



ASBESTOS AND LEAD PAINT BUILDING MATERIALS SURVEY FOR: FIELD HALL MEMORIAL UNIVERSITY OF NEWFOUNDLAND



Prepared for:

Memorial University of Newfoundland

St. John's, NL

Pinchin LeBlanc Environmental Ltd Project No. 02-02-00900

June 19, 2013

EXECUTIVE SUMMARY

Pinchin LeBlanc Environmental Limited (Pinchin) was retained by Memorial University of Newfoundland to perform asbestos and lead paint surveys in selected buildings on the Memorial University of Newfoundland's St. John's, NL campus. A total of twenty-seven (27) buildings were surveyed for asbestos containing materials (ACM) and lead based paints (LBP). This report will provide the findings for the following location:

BUILDING DESCRIPTION: FIELD HALL

BUILDING ADDRESS: MEMORIAL UNIVERSITY OF NL, ST. JOHN'S CAMPUS, NL

A summary of the findings for the Field Hall building (hereafter referred to as "Site Building") provided. For specific recommendations regarding any hazardous materials listed the reader will refer to Sections 3 and 4 of this report:

- 1. Friable asbestos containing building materials were identified in the Site Building, specifically parging cement, tank insulation and ceiling stucco.
- 2. Paints containing greater than 600 mg/kg of lead were identified in the Site Building, specifically the green paint as observed on a door in Room PE-4001, the brown paint as observed in Room 3012, the green paint as observed in Room 2006 and the black paint as observed on the exterior.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.

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1.0 INTRODUCTION

Pinchin LeBlanc Environmental Ltd. (Pinchin) was retained by Memorial University of Newfoundland to perform asbestos and lead paint surveys in selected buildings on the Memorial University of Newfoundland's St. John's, NL campus. A total of twenty-seven (27) buildings were surveyed for asbestos containing materials (ACM) and lead based paints (LBP). This report will provide the findings for the following location:

BUILDING DESCRIPTION: FIELD HALL

BUILDING ADDRESS: MEMORIAL UNIVERSITY OF NL, ST. JOHN'S CAMPUS, NL

The report presents a detailed investigation of condition, quantity, location, access, and type of ACM and LBP present in the building. The Overview Report, provided under separate cover, provides detailed information regarding the survey methodology, sampling procedure, evaluation criteria, suspect materials and regulatory information.

Provincial regulations and guidelines distinguish between friable¹ and non-friable² materials. The asbestos building materials survey performed by Pinchin included a search for both friable and common non-friable ACM.

For reporting purposes, the survey will be divided into sections. The report is presented in this manner to accommodate ease in reading and to allow access to report information for specific areas or materials within the building. The report also addresses specific systems and products likely present in the building. The sections of the report are as follows:

- 2.0 Survey Information
- 3.0 ACM Survey Findings
- 4.0 LBP Survey Findings
- 5.0 Recommendations

¹ The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Friable ACM has a much greater potential to release airborne asbestos fibres when disturbed. The most common friable ACM used in the past are sprayed or trowelled materials (for fireproofing or thermal insulation), texture plaster (decorative or acoustic), and mechanical insulations.

² Common non-friable ACM include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement pipe or board (transite), and asbestos textiles. Although a product may be considered non-friable when new, if the product releases fine dust due to deterioration or during removal, the free dust is considered friable. For example, most lay-in or glued on acoustic ceiling tiles release significant dust during removal of large quantities of these tiles.

2.0 SURVEY INFORMATION

The survey was conducted on February 27th, 2013. The survey, collection of representative bulk samples, and recording of information was performed by Mr. Andy Mitchell and Ms. Angela Stagg of Pinchin. All accessible areas of the building were inspected for the presence of asbestos containing materials (ACM) and lead based paints (LBP).

A total of seventeen (17) representative bulk samples were collected for analysis for asbestos content. Multiple phases within various samples were analyzed independently, as a result, a total of twenty-one (21) analyses were performed.

A total of six (6) bulk samples were collected for analysis of lead content.

3.0 ACM SURVEY FINDINGS

The ACM found during this survey are detailed in the location & data excel document provided to the client. The excel document serves as the clients active asbestos management plan. Quantities of materials identified, locations and friable or non-friable are also present in this excel file. Laboratory certificates for asbestos samples collected are presented in Appendix I and lead samples are presented in Appendix II. Sample location drawings are provided in Appendix III. A photographic record of the samples collected during the survey of the building is presented in Appendix IV. The following is summary of the findings for this building.

3.1 Sprayed or Trowelled Fireproofing and Thermal Insulation

No sprayed or trowelled fireproofing and thermal insulation were observed.

3.2 Mechanical Insulation

Insulating cement, also referred to as "parging cement", present on pipe elbows and fittings was sampled in the site building and contains 30% Chrysotile asbestos (reference sample 02-02-900-S005). For locations and conditions of this material at the time of the building survey refer to location & data excel document.

Insulating cement, also referred to as "mag block", present on tanks was sampled in the site building and contains 20% chrysotile and 5% amosite asbestos (reference sample 02-02-900-S017). For locations and conditions of this material at the time of the building survey refer to location & data excel document.

Tar paper used on insulation was collected in the site building. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S006).

Insulating insulation, also referred to as "Aircell" was collected from the basement (Room GH-001). Analysis of the sample did not identify the presence of asbestos (reference samples 02-02-900-S007-A and 02-02-900-S007-B).

3.3 Acoustic Ceiling Tiles

Two (2) samples were collected of acoustic ceiling tiles observed in the site building. A description of the ceiling tiles sample is summarized below:

- The 2"x4" acoustic ceiling tile distinguished with a deep pinhole square pattern was collected from Room GH-1000 (reference sample 02-02-900-S002). Analysis of the sample did not identify the presence of asbestos.
- The 2"x2" acoustic ceiling tile distinguished with a pinhole and fleck pattern was collected from Room GH-2019 (reference sample 02-02-900-S008). Analysis of the sample did not identify the presence of asbestos.

3.4 Drywall, Plaster, and Texture Finishes

Drywall was used as a wall and ceiling finish throughout the building. Until the early to mid-1980s, drywall joint compound may have contained chrysotile asbestos. Drywall joint compound is considered a non-friable material. Most buildings of this type undergo constant renovation, including the removal and replacement of drywall partitions. Therefore extensive sampling of drywall compound is necessary to come to a reasonable conclusion regarding the extent of asbestos. Furthermore, any attempt to distinguish and delineate all asbestos-containing drywall compounds from new non-asbestos drywall compound is often unachievable. Therefore, drywall joint compound was sampled at walls, which were believed to be original to try to define the presence of asbestos content in the original drywall compound.

Five (5) samples of drywall joint compound were collected in the site building. Analysis of these samples did not identify the presence of asbestos.

Two (2) samples of friable textured ceiling stucco were collected from Room GH-1000 and GH-2S01. Multiple phases within the first sample were analyzed independently, as a result, a total of two (2) analyses were performed. Results identified the presence of 6% chrysotile asbestos (reference sample 02-02-900-S003-A) in the texture coat and 3% chrysotile asbestos (reference sample 02-02-900-S015). Analysis of the sample did not identify the presence of asbestos in the base portion of the sample. For locations and conditions of this material at the time of the building survey refer to location & data excel document.

3.5 Vinyl Flooring Materials

3.5.1 Vinyl Floor Tiles

Two (2) types of vinyl floor tiles were observed in the site building. Analysis of these samples did not identify the presence of asbestos. A list of the two (2) visually different vinyl floor tiles is provided below:

- One (1) sample of the 12"x12" vinyl floor tile identified as green with grey flecks was collected from the laundry room (Room GH-2012). Analysis of the sample did not identify the presence of asbestos (reference samples 02-02-900-S009-A and 02-02-0900-S009-B).
- One (1) sample of the 12"x12" vinyl floor tile identified as green with white flecks was collected from the second floor hallway (Room GH-2C01 and 2C02). Analysis of the sample did not identify the presence of asbestos (reference samples 02-02-900-S010-A and 02-02-0900-S010-B).

3.5.2 Vinyl Sheet Flooring

Two (2) types of vinyl sheet flooring were observed in the site building. Analysis of the samples did not identify the presence of asbestos. A summary of the visually different non-asbestos containing vinyl sheet flooring is provided it the table below:

3.5.2.1 Non-Asbestos Containing Vinyl Sheet Flooring

Non-Asbestos Containing Vinyl Sheet Flooring					
Field Hall					
Sample Number	Location	Description			
02-02-900-S004-A 02-02-900-S004-B	Room GH-1000	Green with White Streaks (flooring and mastic)			
02-02-900-S012	Room GH-2005	Blue with White Streaks			

For additional locations of these materials at the time of the building survey refer to location & data excel document (Location and Data Report).

3.6 Asbestos Cement Products

No asbestos cement products were observed.

3.7 Vermiculite Insulation

No vermiculite containing products were observed. Visual observations were made above the ceiling and through any hatches.

4.0 LBP SURVEY FINDINGS

Analytical results indicate that two (2) of the samples collected of painted surfaces would be considered a risk to worker exposure during construction or renovation activities (with lead concentrations exceeding 0.06%). The off white paint as observed in Room GH-1003 (reference sample 02-02-900-L004) contains 5.8% and the bluish grey paint as observed on the floor in Room GH-001 (reference sample 02-02-900-L005) contains 0.094% and the same paint colours located elsewhere, should be managed as lead-containing.

Results indicate that were detected, all other paint samples contain less than 0.06% lead.

5.0 RECOMMENDATIONS

Asbestos containing materials have been identified in the Site Building. Listed below are a series of general recommendations for the Site Building. Recommendations provided in the Overview Report may also be reviewed and applied to this building.

Friable ACMs

Friable asbestos containing materials identified inside the Site Building include: parging cement and ceiling stucco.

- 1. Type III (high risk) asbestos abatement procedures should be carried out for the scheduled removal of greater than 1 ft² of friable asbestos containing materials. Alternatively, Type II (moderate risk) glove bag abatement procedures may be applied where practical.
- 2. Type II (moderate risk) asbestos abatement procedures should be carried out for the scheduled repair or enclosure of friable ACMs or for the removal of less than 1 ft² of material.

Lead Based Paints

Any painted surfaces visually matching the identified paint colors should be managed as lead containing and necessary precautions (i.e.: worker protection) should be employed prior to the disturbance to these materials.

Should there be any questions pertaining to the contents of this report, please do not hesitate to contact the undersigned at our office.

PINCHIN LEBLANC ENVIRONMENTAL LIMITED

Prepared by;

Melanie Snow, M.A.Sc.

Group Manager

Assessment & Remediation

msnow@pinchinleblanc.com

APPENDIX I

ASBESTOS ANALYTICAL REPORT



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin LeBlanc Environmental

27 Austin St 2nd Flr

St Johns NL A1B 4C3

Project: 02-02-00900

Attn: Dawn Benteau Paul Staeben Lab Order ID:

1303840

Analysis ID:

1303840_PLM

Date Received:

3/5/2013

Date Reported: 3/8/2013

Description	Ashestos	Fibrous	Non-Fibrous	Attributes
Lab Notes	11300505	Components	Components	Treatment
DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
_				Crushed
2"x4" acoustic ceiling tile, deep pinhole square pattern	None Detected	50% Cellulose 30% Mineral Wool	10% Perlite 10% Other	White Fibrous Heterogeneous
				Teased
Textured cement	6% Chrysotile		50% Perlite 44% Other	White Fibrous Heterogeneous
texture coat				Crushed
Textured cement	None Detected		70% Other	Gray Non Fibrous Heterogeneous
base				Crushed
vinyl sheet flooring, green with white streaks	None Detected		100% Other	Green Non Fibrous Homogeneous
sheet flooring				Ashed
vinyl sheet flooring, green with white streaks	None Detected		100% Other	Yellow Non Fibrous Homogeneous
mastic				Dissolved
parging cement	30% Chrysotile		70% Other	White Fibrous Homogeneous
1				Teased
tar paper on pipe	None Detected	10% Cellulose 10% Fiber Glass	80% Other	Black Non Fibrous Heterogeneous
1				Dissolved
	Lab Notes DWJC 2"x4" acoustic ceiling tile, deep pinhole square pattern Textured cement texture coat Textured cement base vinyl sheet flooring, green with white streaks sheet flooring vinyl sheet flooring, green with white streaks mastic parging cement	DWJC None Detected 2"x4" acoustic ceiling tile, deep pinhole square pattern Textured cement texture coat Textured cement None Detected Sheet flooring, green with white streaks None Detected None Detected None Detected Aspect flooring Vinyl sheet flooring, green with white streaks None Detected Mastic Parging cement 30% Chrysotile	DWJC	DWJC

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Sharon Donald (19)

Analyst

Approved Signatory



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin LeBlanc Environmental

27 Austin St 2nd Flr

St Johns NL A1B 4C3

Project: 02-02-00900

Attn: Dawn Benteau Paul Staeben

Lab Order ID:

1303840

Analysis ID:

1303840_PLM

Date Received:

3/5/2013

Date Reported:

3/8/2013

Sample ID	Description	Asbestos	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Asbestos	Components	Components	Treatment
02-02-900- S007 - A	aircell insulation	None Detected	70% Cellulose	30% Other	Black Fibrous Heterogeneous
1303840PLM_7	felt				Teased
02-02-900- S007 - B	aircell insulation	None Detected	90% Cellulose	10% Other	Brown Fibrous Heterogeneous
1303840PLM_17	paper layers				Teased
02-02-900- S008	2"x2" acoustic ceiling tiles, pinhole with fleck	None Detected	50% Cellulose 30% Mineral Wool	10% Perlite 10% Other	White Fibrous Heterogeneous
1303840PLM_8					Teased
02-02-900- S009 - A	12"x12" vinyl floor tiles, green with grey fleck	None Detected		100% Other	Green Non Fibrous Heterogeneous
1303840PLM_9	tile				Dissolved
02-02-900- S009 - B	12"x12" vinyl floor tiles, green with grey fleck	None Detected		100% Other	Black Non Fibrous Homogeneous
1303840PLM_18	mastic				Dissolved
02-02-900- S010 - A	12"x12" vinyl floor tiles, line green with white fleck	None Detected		100% Other	Green Non Fibrous Heterogeneous
1303840PLM_10	tile				Dissolved
02-02-900- S010 - B	12"x12" vinyl floor tiles, line green with white fleck	None Detected		100% Other	Black Non Fibrous Homogeneous
1303840PLM_19	mastic				Dissolved
02-02-900- S011	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1303840PLM_11					Crushed

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Sharon Donald (19)



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin LeBlanc Environmental

27 Austin St 2nd Flr

St Johns NL A1B 4C3

Project: 02-02-00900

Attn: Dawn Benteau Paul Staeben

Lab Order ID:

1303840

Analysis ID:

1303840_PLM

Date Received:

3/5/2013

Date Reported: 3/8/2013

Sample ID Lab Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
02-02-900- S012	vinyl sheet flooring, blue with white streaks	None Detected		100% Other	Blue Non Fibrous Heterogeneous
1303840PLM_12					Dissolved
02-02-900- S013	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1303840PLM_13					Crushed
02-02-900- S014	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1303840PLM_14					Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Sharon Donald (19)



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin LeBlanc Environmental

27 Austin St 2nd Flr

St Johns NL A1B 4C3 **Project:** Field Hall; 02-02-00900

Attn: Dawn Benteau Paul Staeben Lab Order ID: 1

D: 1308149 1308149_PLM

Date Received:

Analysis ID:

5/2/2013

Date Reported:

5/7/2013

Sample ID Lab Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
02-02-900- S0015	Textured Ceiling Coat	3% Chrysotile		77% Other 20% Perlite	White Fibrous Heterogeneous
1308149PLM_1					Teased
02-02-900- S0016	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Heterogeneous
1308149PLM_2					Teased
02-02-900- S0017	Tank Insulation	20% Chrysotile 5% Amosite		75% Other	Gray, White Fibrous Heterogeneous
1308149PLM_3					Teased

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Ired Gulley (3)

Analyst

Approved Signatory

APPENDIX II LEAD PAINT ANALYTICAL REPORT



Analysis for Lead Concentration in Paint Chips



by Flame Atomic Absorption Spectroscopy EPA SW-846 3rd Ed. Method No. 3050B/Method No. 7420

Customer: Pinchin LeBlanc Environmental

27 Austin St 2nd Flr

St Johns NL A1B 4C3

Project: 02-02-00900

Attn: Dawn Benteau Lab Order ID: 1303843 Paul Staeben

Analysis ID: 1303843 PBP **Date Received:** 3/5/2013

> 3/7/2013 **Date Reported:**

Sample ID Lab Sample ID	Description Lab Notes	Mass (g)	Analytical Sensitivity (% by weight)	Concentration (% by weight)
02-02-900-L001 1303843PBP_1	chocolate brown	0.0636	0.002%	< 0.006%
02-02-900-L002 1303843PBP_2	brown	0.0504	0.003%	< 0.008%
02-02-900-L003 1303843PBP_3	orange	0.0696	0.002%	< 0.006%
02-02-900-L004 1303843PBP_4	off white	0.0765	0.011%	5.8%
02-02-900-L005 1303843PBP_5	blueish grey floor paint	0.0535	0.003%	0.094%
02-02-900-L006 1303843PBP_6	green wall paint	0.0483	0.003%	< 0.008%

The quality control samples run with the samples in this report have passed all AIHA required specifications unless otherwise noted. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by AIHA or any other agency of the U.S. government.

Robert Duke (6)

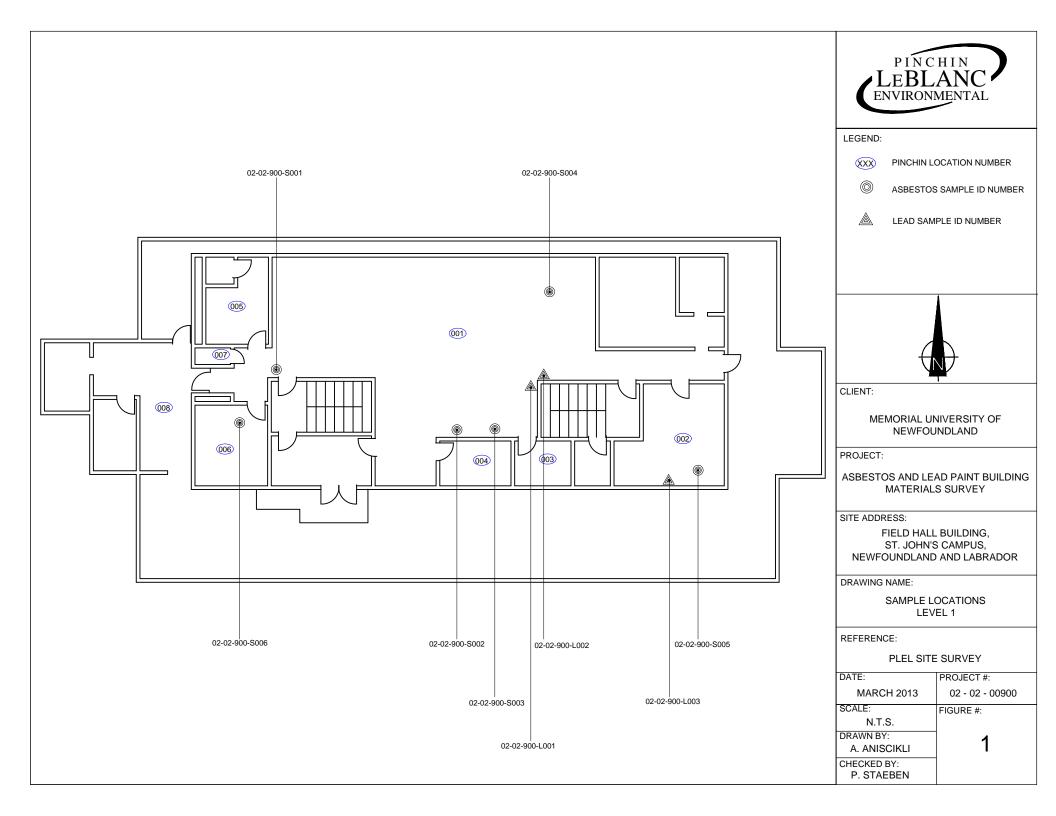
Analyst

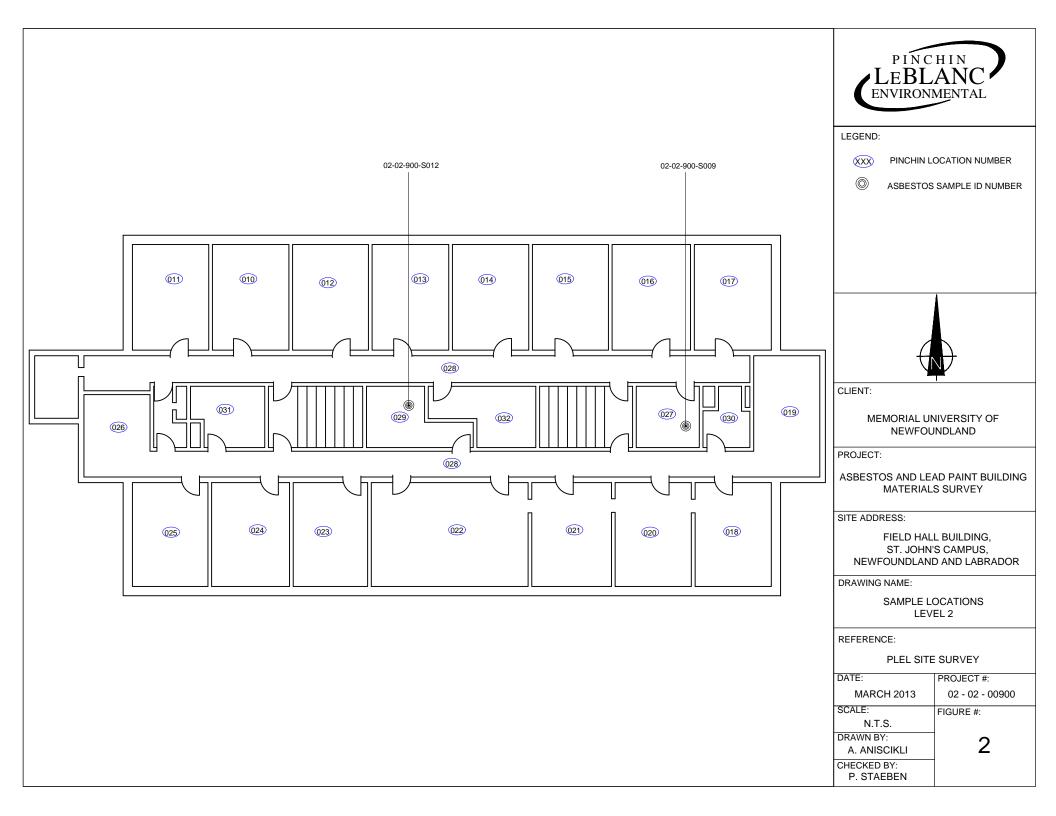
Laboratory Director

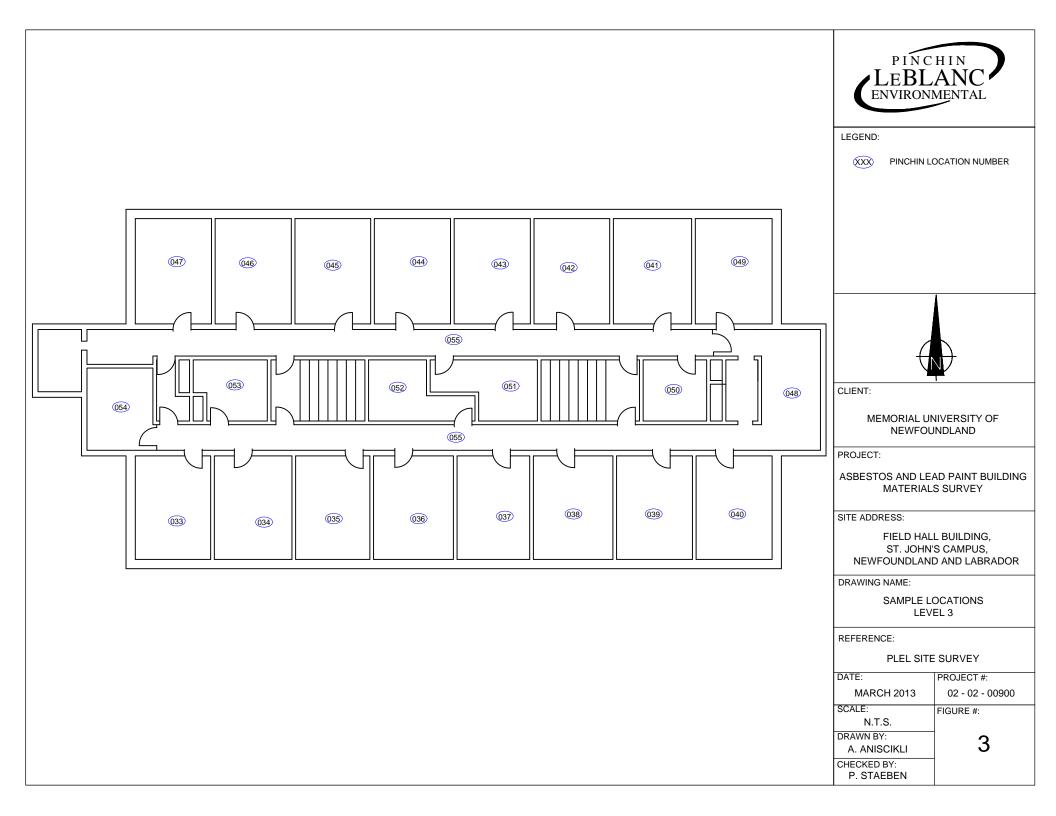
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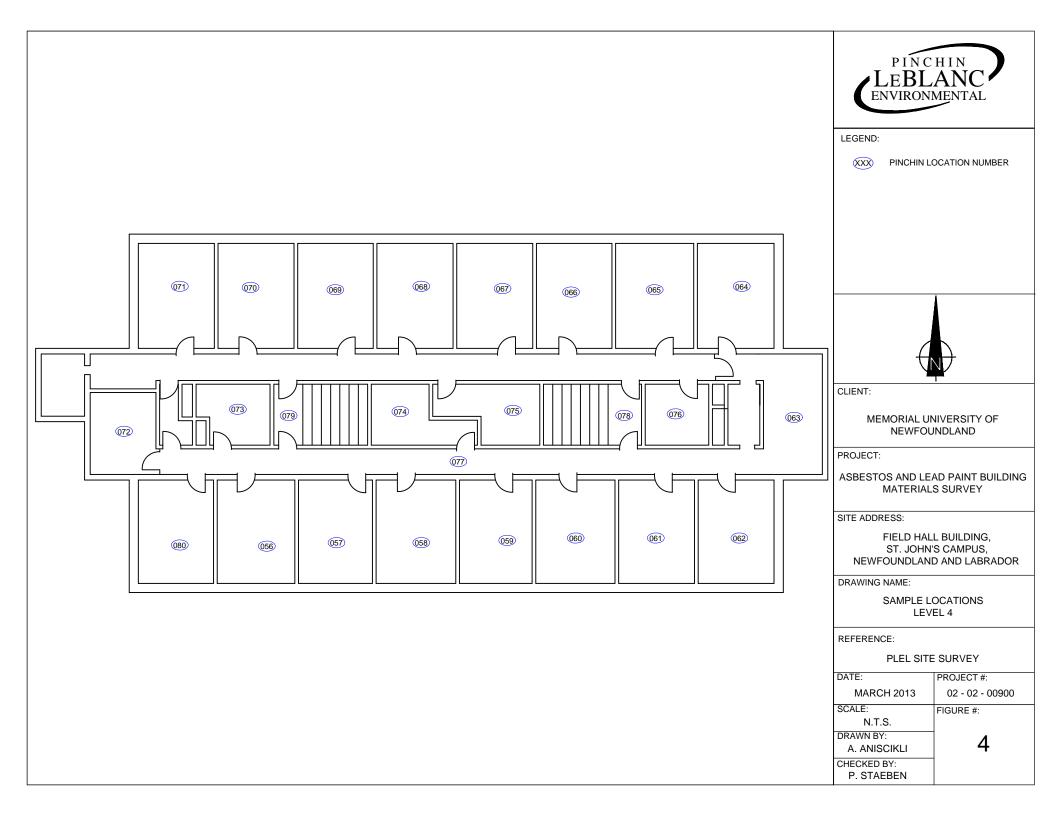
APPENDIX III

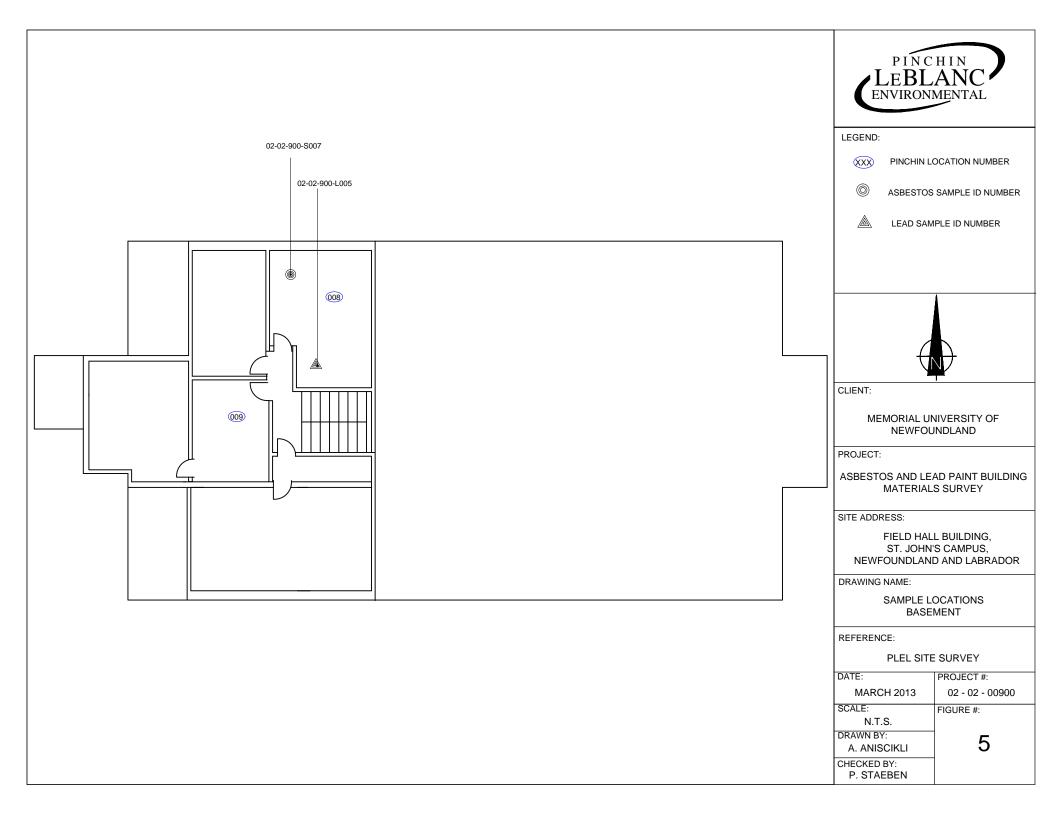
SITE DRAWINGS











APPENDIXI V

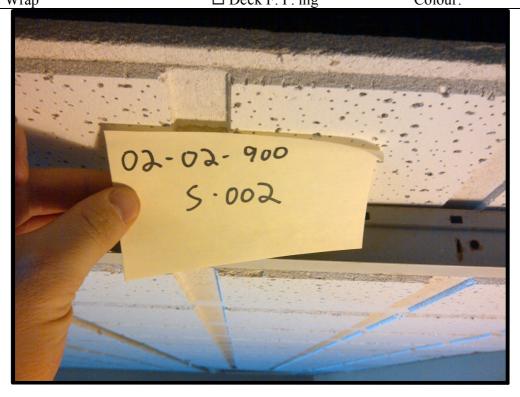
PHOTO SAMPLE LOG



Sample #:	S001		Date Sampled:	August 8, 2012	
Building:	Field Hall		Sampler:	Trent Hardy	
Location:	001, room 1000		Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	\Box T	extured	☐ Shingle	☐ Floor
□ Elbow	☐ 9'x9'Tile	\square S	tucco	□ Rolled	X Wall Orientation
☐ Fitting	☐ Vinyl Sheet	\square P	opcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	\square D	OWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	\square P	laster		□ Other
☐ Tank Insulation	☐ Transite Panel	\Box A	coustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	\Box A	coustic Tile (Glued-on)		
HVAC	☐ Plaster	\square N	lastic	Miscellaneous:	No picture
☐ Insulation	X DWJC		Structural		
□ Tape		\square S	teel F. P. ing	No. of Phases:	
☐ Paper Wrap			eck F. P. ing	Colour:	



01414 11311					
Sample #:	S002	D	ate Sampled:	August 8, 2012	
Building:	Field Hall	S	ampler:	Trent Hardy	
Location:	001, room 1000	A	nalysis:	SAI - PLM	
MUN Project #:	02-02-900	V	Vork Order #:		
-		Bulk Sa	mpling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	□Tex	tured	☐ Shingle	□ Floor
□ Elbow	□ 9'x9'Tile	☐ Stuc	cco	□ Rolled	☐ Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Pop	corn	☐ Felt	X Ceiling
☐ Transite Pipe	☐ Mastic	\square DW	JC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	□ Plas	ter		□ Other
☐ Tank Insulation	☐ Transite Panel	X Acou	ustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	□ Aco	ustic Tile (Glued-on)		
HVAC	□ Plaster	□ Mas	stic	Miscellaneous: square	2' x 4' pinhole
☐ Insulation	□ DWJC		Structural	-	
☐ Tape		☐ Stee	el F. P. ing	No. of Phases:	
□ Paper Wran		\Box Dec	k F D ing	Colour	



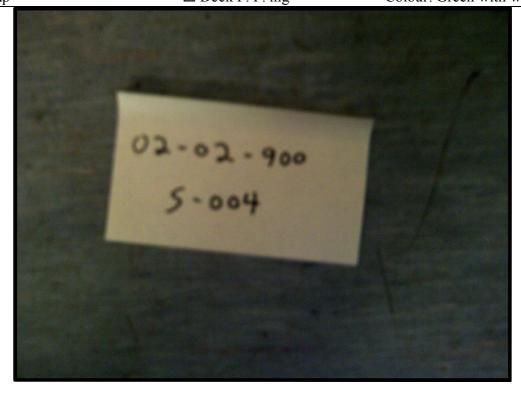


Sample #:	S003	Date Sampled:	August 8, 2012	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	001, room 1000	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	□ Floor
□ Elbow	☐ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	X Above Ceiling
☐ Gasket	Wall	☐ Plaster		□ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	Textured cement
☐ Insulation	□ DWJC	Structural		
□ Tape		☐ Steel F. P. ing	No. of Phases:	
□ Paper Wran		□ Deck F P ing	Colour:	



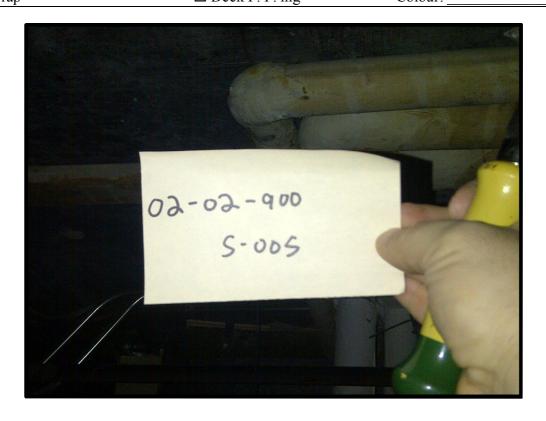


Sample #:	S004	Date Sampled:	August 8, 2012	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	001, room 1000	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	X Floor
□ Elbow	☐ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation
☐ Fitting	X Vinyl Sheet	□ Popcorn	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	☐ Plaster		□ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	
☐ Insulation	□ DWJC	Structural		
☐ Tape		☐ Steel F. P. ing	No. of Phases:	
☐ Paper Wrap		□ Deck F P ing	Colour: Green	with white streaks



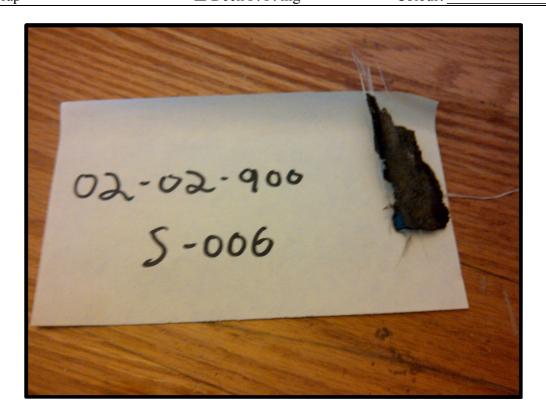


Sample #:	S005	Date Sampled:	August 8, 2012	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	002, room 1003	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	□ Floor
X Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	X Above Ceiling
☐ Gasket	Wall	☐ Plaster		□ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	
☐ Insulation	\square DWJC	Structural		
☐ Tape		☐ Steel F. P. ing	No. of Phases:	
☐ Paper Wrap		□ Deck F P ing	Colour:	





Sample #:	S006	Date Sampled:	August 8, 2012		
Building:	Field Hall	Sampler:	Trent Hardy		
Location:	006, room 1008	Analysis:	SAI - PLM		
MUN Project #:	02-02-900	Work Order #:			
Bulk Sampling Parameters					
Pipe/Tank	Flooring	Ceiling	Roofing	Location	
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	☐ Floor	
□ Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation	
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling	
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	X Above Ceiling	
☐ Gasket	Wall	☐ Plaster		□ Other	
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)			
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)			
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	Tar Paper	
☐ Insulation	□ DWJC	Structural			
☐ Tape		☐ Steel F. P. ing	No. of Phases:		
☐ Paper Wrap		□ Deck F. P. ing	Colour:		



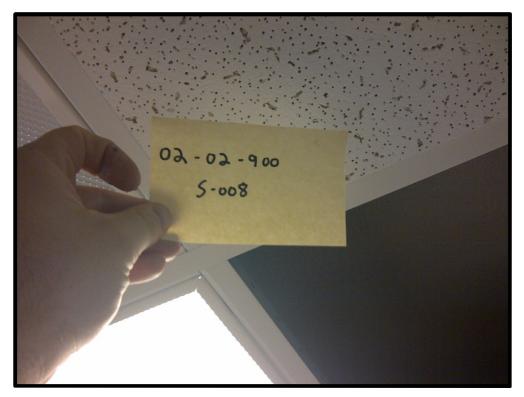


01414 [1311	1					
Sample #:	S007	Date Sampled:	August 8, 2012			
Building:	Field Hall	Sampler:	Trent Hardy			
Location:	008, room 001	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
Bulk Sampling Parameters						
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
X Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	□ Floor		
□ Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation		
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	X Above Ceiling		
☐ Gasket	Wall	☐ Plaster		□ Other		
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	Air Cell		
☐ Insulation	\square DWJC	Structural				
☐ Tape		☐ Steel F. P. ing	No. of Phases:			
□ Paper Wran		□ Deck F P ing	Colour:			



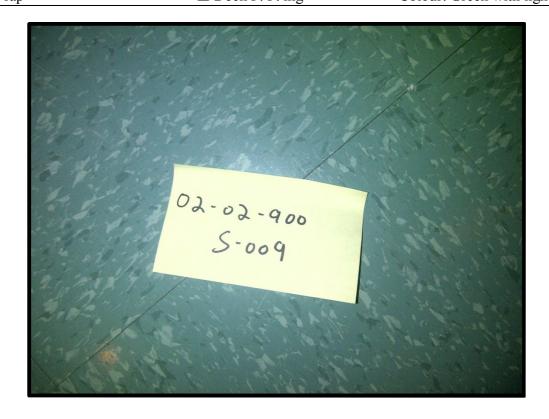


S008		Date Sampled:	August 8, 2012	
Field Hall		Sampler:	Trent Hardy	
010, room 2019		Analysis:	SAI - PLM	
02-02-900		Work Order #:		
Bulk Sampling Parameters				
Flooring		Ceiling	Roofing	Location
□12'x12' Tile	\Box T	extured	☐ Shingle	□ Floor
☐ 9'x9'Tile	\square S	tucco	□ Rolled	☐ Wall Orientation
☐ Vinyl Sheet	\square P	opcorn	□ Felt	X Ceiling
☐ Mastic	\square D	OWJC	□ Tar	☐ Above Ceiling
Wall	\square P	laster		□ Other
☐ Transite Panel	ΧA	coustic Tile (Dropped)		
☐ Textured Wall	\Box A	coustic Tile (Glued-on)		
☐ Plaster	\square N	lastic	Miscellaneous:	2' x 2' pinhole fleck
□ DWJC		Structural		
	\square S	teel F. P. ing	No. of Phases: _	
		eck F. P. ing	Colour:	
	Field Hall 010, room 2019 02-02-900 Flooring 12'x12' Tile 9'x9'Tile Vinyl Sheet Mastic Wall Transite Panel Textured Wall Plaster	Field Hall 010, room 2019 02-02-900 Bulk Flooring □12'x12' Tile □ T □9'x9'Tile □ S □Vinyl Sheet □ P □ Mastic □ P □ Wall □ P □ Transite Panel X A □ Textured Wall □ A □ Plaster □ M □ DWJC □ S	Field Hall Sampler: 010, room 2019 Analysis: 02-02-900 Work Order #: Bulk Sampling Parameters Flooring Ceiling □ 12'x12' Tile □ Textured □ 9'x9'Tile □ Stucco □ Vinyl Sheet □ Popcorn □ Mastic □ DWJC Wall □ Plaster □ Textured Wall □ Acoustic Tile (Dropped) □ Textured Wall □ Acoustic Tile (Glued-on) □ Plaster □ Mastic	Field Hall Sampler: Trent Hardy 010, room 2019 Analysis: SAI - PLM 02-02-900 Work Order #: Bulk Sampling Parameters Flooring Roofing □ 12'x12' Tile □ Textured □ Shingle □ 9'x9'Tile □ Stucco □ Rolled □ Vinyl Sheet □ Popcorn □ Felt □ Mastic □ DWJC □ Tar □ Plaster □ Acoustic Tile (Dropped) □ Textured Wall □ Plaster □ Mastic Miscellaneous: □ DWJC Structural □ DWJC Structural □ Steel F. P. ing No. of Phases:





Sample #:	S009	Date Sampled:	August 8, 2012			
Building:	Field Hall	Sampler:	Trent Hardy			
Location:	027, room 2012	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
	Bulk Sampling Parameters					
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
☐ Insulation	X12'x12' Tile	☐ Textured	☐ Shingle	X Floor		
□ Elbow	☐ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation		
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	☐ Plaster		□ Other		
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:			
☐ Insulation	\square DWJC	Structural				
☐ Tape		☐ Steel F. P. ing	No. of Phases:			
☐ Paper Wrap		□ Deck F P ing	Colour: Green	with light fleck		



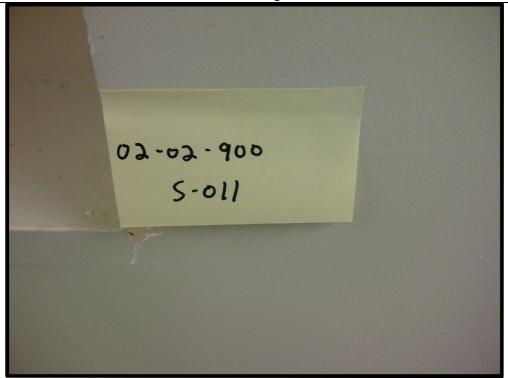


Sample #:	S010	Date Sampled:	August 8, 2012			
Building:	Field Hall	Sampler:	Trent Hardy			
Location:	028, room 1C01	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
	Bulk Sampling Parameters					
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
☐ Insulation	X12'x12' Tile	☐ Textured	☐ Shingle	X Floor		
□ Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation		
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	☐ Plaster		□ Other		
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:			
☐ Insulation	□ DWJC	Structural				
☐ Tape		☐ Steel F. P. ing	No. of Phases:			
☐ Paper Wrap		□ Deck F P ing	Colour Light g	reen with light fleck		



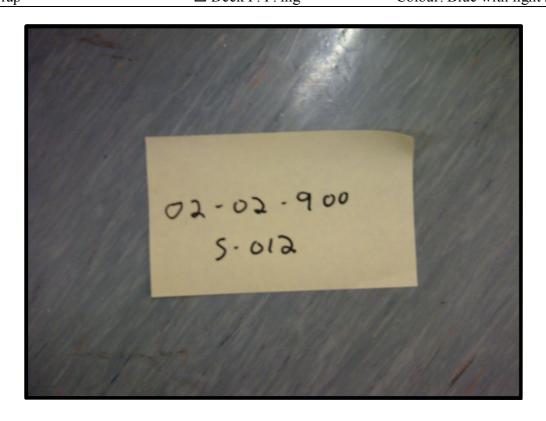


Sample #:	S011	Date Sampled:	August 8, 2012	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	028, room 2C01	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	☐ Floor
□ Elbow	☐ 9'x9'Tile	☐ Stucco	□ Rolled	X Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	☐ Plaster		☐ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	
☐ Insulation	X DWJC	Structural		
☐ Tape		☐ Steel F. P. ing	No. of Phases:	
☐ Paper Wrap		□ Deck F. P. ing	Colour:	





Sample #:	S012	Date Sampled:	August 8, 2012			
Building:	Field Hall	Sampler:	Trent Hardy			
Location:	029, hallway 2005	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
Bulk Sampling Parameters						
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	X Floor		
□ Elbow	☐ 9'x9'Tile	☐ Stucco	□ Rolled	☐ Wall Orientation		
☐ Fitting	X Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	☐ Plaster		□ Other		
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:			
☐ Insulation	□ DWJC	Structural				
☐ Tape		☐ Steel F. P. ing	No. of Phases:			
☐ Paper Wran		□ Deck F P ing	Colour: Blue w	ith light streaks		

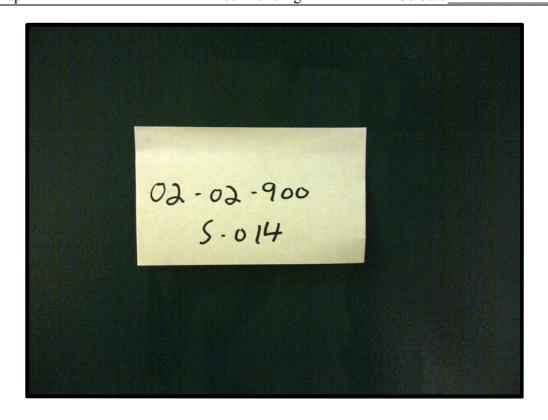




ONTVERSIT					
Sample #:	S013	Dat	te Sampled:	August 8, 2012	
Building:	Field Hall	San	npler:	Trent Hardy	
Location:	048, room 3010	Ana	alysis:	SAI - PLM	
MUN Project #:	02-02-900	Wo	rk Order #:		
		Bulk Sam	pling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textur	red	☐ Shingle	☐ Floor
□ Elbow	□ 9'x9'Tile	☐ Stucco)	□ Rolled	X Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popco:	rn	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	\square DWJC		□ Tar	☐ Above Ceiling
☐ Gasket	Wall	☐ Plaster	r		☐ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acous	tic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acous	tic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic		Miscellaneous:	No picture
☐ Insulation	X DWJC		Structural		
☐ Tape		☐ Steel F	F. P. ing	No. of Phases:	
☐ Paper Wrap		□ Deck l	F. P. ing	Colour:	



Sample #:	S014	Date Sampled:	August 8, 2012	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	078, room 4S02	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	☐ Floor
□ Elbow	□ 9'x9'Tile	☐ Stucco	□ Rolled	X Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	☐ Plaster		□ Other
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	
☐ Insulation	X DWJC	Structural		
☐ Tape		☐ Steel F. P. ing	No. of Phases:	
☐ Paper Wrap		□ Deck F. P. ing	Colour:	





Sample #:	S015	Date Sampled:	May 2, 2013				
Building:	Field Hall	Sampler:	Trent Hardy				
Location:	Room 2S01	Analysis:	SAI - PLM				
MUN Project #:	02-02-900	Work Order #:					
	Bulk Sampling Parameters						
Pipe/Tank	Flooring	Ceiling	Roofing	Location			
☐ Insulation	□12'x12' Tile	X Textured	☐ Shingle	□ Floor			
□ Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	☐ Wall Orientation			
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	X Ceiling			
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling			
☐ Gasket	Wall	☐ Plaster		□ Other			
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)					
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:				
☐ Insulation	\square DWJC	Structural					
☐ Tape		☐ Steel F. P. ing	No. of Phases:				
☐ Paper Wrap		□ Deck F P ing	Colour:				





Sample #:	S016	Date Sampled:	May 2, 2013			
Building:	Field Hall	Sampler:	Trent Hardy			
Location:	1S01	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
	Bulk Sampling Parameters					
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	□ Floor		
□ Elbow	□ 9'x9'Tile	☐ Stucco	☐ Rolled	X Wall Orientation		
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	☐ Plaster		□ Other		
☐ Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:			
☐ Insulation	X DWJC	Structural				
☐ Tape		☐ Steel F. P. ing	No. of Phases:			
☐ Paper Wrap		□ Deck F. P. ing	Colour:			





Sample #:	S017	Date Sampled:	May 2, 2013	
Building:	Field Hall	Sampler:	Trent Hardy	
Location:	Room 004	Analysis:	SAI - PLM	
MUN Project #:	02-02-900	Work Order #:		
		Bulk Sampling Parameters		
Pipe/Tank	Flooring	Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured	☐ Shingle	□ Floor
□ Elbow	☐ 9'x9'Tile	☐ Stucco	□ Rolled	X Wall Orientation
☐ Fitting	☐ Vinyl Sheet	□ Popcorn	□ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	☐ Plaster		□ Other
X Tank Insulation	☐ Transite Panel	☐ Acoustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	☐ Acoustic Tile (Glued-on)		
HVAC	☐ Plaster	☐ Mastic	Miscellaneous:	
☐ Insulation	□ DWJC	Structural		
☐ Tape		☐ Steel F. P. ing	No. of Phases:	
☐ Paper Wrap		☐ Deck F. P. ing	Colour:	

