.**



**Photograph 12: Asbestos containing texture coat on the ceilings of HA210 and HA211.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|





**Photograph 13: Asbestos containing 1' x 1' vinyl floor tile.**



**Photograph 14: Asbestos containing 9" x 9" vinyl floor tile, sample HA-1.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|



**Photograph 15: Asbestos containing 9" x 9" vinyl floor tile, sample HA-4.**



**Photograph 16: Asbestos containing 9" x 9" vinyl floor tile, sample HA-13**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|



**Photograph 17: Asbestos containing 9" x 9" vinyl floor tile, sample HA-15A**

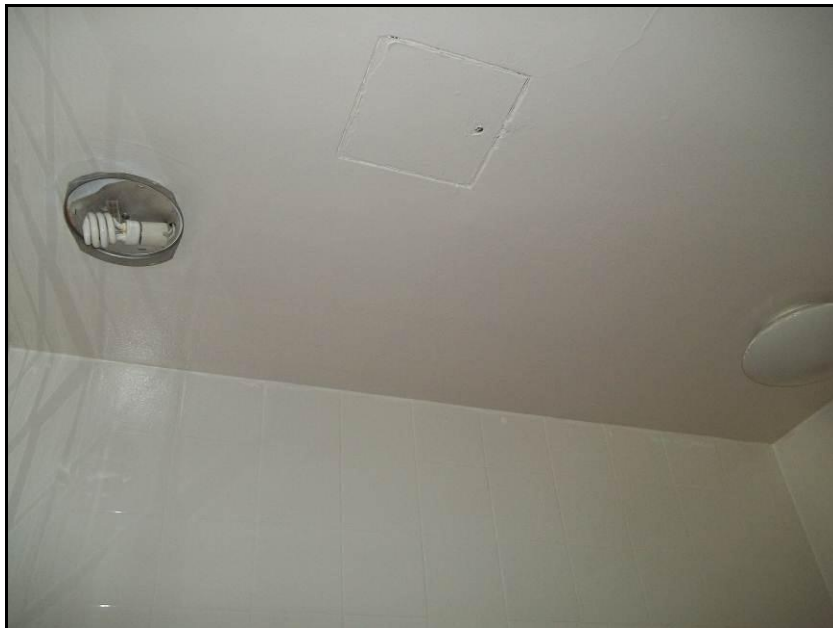


**Photograph 18: Asbestos containing 9" x 9" vinyl floor tile, sample HA-35.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|



**Photograph 19: Suspect asbestos containing transite ceiling panel (and asbestos containing light fixture heat shields, HA-6) exterior of the main entrance to the building.**



**Photograph 20: Asbestos containing light fixture heat shields, HA-6.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|





**Photograph 21: Asbestos containing light fixture heat shields, HA-24.**

|   |  |                                 |
|---|--|---------------------------------|
| <b>Consultant:</b><br>Carla Noseworthy, CET<br>ALL-TECH Environmental | <b>Building:</b><br>Hatcher House<br>Memorial University of Newfoundland<br>St. John's, NL | <b>Date:</b><br>August 19, 2011 |
|---|--|---------------------------------|

**APPENDIX II**  
LABORATORY ASBESTOS RESULTS

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 226-3675 Fax: (856) 786-0074 Email: cinnlab@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax: (709) 754-4146  
Project: 13916/HATCHER

EMSL Proj:  
Analysis Date: 8/24/2011

**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        |
| HA-1-Floor Tile<br>041123002-0001 | - 9 X9 RT- DK<br>GREY W/WHITE     | Gray<br>Non-Fibrous<br>Homogeneous  |                                | 92% Non-fibrous (other)  | 8% Chrysotile |
| HA: HA 35503                      |                                   |                                     |                                |                          |               |
| HA-1-Mastic<br>041123002-0001A    | - 9 X9 RT- DK<br>GREY W/WHITE     | Black<br>Non-Fibrous<br>Homogeneous |                                | 95% Non-fibrous (other)  | 5% Chrysotile |
| HA: HA55503                       |                                   |                                     |                                |                          |               |
| HA-2<br>041123002-0002            | - 2 X2 CT -<br>PISSURE<br>PINHOLE | White<br>Fibrous<br>Homogeneous     | 40% Cellulose<br>40% Min. Wool | 20% Non-fibrous (other)  | None Detected |
| HA: HA5C01                        |                                   |                                     |                                |                          |               |
| HA-3<br>041123002-0003            | - PLASTER                         | White<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (other) | None Detected |
| HA: HA5C01                        |                                   |                                     |                                |                          |               |
| HA-4-Floor Tile<br>041123002-0004 | - 9 X 9 VT -<br>WHITE W/<br>GREEN | White<br>Non-Fibrous<br>Homogeneous |                                | 94% Non-fibrous (other)  | 6% Chrysotile |
| HA: HA537                         |                                   |                                     |                                |                          |               |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AHA-LAP, LLC-PLAP Lab 100194, NYS ELAP 18872, NJ DEP 00036

Test Report PLM-7.23.0 Printed: 8/29/2011 3:33:50 PM

1

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 225-3675 Fax: (856) 785-5974 Email: cinnabb@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax: Phone: (709) 754-4146  
Project: 13916/HATCHER

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-4-Mastic<br>041123002-0004A    | - 9 X 9 VT -<br>WHITE W/<br>GREEN | Black<br>Non-Fibrous<br>Homogeneous     |               | 97% Non-Fibrous (other)  | 3% Chrysotile  |
| HA: HA537                         |                                   |   |               |                          |                |
| HA-5<br>041123002-0005            | - LIGHT<br>FIXTURE HEAT<br>SHIELD | Tan<br>Fibrous<br>Homogeneous           | 10% Cellulose | 50% Non-Fibrous (other)  | 40% Chrysotile |
| HA: HA537                         |                                   |   |               |                          |                |
| HA-6<br>041123002-0006            | - LIGHT<br>FIXTURE HEAT<br>SHIELD | Tan<br>Fibrous<br>Homogeneous           | 10% Cellulose | 50% Non-Fibrous (other)  | 40% Chrysotile |
| HA: HA532                         |                                   |   |               |                          |                |
| HA-7<br>041123002-0007            | - PLASTER                         | White<br>Non-Fibrous<br>Homogeneous     |               | 100% Non-Fibrous (other) | None Detected  |
| HA: HA532                         |                                   |   |               |                          |                |
| HA-8-Floor Tile<br>041123002-0008 | - 1 X 1 VT- GREY<br>MX            | Gray/Blue<br>Non-Fibrous<br>Homogeneous |               | 100% Non-Fibrous (other) | None Detected  |
| HA: HA501                         |                                   |   |               |                          |                |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.  
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101948-D, AHA-LAP, LLC-PLAP Lab 101994, NYS ELAP 19872, NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 220-3675 Fax: (856) 786-0974 Email: cinnatlab@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/HATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-8-Mastic<br>041123002-0008A | - 1 X 1 VT- GREY<br>MX         | Black<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (other) | None Detected  |
| HA: HASCD1                     |                                |                                     |                                |                          |                |
| HA-9<br>041123002-0009         | - TAR SEALANT                  | Black<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (other) | None Detected  |
| HA: HASCD1                     |                                |                                     |                                |                          |                |
| HA-10<br>041123002-0010        | - FIRE<br>PROOFING             | Gray<br>Fibrous<br>Homogeneous      | 30% Cellulose<br>40% Min. Wool | 30% Non-fibrous (other)  | None Detected  |
| HA: HASCD1                     |                                |                                     |                                |                          |                |
| HA-11<br>041123002-0011        | - PIPE FITTING -<br>INSULATION | Gray<br>Fibrous<br>Homogeneous      |                                | 40% Non-fibrous (other)  | 60% Chrysotile |
| HA: HASST                      |                                |                                     |                                |                          |                |
| HA-12<br>041123002-0012        | - DUCT<br>INSULATION           | Gray<br>Fibrous<br>Homogeneous      |                                | 65% Non-fibrous (other)  | 35% Chrysotile |
| HA: HAS19                      |                                |                                     |                                |                          |                |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AHA-LAP, LLC-PLAP Lab 100104, NYS ELAP 18872, NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 225-3675 Fax: (856) 786-0974 Email: [cinlab@EMSL.com](mailto:cinlab@EMSL.com)

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/HATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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        |
| HA-13-Floor Tile<br>041123002-0013 | - 9 X9 - BLUE W/<br>WHITE   | Blue<br>Non-Fibrous<br>Homogeneous  |               | 92% Non-fibrous (other)  | 8% Chrysotile |
| HA: HA403                          |                             |                                     |               |                          |               |
| HA-13-Mastic<br>041123002-0013A    | - 9 X9 - BLUE W/<br>WHITE   | Black<br>Non-Fibrous<br>Homogeneous |               | 97% Non-fibrous (other)  | 3% Chrysotile |
| HA: HA403                          |                             |                                     |               |                          |               |
| HA-14<br>041123002-0014            | - 1 X 1 CT-<br>FISSURES     | White<br>Fibrous<br>Homogeneous     | 85% Min. Wool | 15% Non-fibrous (other)  | None Detected |
| HA: HA403                          |                             |                                     |               |                          |               |
| HA-15-Floor Tile<br>041123002-0015 | - 1 X 1 - WHITE<br>W/ BLACK | White<br>Non-Fibrous<br>Homogeneous |               | 100% Non-fibrous (other) | None Detected |
| HA: HA401                          |                             |                                     |               |                          |               |
| HA-15-Mastic<br>041123002-0015A    | - 1 X 1 - WHITE<br>W/ BLACK | Black<br>Non-Fibrous<br>Homogeneous |               | 100% Non-fibrous (other) | None Detected |
| HA: HA401                          |                             |                                     |               |                          |               |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.  
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101045-0, AHA-LAP, LLC-PLAP Lab 100104, NYS ELAP 19872, NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 229-3675 Fax: (856) 786-9974 Email: cinnablab@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax: (709) 754-4146  
Project: 13916/HATCHER

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-15A-Floor Tile<br>041123002-0016 | - 9 X 9 MED<br>GREY W/ WHITE,<br>DK GREY | Gray<br>Non-Fibrous<br>Homogeneous  | HA: HA403    | 90% Non-fibrous (other)  | 10% Chrysotile |
| HA-15A-Mastic<br>041123002-0016A    | - 9 X 9 MED<br>GREY W/ WHITE,<br>DK GREY | Black<br>Non-Fibrous<br>Homogeneous | HA: HA403    | 100% Non-fibrous (other) | None Detected  |
| HA-16-Floor Tile<br>041123002-0017  | - 1 X 1 VT -<br>BEIGE W/<br>BROWN        | Beige<br>Non-Fibrous<br>Homogeneous | HA: HA409    | 100% Non-fibrous (other) | None Detected  |
| HA-16-Mastic<br>041123002-0017A     | - 1 X 1 VT -<br>BEIGE W/<br>BROWN        | Black<br>Non-Fibrous<br>Homogeneous | HA: HA409    | 100% Non-fibrous (other) | None Detected  |
| HA-17-Flooring<br>041123002-0018    | - VSP - BROWN<br>MX                      | Brown<br>Non-Fibrous<br>Homogeneous | HA: HA415    | 100% Non-fibrous (other) | None Detected  |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AHA-LAP, LLC-PLAP Lab 100194, NYS ELAP 18872, NJ DEP 00036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 225-3675 Fax: (856) 785-5974 Email: cinnabb@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/HATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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        |
| HSA-17-Mastic<br>041123002-0016A | - VSP - BROWN<br>MX        | Yellow<br>Non-Fibrous<br>Homogeneous     |              | 100% Non-fibrous (other) | None Detected |
| HL: HSA15                        |                            |  |              |                          |               |
| HSA-18<br>041123002-0019         | - 1 X 1 VT -<br>GREEN MX   | Green<br>Non-Fibrous<br>Homogeneous      |              | 100% Non-fibrous (other) | None Detected |
| HL: HSA16A<br>No mastic          |                            |  |              |                          |               |
| HSA-19<br>041123002-0020         | - DJC                      | White<br>Non-Fibrous<br>Homogeneous      |              | 100% Non-fibrous (other) | None Detected |
| HL: HSA15                        |                            |  |              |                          |               |
| HSA-20<br>041123002-0021         | - 1 X 1 VT - IT<br>GREY MX | Gray<br>Non-Fibrous<br>Homogeneous       |              | 100% Non-fibrous (other) | None Detected |
| HL: HSA31<br>No mastic           |                            |  |              |                          |               |
| HSA-21<br>041123002-0022         | - PLASTER                  | Gray/White<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (other)  | None Detected |
| HL: HSA32                        |                            |  |              |                          |               |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101948-D, AHA-LAP, LLC-PLAP Lab 10194, NYS ELAP 19872, NJ DEP 03036



**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 228-3675 Fax: (856) 786-8874 Email: cinnamin@emsl.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax: (709) 754-4146  
Project: 13916/HATCHER

EMSL Proj:  
Analysis Date: 8/24/2011

**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        |
| HA-36-Floor Tile<br>041123002-0023 | - 1 X 1 VT - IT<br>GREY W/ MED<br>GREY   | Gray<br>Non-Fibrous<br>Homogeneous   |              | 98% Non-Fibrous (other)  | 2% Chrysotile |
|                                    |  | HA: HA117                            |              |                          |               |
| HA-36-Mastic<br>041123002-0023A    | - 1 X 1 VT - IT<br>GREY W/ MED<br>GREY   | Black<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-Fibrous (other) | None Detected |
|                                    |  | HA: HA117                            |              |                          |               |
| HA-22-Flooring<br>041123002-0024   | - VSP                                    | Green<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-Fibrous (other) | None Detected |
|                                    |  | HA: HA311                            |              |                          |               |
| HA-22-Mastic<br>041123002-0024A    | - VSP                                    | Yellow<br>Non-Fibrous<br>Homogeneous |              | 100% Non-Fibrous (other) | None Detected |
|                                    |  | HA: HA311                            |              |                          |               |
| HA-23-Floor Tile<br>041123002-0025 | - 1 X 1 VT -<br>CREAM W/<br>BROWN, WHITE | Cream<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-Fibrous (other) | None Detected |
|                                    |  | HA: HA304                            |              |                          |               |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.  
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-S, AHA-LAP, LLC-PLAP Lab 100104, NYS ELAP 19872, NJ DEP 03036

Test Report PLM-7.23.0 Printed: 8/29/2011 3:33:50 PM

7

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 226-3675 Fax: (856) 786-0974 Email: [clientlab@EMSL.com](mailto:clientlab@EMSL.com)

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/MATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-23-Mastic<br>041123002-0025A    | - 1 X 1 VT -<br>CREAM W/<br>BROWN, WHITE | Black<br>Non-Fibrous<br>Homogeneous  |                                | 97% Non-fibrous (other)  | 3% Chrysotile  |
| HA: HA304                          |  |                                      |                                |                          |                |
| HA-24<br>041123002-0026            | - LIGHT<br>FIXTURE HEAT<br>SHIELD        | Tan<br>Fibrous<br>Homogeneous        |                                | 50% Non-fibrous (other)  | 50% Chrysotile |
| HA: HA3001                         |  |                                      |                                |                          |                |
| HA-25-Floor Tile<br>041123002-0027 | - 1 X 1 VT -<br>WHITE W/ BLACK           | White<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (other) | None Detected  |
| HA: HA3001                         |  |                                      |                                |                          |                |
| HA-25-Mastic<br>041123002-0027A    | - 1 X 1 VT -<br>WHITE W/ BLACK           | Black<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (other) | None Detected  |
| HA: HA3001                         |  |                                      |                                |                          |                |
| HA-26<br>041123002-0028            | - 2 X 4 CT-<br>SQUARE<br>PATTERN         | Gray/White<br>Fibrous<br>Homogeneous | 50% Cellulose<br>30% Min. Wood | 20% Non-fibrous (other)  | None Detected  |
| HA: HA3001                         |  |                                      |                                |                          |                |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0. AHA-LAP, LLC-ILAP Lab 100104. NYS ELAP 10072. NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 225-3675 Fax: (856) 786-8874 Email: cinnabbb@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/HATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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        |
| HA-27<br>041123002-0029            | - PLASTER                        | White<br>Non-Fibrous<br>Homogeneous |               | 100% Non-fibrous (other) | None Detected |
| HA: HA2C01                         |                                  |                                     |               |                          |               |
| HA-28-Floor Tile<br>041123002-0030 | - 1 X 1 VT - DK<br>GREY W/ WHITE | Gray<br>Non-Fibrous<br>Homogeneous  |               | 100% Non-fibrous (other) | None Detected |
| HA: HA2502                         |                                  |                                     |               |                          |               |
| HA-28-Mastic<br>041123002-0030A    | - 1 X 1 VT - DK<br>GREY W/ WHITE | Black<br>Non-Fibrous<br>Homogeneous |               | 97% Non-fibrous (other)  | 3% Chrysotile |
| HA: HA2502                         |                                  |                                     |               |                          |               |
| HA-29<br>041123002-0031            | - FIRE<br>PROOFING               | Gray<br>Fibrous<br>Homogeneous      | 80% Min. Wool | 20% Non-fibrous (other)  | None Detected |
| HA: HA208                          |                                  |                                     |               |                          |               |
| HA-30<br>041123002-0032            | - V/SF- BROWN<br>MDX             | Brown<br>Fibrous<br>Homogeneous     | 30% Cellulose | 70% Non-fibrous (other)  | None Detected |
| HA: HA211                          |                                  |                                     |               |                          |               |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 10:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101948-0, AHA-LAP, LLC-PLAP Lab 100104, NYS ELAP 10072, NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 226-3675 Fax: (856) 786-0974 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: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/MATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-31<br>041123002-0033            | - TEXTURE<br>COAT              | White<br>Non-Fibrous<br>Homogeneous  |              | 97% Non-fibrous (other)  | 3% Chrysotile  |
| HA: HA211                          |                                |                                      |              |                          |                |
| HA-32-Floor Tile<br>041123002-0034 | - 1 X 1 VT -<br>CREAM MIX      | Cream<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-fibrous (other) | None Detected  |
| HA: HA207                          |                                |                                      |              |                          |                |
| HA-32-Mastic<br>041123002-0034A    | - 1 X 1 VT -<br>CREAM MIX      | Yellow<br>Non-Fibrous<br>Homogeneous |              | 100% Non-fibrous (other) | None Detected  |
| HA: HA207                          |                                |                                      |              |                          |                |
| HA-33<br>041123002-0035            | - TAR ON<br>FIBERGLASS<br>DUCT | Black<br>Non-Fibrous<br>Homogeneous  |              | 90% Non-fibrous (other)  | 10% Chrysotile |
| HA: HA1002                         |                                |                                      |              |                          |                |
| HA-34<br>041123002-0036            | - TANK<br>INSULATION           | Gray<br>Fibrous<br>Homogeneous       |              | 65% Non-fibrous (other)  | 35% Chrysotile |
| HA: HA114                          |                                |                                      |              |                          |                |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIM, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0. AHA-LAP, LLC-ILAP Lab 100104. NYS ELAP 10072. NJ DEP 03036

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 226-3675 Fax: (856) 786-9374 Email: cinnabb@EMSL.com

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

Customer ID: ATE5440  
Customer PO:  
Received: 08/24/11 9:20 AM  
EMSL Order: 041123002

Fax:  
Project: 13916/HATCHER

Phone: (709) 754-4146

EMSL Proj:  
Analysis Date: 8/24/2011

**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         |
| HA-35-Floor Tile<br>041123002-0037 | - 9 X 9 - RED                    | Brown/Red<br>Non-Fibrous<br>Homogeneous<br>HL HA116 |              | 90% Non-fibrous (other)  | 10% Chrysotile |
| HA-35-Mastic<br>041123002-0037A    | - 9 X 9 - RED                    | Black<br>Non-Fibrous<br>Homogeneous<br>HL HA116     |              | 96% Non-fibrous (other)  | 4% Chrysotile  |
| HA-37<br>041123002-0038            | - EXTERIOR<br>WINDOW<br>CAULKING | Gray<br>Non-Fibrous<br>Homogeneous<br>HL HA38       |              | 98% Non-fibrous (other)  | 2% Chrysotile  |
| HA-38<br>041123002-0039            | - WALL CAVITY<br>PLASTER         | White<br>Non-Fibrous<br>Homogeneous<br>HL HA411     |              | 100% Non-fibrous (other) | None Detected  |

Report Amended: 08/29/2011 15:33:50 Replaces the Initial Report 08/24/2011 19:21:51. Reason Code: Data Entry-Change to Appearance

Analyst(s)

Melanie Koenig (54)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAP unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.  
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101948-D, AHA-LAP, LLC-PLAP Lab 100194, NYS ELAP 19872, NJ DEP 03036

Test Report PLM-7.23.0 Printed: 8/29/2011 3:33:50 PM

**THIS IS THE LAST PAGE OF THE REPORT.**

11

**APPENDIX III**  
ASBESTOS BUILDING SURVEY INFORMATION

### Asbestos Bldg Survey Information -- Hatcher House

| Room #         | Bldg. System | Component | Material Type           | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location                     | Sample Description                             | Result         |
|----------------|--------------|-----------|-------------------------|--------|------------|------|------|---------|-----------------------|------------|-------------------------------------|--|----------------|
|                |              |           |                         |        | Good       | Fair | Poor | Sprayed |                       |            |                                     |  |                |
| Exterior       |              |           | Window Caulking         | A - C  | X          |      |      |         |                       | HA-37      | Window at Ground Level              | White Caulking                                 | 2% Chrysotile  |
| HA1C02         |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 250 ft <sup>2</sup> | HA-15A     |                                     | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA1C02         |              |           | Pipe Fitting Insulation | C      | X          |      |      |         | 2                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA1C02         |              |           | Tar on Fibreglass Pipe  | C      | X          |      |      |         |                       | HA-33      | Fibreglass Pipe, above ceiling tile | Black Tar                                      | 10% Chrysotile |
| HA1C03         |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 600 ft <sup>2</sup> | HA-13      |                                     | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA1C03         |              |           | Tile Mastic             | A      | X          |      |      |         | ~ 600 ft <sup>2</sup> | HA-13      |                                     | Black  | 3% Chrysotile  |
| HA1C03         |              |           | Pipe Fitting Insulation | A      |            |      | X    |         | 5                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA1S01         |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                                     | 9" x 9" White with Green Tile                  | 6% Chrysotile  |
| HA1S01         |              |           | Tile Mastic             | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                                     | Black  | 3% Chrysotile  |
| HA1S01         |              |           | Pipe Fitting Insulation | A      | X          |      |      |         | 12                    | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA1S02         |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                                     | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA1S02         |              |           | Tile Mastic             | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                                     | Black  | 5% Chrysotile  |
| HA1S03         |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                                     | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA1S03         |              |           | Tile Mastic             | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                                     | Black  | 5% Chrysotile  |
| HA1S03         |              |           | Pipe Fitting Insulation | A      | X          |      |      |         | 12                    | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA1S03         |              |           | Pipe Fitting Insulation | A      |            |      | X    |         | 4                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA101          |              |           | Pipe Fitting Insulation | A      |            |      | X    |         | 1                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA101          |              |           | Pipe Fitting Insulation | A      | X          |      |      |         | 9                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA103          |              |           | Pipe Fitting Insulation | C      | X          |      |      |         | 10                    | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA104          |              |           | Pipe Fitting Insulation | C      | X          |      |      |         | 5                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA104          |              |           | Pipe Fitting Insulation | C      |            |      | X    |         | 1                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA106          |              |           | Pipe Fitting Insulation | C      | X          |      |      |         | 6                     | HA-11      |                                     | Grey Insulation                                | 60% Chrysotile |
| HA107 / HA107A |              |           | Vinyl Floor Tile        | A      | X          |      |      |         | ~ 120 ft <sup>2</sup> | HA-1       |                                     | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA107 / HA107A |              |           | Tile Mastic             | A      | X          |      |      |         | ~ 120 ft <sup>2</sup> | HA-1       |                                     | Black  | 5% Chrysotile  |

| Room #         | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity               | Sample No. | Sample Location | Sample Description                             | Result         |
|----------------|--------------|-----------|---------------------------|--------|------------|------|------|---------|------------------------|------------|-----------------|--|----------------|
|                |              |           |                           |        | Good       | Fair | Poor | Sprayed |                        |            |                 |  |                |
| HA107 / HA107A |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 65 ft <sup>2</sup>   | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA107 / HA107A |              |           | Light Fixture Heat Shield | A      | X          |      |      |         | 1                      | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA110          |              |           | Pipe Fitting Insulation   | C      | X          |      |      |         | 5                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA110A         |              |           | Pipe Fitting Insulation   | C      |            |      | X    |         | 4                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA110A         |              |           | Pipe Fitting Insulation   | C      | X          |      |      |         | 11                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA111          |              |           | Pipe Fitting Insulation   | C      | X          |      |      |         | 1                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA114          |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 50 ft <sup>2</sup>   | HA-35      |                 | 9" x 9" Red Tile                               | 10% Chrysotile |
| HA114          |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 50 ft <sup>2</sup>   | HA-35      |                 | Black  | 4% Chrysotile  |
| HA114          |              |           | Pipe Fitting Insulation   | A/C    | X          |      |      |         | ~ 50                   | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA114          |              |           | Tank Insulation           | A      | X          |      |      |         | ~ 500 gal              | HA-34      |                 | Grey Insulation                                | 35% Chrysotile |
| HA116          |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA116          |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                 | Black  | 5% Chrysotile  |
| HA117          |              |           | Vinyl Floor Tile          | A      |            | X    |      |         | ~ 2000 ft <sup>2</sup> | HA-36      | Floor           | 1' x 1' Light Grey with Medium Grey Tile       | 2% Chrysotile  |
| HA117A         |              |           | Pipe Fitting Insulation   | C      | X          |      |      |         | ~ 25                   | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA117B         |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | ~ 20                   | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA120          |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | ~ 60                   | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA120          |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                      | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA121          |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 8                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA121          |              |           | Pipe Fitting Insulation   | A      |            |      | X    |         | 1                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA121          |              |           | Light Fixture Heat Shield | A      | X          |      |      |         | 2                      | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA128          |              |           | Pipe Fitting Insulation   | B      | X          |      |      |         | 15                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA2S01         |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA2S01         |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                 | Black  | 5% Chrysotile  |
| HA2S01         |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-23      |                 | Black  | 3% Chrysotile  |
| HA2S01         |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 5                      | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA2S02         |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup>  | HA-28      | Floor           | Grey   | 3% Chrysotile  |



| Room # | Bldg. System | Component | Material Type                        | Access | Conditions |      |      |         | Quantity               | Sample No. | Sample Location     | Sample Description                | Result         |
|--------|--------------|-----------|--------------------------------------|--------|------------|------|------|---------|------------------------|------------|---------------------|-----------------------------------|----------------|
|        |              |           |                                      |        | Good       | Fair | Poor | Sprayed |                        |            |                     |                                   |                |
| HA2S03 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA2S03 |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | Black                             | 5% Chrysotile  |
| HA2S03 |              |           | Pipe Fitting Insulation              | A      | X          |      |      |         | 5                      | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA201A |              |           | Pipe Fitting Insulation              | C      | X          |      |      |         | 10                     | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA205  |              |           | Light Fixture Heat Shield            | A      |            |      | X    |         | 2                      | HA-6       |                     | Grey with Foil Backing            | 40% Chrysotile |
| HA206  |              |           | Light Fixture Heat Shield            | A      |            |      | X    |         | 2                      | HA-6       |                     | Grey with Foil Backing            | 40% Chrysotile |
| HA208  |              |           | Pipe Fitting Insulation              | A      |            |      | X    |         | 4                      | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA208  |              |           | <sup>1</sup> Duct                    | C      | X          |      |      |         |                        |            |                     |                                   |                |
| HA210  |              |           | Texture Coat                         | A      | X          |      |      | X       | ~ 2000 ft <sup>2</sup> | HA-31      |                     | White, Stipple ceiling            | 3% Chrysotile  |
| HA211  |              |           | Texture Coat                         | A      | X          |      |      | X       | ~ 2000 ft <sup>2</sup> | HA-31      | ceiling, near HA207 | White, Stipple ceiling            | 3% Chrysotile  |
| HA211  |              |           | <sup>2</sup> Pipe Fitting Insulation | A      | X          |      |      |         | 3                      | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA211A |              |           | Pipe Fitting Insulation              | C      | X          |      |      |         | 4                      | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA3C01 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 550 ft <sup>2</sup>  | HA-1       |                     | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA3C01 |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 550 ft <sup>2</sup>  | HA-1       |                     | Black                             | 5% Chrysotile  |
| HA3C01 |              |           | Light Fixture Heat Shield            | A      |            |      | X    |         | 4                      | HA-24      |                     | Grey with Foil Backing            | 50% Chrysotile |
| HA3C02 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                     | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA3C2  |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 120 ft <sup>2</sup>  | HA-1       |                     | Black                             | 5% Chrysotile  |
| HA3S01 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 50 ft <sup>2</sup>   | HA-4       |                     | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA3S01 |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 50 ft <sup>2</sup>   | HA-4       |                     | Black                             | 3% Chrysotile  |
| HA3S01 |              |           | Pipe Fitting Insulation              | A      | X          |      |      |         | 12                     | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA3S02 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA3S02 |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | Black                             | 5% Chrysotile  |
| HA3S02 |              |           | Pipe Fitting Insulation              | A      | X          |      |      |         | 13                     | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA3S03 |              |           | Vinyl Floor Tile                     | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA3S03 |              |           | Tile Mastic                          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup>  | HA-1       |                     | Black                             | 5% Chrysotile  |
| HA3S03 |              |           | Pipe Fitting Insulation              | A      | X          |      |      |         | 12                     | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |
| HA3S03 |              |           | Pipe Fitting Insulation              | A      |            | X    |      |         | 1                      | HA-11      |                     | Grey Insulation                   | 60% Chrysotile |

| Room #       | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                | Result         |
|--------------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|-----------------------------------|----------------|
|              |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |                                   |                |
| HA300        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-23      |                 | Black                             | 3% Chrysotile  |
| HA301A       |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-6       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA302/HA302A |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-23      |                 | Black                             | 3% Chrysotile  |
| HA303        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA303        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA303        |              |           | Pipe Fitting Insulation   | A      |            |      | X    |         | 1                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA304        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-23      |                 | Black                             | 3% Chrysotile  |
| HA305        |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-6       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA306        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA306        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA307        |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 1                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA308        |              |           | Pipe Fitting Insulation   | C/D    | X          |      |      |         | 5                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA309        |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 2                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA310        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA310        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA312        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 260 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA312        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 260 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA316A       |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 300 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA316A       |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 300 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA316A       |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 2                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA317        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA317        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA317A       |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 130 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA317A       |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 130 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA319        |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA320        |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA320        |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA321        |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA321        |              |           | Pipe Fitting Insulation   | C/D    |            |      | X    |         | debris                | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |

| Room # | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                             | Result         |
|--------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|--|----------------|
|        |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |  |                |
| HA322  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA323  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA323  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black  | 5% Chrysotile  |
| HA323  |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 2                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA324A |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-6       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA4C01 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 550 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA4C01 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 550 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA4C02 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 700 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA4C02 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 700 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA4C02 |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 7                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA4C03 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 550 ft <sup>2</sup> | HA-13      | Floor           | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA4C03 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 550 ft <sup>2</sup> | HA-13      | Floor           | Black  | 3% Chrysotile  |
| HA4C03 |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 7                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA4S01 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile                  | 6% Chrysotile  |
| HA4S01 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                 | Black  | 3% Chrysotile  |
| HA4S02 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA4S02 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | Black  | 5% Chrysotile  |
| HA4S03 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA4S03 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | Black  | 5% Chrysotile  |
| HA4S03 |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 1                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA401  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA401  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA403  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     | Floor           | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA404  |              |           | Pipe Fitting Insulation   | A      |            | X    |      |         | 3                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA405  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA405  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |

| Room # | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                             | Result         |
|--------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|--|----------------|
|        |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |  |                |
| HA406  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA407  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA407  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA407  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA408  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA408  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA409  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 45 ft <sup>2</sup>  | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA409  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA411  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA416  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA416  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA418  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA418  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA418  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA419  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA419  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA420  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA420  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA421  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA421  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA422  |              |           | Light Fixture Heat Shield | A      | X          |      |      |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA422  |              |           | Pipe Fitting Insulation   | C/D    |            |      | X    |         | ~ 5                   | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA422  |              |           | Tar on Fibreglass Duct    | C/D    | X          |      |      |         | - -                   | HA-33      |                 | Black Tar                                      | 10% Chrysotile |

| Room # | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                             | Result         |
|--------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|--|----------------|
|        |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |  |                |
| HA423  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA423  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA424  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA424  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA424  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA425  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA425  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA426  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA426  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA426  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA427  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA427  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA429  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | 9" x 9" Blue with White Tile                   | 8% Chrysotile  |
| HA429  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-13      |                 | Black  | 3% Chrysotile  |
| HA429  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing                         | 40% Chrysotile |
| HA430  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-15A     |                 | 9" x 9" Medium Grey with White, Dark Grey Tile | 10% Chrysotile |
| HA430  |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 2                     | HA-11      |                 | Grey Insulation                                | 60% Chrysotile |
| HA5S01 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile                  | 6% Chrysotile  |
| HA5S01 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-4       |                 | Black  | 3% Chrysotile  |
| HA5S02 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA5202 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       |                 | Black  | 5% Chrysotile  |
| HA5202 |              |           | Pipe Fitting Insulation   | A      | X          |      |      |         | 5                     | HA-11      | Wall            | Grey Insulation                                | 60% Chrysotile |
| HA5S03 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       | Floor           | 9" x 9" Dark Grey with White Tile              | 8% Chrysotile  |
| HA5S03 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 200 ft <sup>2</sup> | HA-1       | Floor           | Black  | 5% Chrysotile  |

| Room # | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                | Result         |
|--------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|-----------------------------------|----------------|
|        |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |                                   |                |
| HA5C01 |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA5C01 |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA501  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA501  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA502  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA502  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA503  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA503  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA503  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA504  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA504  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA504  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA505  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA505  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA506  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA506  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA507  |              |           | Pipe Fitting Insulation   | A      |            |      | X    |         | 3                     | HA-11      |                 | Grey Insulation                   | 60% Chrysotile |
| HA507  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-6       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA508  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA508  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA509  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA509  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA508  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA508  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA511  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA511  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA513  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA514  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA514  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA514  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-6       |                 | Grey with Foil Backing            | 40% Chrysotile |

| Room # | Bldg. System | Component | Material Type             | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                | Result         |
|--------|--------------|-----------|---------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|-----------------------------------|----------------|
|        |              |           |                           |        | Good       | Fair | Poor | Sprayed |                       |            |                 |                                   |                |
| HA516  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA516  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA516  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA517  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA517  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA518  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA518  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA519  |              |           | Pipe Fitting Insulation   | B / C  | X          |      |      |         | 14                    | HA-11      | Floor           | Grey Insulation                   | 60% Chrysotile |
| HA519  |              |           | Pipe Fitting Insulation   | B / C  |            |      | X    |         | 1 (debris)            | HA-11      | Floor           | Grey Insulation                   | 60% Chrysotile |
| HA519  |              |           | Duct Insulation           | B/C    |            | X    |      |         |                       | HA-12      | Duct Seam       | Grey Insulation                   | 35% Chrysotile |
| HA521  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA521  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA522  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA522  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA523  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA523  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA523  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA524  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA524  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA524  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA525  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA525  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA526  |              |           | Light Fixture Heat Shield | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA526B |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA526B |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 100 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA527  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA527  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA528  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA528  |              |           | Tile Mastic               | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA529  |              |           | Vinyl Floor Tile          | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |

| Room #   | Bldg. System | Component | Material Type                       | Access | Conditions |      |      |         | Quantity              | Sample No. | Sample Location | Sample Description                | Result         |
|----------|--------------|-----------|-------------------------------------|--------|------------|------|------|---------|-----------------------|------------|-----------------|-----------------------------------|----------------|
|          |              |           |                                     |        | Good       | Fair | Poor | Sprayed |                       |            |                 |                                   |                |
| HA529    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA529    |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA530    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA530    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA530    |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA531    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA531    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA532    |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 2                     | HA-6       | Ceiling         | Grey with Foil Backing            | 40% Chrysotile |
| HA533    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA533    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA534    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA534    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA535    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA535    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       |                 | Black                             | 3% Chrysotile  |
| HA536    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | 9" x 9" Dark Grey with White Tile | 8% Chrysotile  |
| HA536    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-1       |                 | Black                             | 5% Chrysotile  |
| HA536    |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 1                     | HA-5       |                 | Grey with Foil Backing            | 40% Chrysotile |
| HA537    |              |           | Vinyl Floor Tile                    | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       | Floor           | 9" x 9" White with Green Tile     | 6% Chrysotile  |
| HA537    |              |           | Tile Mastic                         | A      | X          |      |      |         | ~ 150 ft <sup>2</sup> | HA-4       | Floor           | Black                             | 3% Chrysotile  |
| HA537    |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 1                     | HA-5       | Ceiling         | Grey with Foil Backing            | 40% Chrysotile |
| Exterior |              |           | Light Fixture Heat Shield           | A      |            |      | X    |         | 2                     | HA-6       |                 | Grey with Foil Backing            | 40% Chrysotile |
| Exterior |              |           | <sup>3</sup> Suspect transite panel | A      | X          |      |      |         | ~ 25 ft <sup>2</sup>  |            | Ceiling         |                                   |                |

No access was available for the following rooms: HA-109A, HA-112, HA-115, HA-125B, HA125C, HA-201, HA-204, HA-402,, HA-402B, HA-412, HA-414, HA-417

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

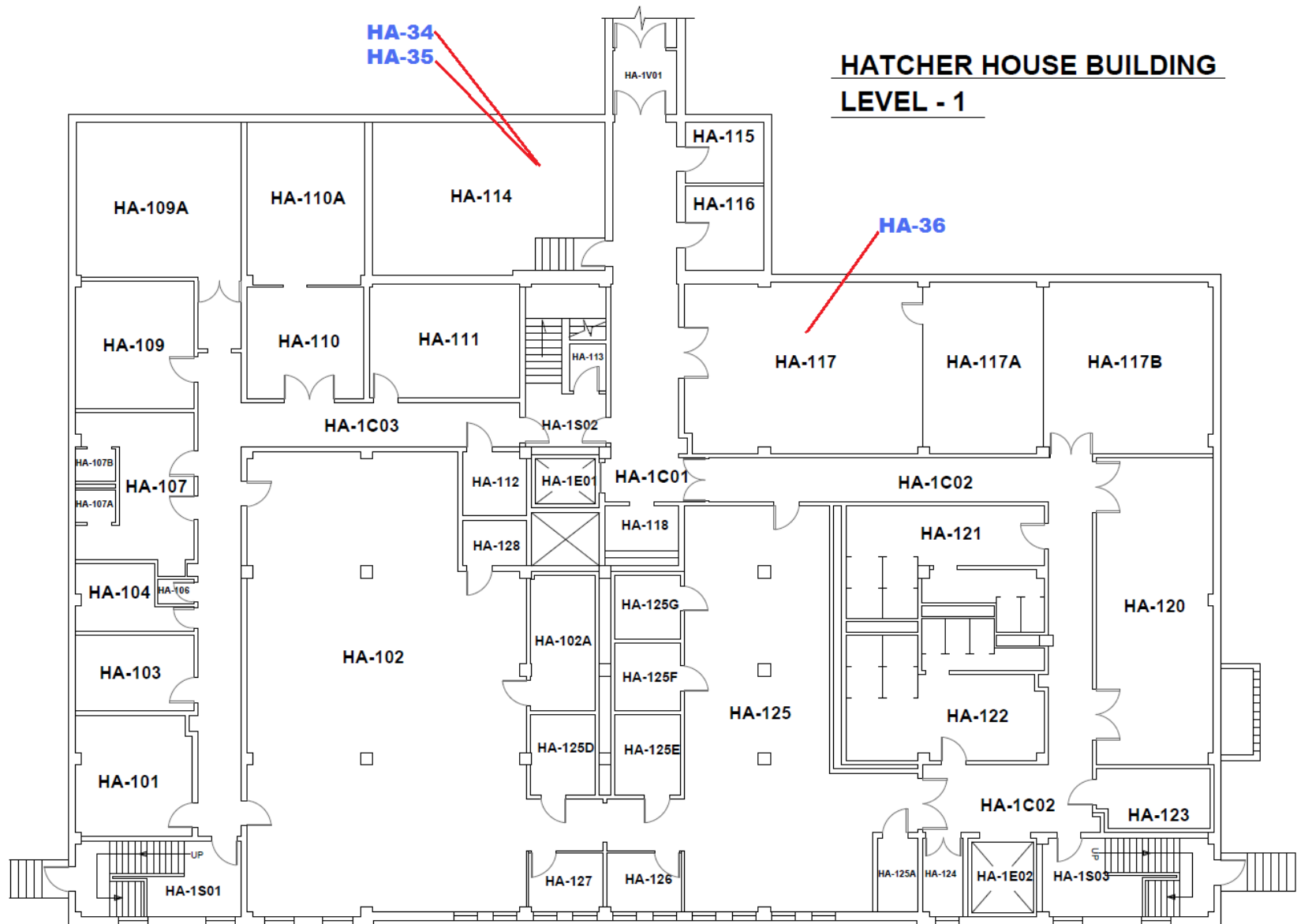
<sup>1</sup> Suspect asbestos containing. Unable to access. Assume asbestos containing until proven otherwise.

<sup>2</sup> Located under the cupboard near the sink

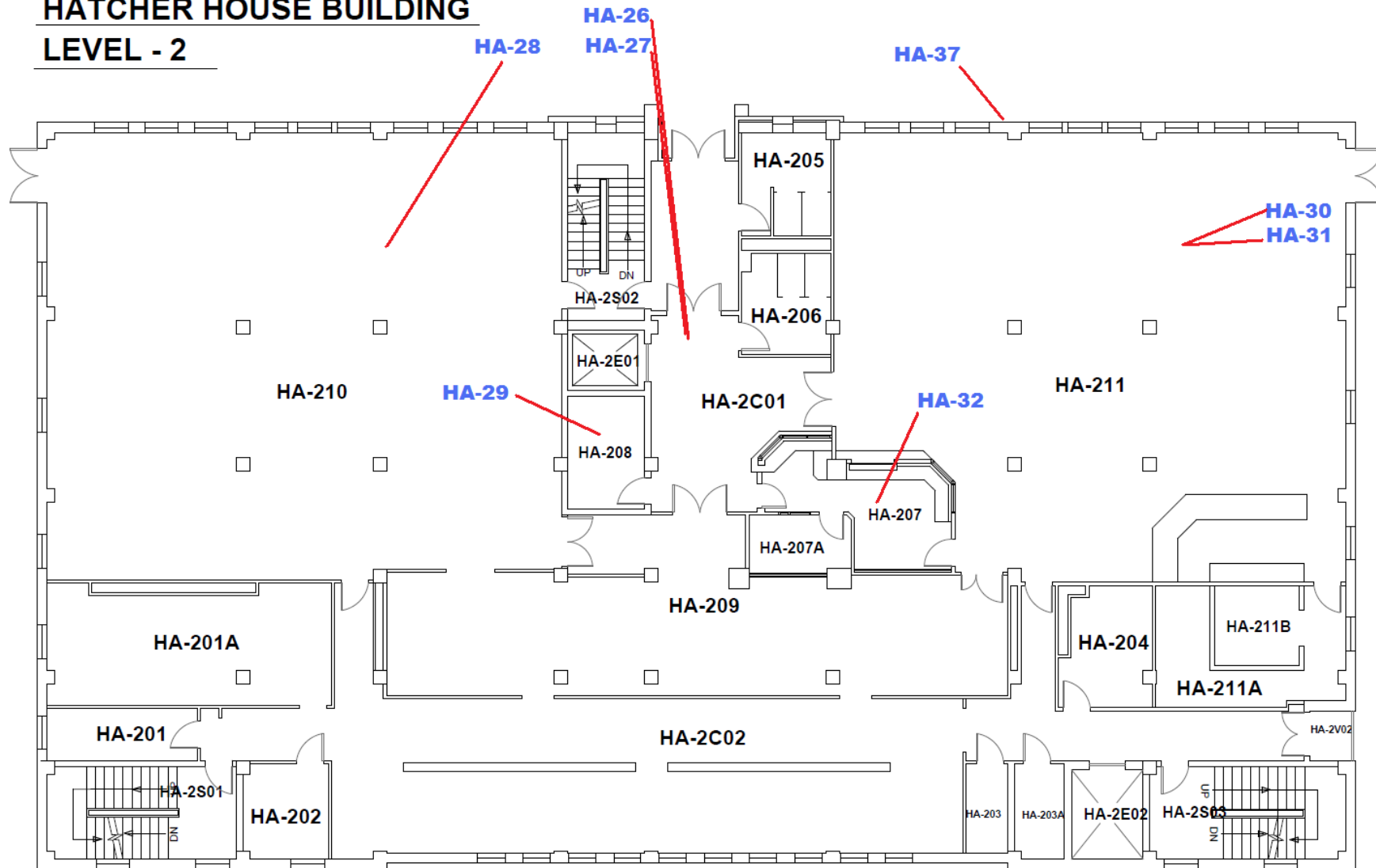
<sup>3</sup> Suspected to be asbestos-containing transite board. Unable to collect samples.



**APPENDIX IV**  
FLOOR PLANS SHOWING SAMPLING LOCATIONS

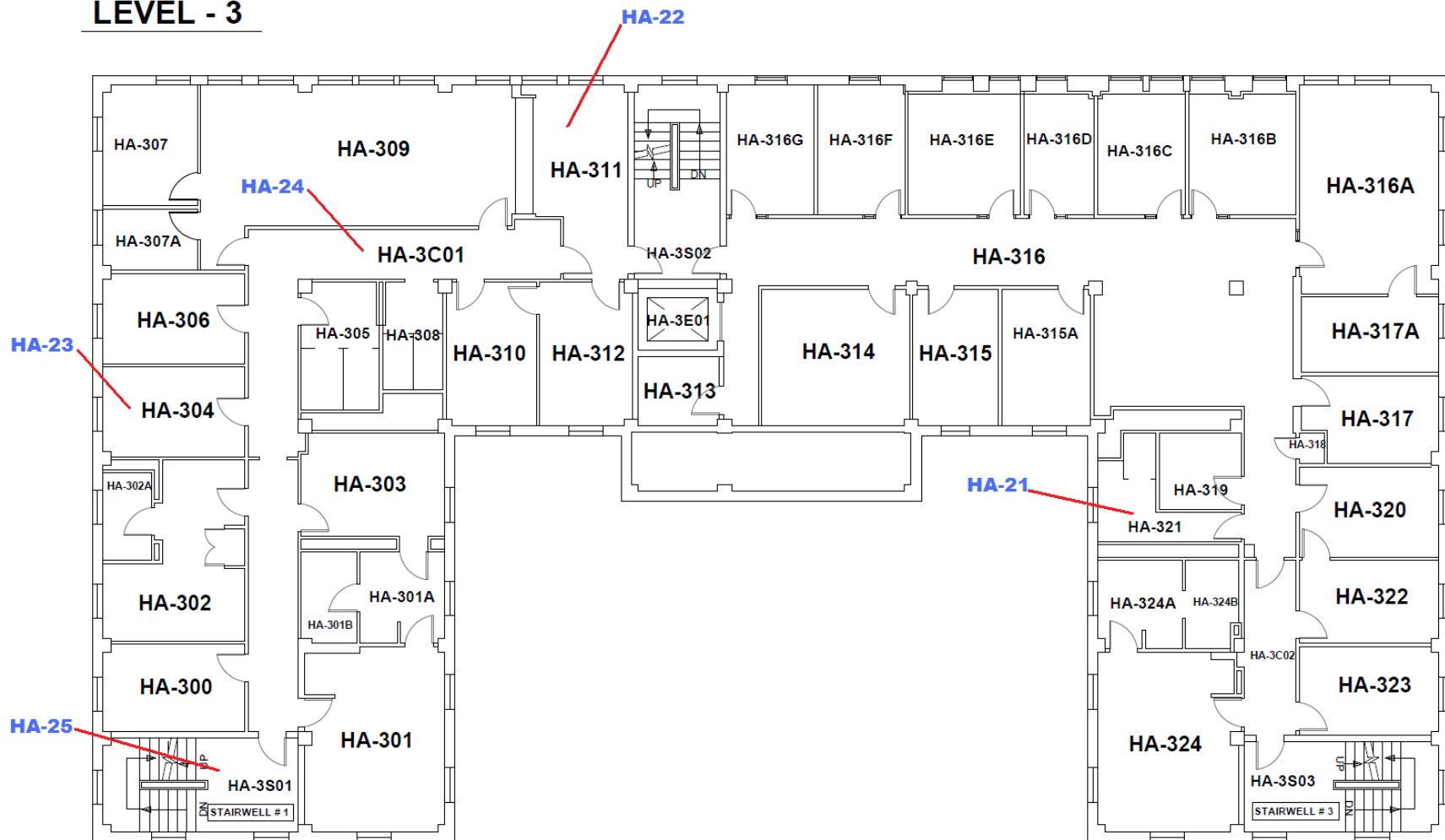


**HATCHER HOUSE BUILDING**  
**LEVEL - 2**



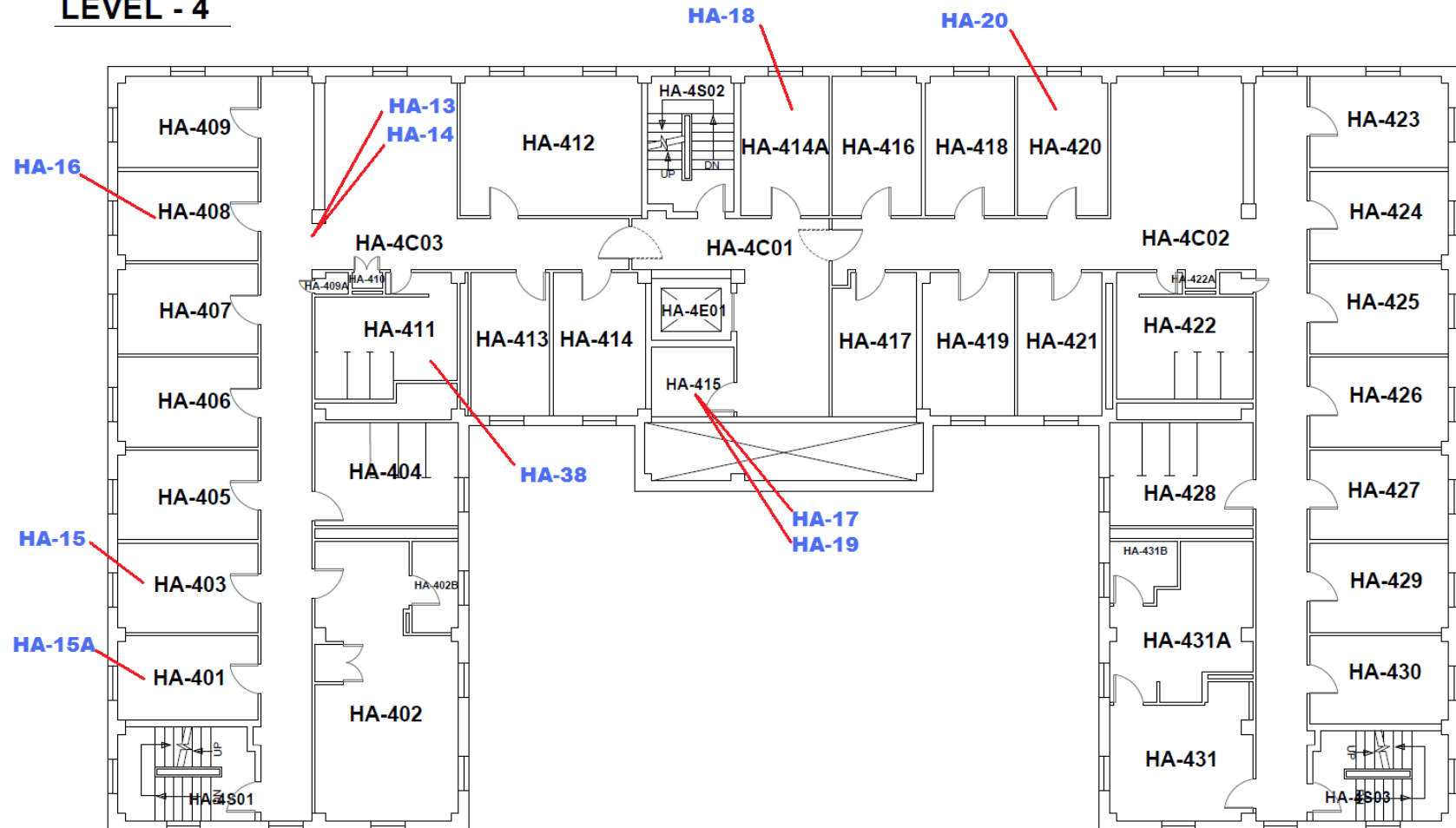
# HATCHER HOUSE BUILDING

## LEVEL - 3



## HATCHER HOUSE BUILDING

### LEVEL - 4



## LEVEL - 5

