



ASBESTOS AND LEAD PAINT BUILDING MATERIALS SURVEY FOR: C-CORE BUILDING 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

27 AUSTIN STREET, ST. JOHN'S NL, A1B 4C3 TEL: (709) 754-4490 FAX: (709) 754-1359 SAINT JOHN, NB • DARTMOUTH, NS • LABRADOR CITY, NL • CORNER BROOK, NL

ISO 9001:2008 Registered Quality System (Dartmouth, NS)

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: C-CORE BUILDING

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

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

- 1. Non-friable asbestos-containing building materials were identified in the Site Building, specifically tar mastics and vinyl floor tiles and transite;
- 2. No paints with lead concentrations exceeding 600mg/kg were identified in the Site Building.

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 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: C-CORE BUILDING

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 November 28th, 2012. The survey, collection of representative bulk samples, and recording of information was performed by Mr. Trent Hardy 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 sixteen (16) representative bulk samples were collected for analysis for asbestos content and two (2) 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 spray or trowelled fireproofing or thermal insulation was observed in the Site Building at the time of the survey.

3.2 Mechanical Insulation

Tar mastic present on mitered elbows of fiberglass pipe insulation was sampled and analysis indicates the presence of 10% chrysotile asbestos (reference sample 02-02-900-S004). For locations and conditions of this material at the time of the building survey refer to location & data excel document.

Parging cement present on pipe elbows was sampled in room 1005B and analysis did not identify the presence of asbestos (reference sample 02-02-900-S015).

3.3 Acoustic Ceiling Tiles

Off the (3) three samples collected of acoustic ceiling tiles were observed in the Site Building none were identified with asbestos. A summary of the acoustic ceiling tiles sampled is presented below:

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- The 2"x2" acoustic ceiling tile distinguished with a pinhole and fleck pattern located in room K-1C02 (reference sample 02-02-900-S002);
- The 2"x2" acoustic ceiling tile distinguished with a parallel fissure and pinhole pattern in room K-1C02 (reference sample 02-02-900-S003); and
- The 2"x2" acoustic ceiling tile distinguished with a pinhole and hole pattern in room K-1000 (reference sample 02-02-900-S011).

3.4 Drywall, Plaster, and Texture Finishes

Drywall was used as a wall and ceiling finish throughout the Site 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.

A total of five (5) samples of drywall joint compound were collected in the site building. None of the samples analyzed indicated the presence of asbestos (reference samples, 02-02-900-S005, S008, S009, S012, and S013).

Plaster was not observed in use as a wall and/or ceiling finish in the Site Building. It should be noted that plaster can at times be difficult to distinguish from other wall and ceiling finishes such as drywall and concrete. Should plaster be encountered during any demolition or renovation activities, it should be sampled for analysis for asbestos content.

Two (2) samples of textured ceiling coats were collected from the Site Building. A summary of the results of their analysis is provided below:

- Textured ceiling coating was sampled from room K-1V0. Analysis of the sample and did not identify the presence of asbestos (reference sample 02-02-900-S010).
- Texture ceiling coating was sampled from room K-1011. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S007).

3.5 Vinyl Flooring Materials

<u>3.5.1</u> Vinyl Floor Tiles

Two (2) types of vinyl floor tiles were observed in the Site Building. A list of the two (2) visually different vinyl floor tiles is provided below. For locations and conditions of this material at the time of the building survey refer to location & data excel document.

- The 12"x12" cream with abundant brown flecks vinyl floor tile were sampled in room K-1C02, and contain 3% chrysotile asbestos (reference sample 02-02-900-S001).
- The 12"x12" white with brown streaks vinyl floor tile, were sampled in room K-1009. Analysis of this sample and associated tar mastic adhesive did not detect the presence of asbestos (reference sample 02-02-900-S006).

3.5.2 Vinyl Sheet Flooring

One (1) type of vinyl floor covering was observed in the Site Building. The description of this floor covering is detailed below.

• One sample of the tan vinyl floor covering sampled in room 2000A, and analysis did not detect the presence of asbestos (reference sample 02-02-900-S014). Additional analysis of the glue adhesive did not detect the presence of asbestos.

3.6 Asbestos Cement Products

No asbestos cement products were observed in the Site Building at the time of the survey.

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 none 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%).

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.

Non-Friable Materials

Non-friable asbestos containing materials identified inside the Site Building include: tar mastics and vinyl floor tiles.

- 1. Type I (low risk) asbestos abatement procedures should be carried out for the scheduled disturbance of any non-friable materials provided the materials can be removed intact, and without the use of powered hand tools.
- 2. Should the use of powered hand tools or excessive breakage of the materials become necessary, Type II (moderate risk) asbestos abatement procedures should be adopted.

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;

Lacher Paul Staeber

NL Vice Present pstaeben@pinchinleblanc.com

APPENDIX I

ASBESTOS ANALYTICAL REPORT



Bulk Asbestos Analysis

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 Attn: Dawn Benteau Curtis Snelgrove

Lab Order ID:	1219472
Analysis ID:	1219472PLM
Date Received:	12/3/2012
Date Reported:	12/7/2012

Project: 02-02-0900 "C-Core Bldg"

Sample ID	Description	Asbestos	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	ASDESIUS	Components	Components	Treatment
02-02-0900- S001	12"x12" VFT, cream w abundant brown flecks	3% Chrysotile		97% Other	Cream Non Fibrous Heterogeneous
1219472PLM_1	tile only				Dissolved
02-02-0900- S002	2"x2" ACT, pinhole & fleck	None Detected	40%Cellulose40%Fiber Glass	20% Other	Tan, White Fibrous Heterogeneous
1219472PLM_2	-				Crushed
02-02-0900- S003	2"x2" ACT, parallel fissure & pinhole	None Detected	40%Cellulose40%Fiber Glass	20% Other	Tan, White Fibrous Heterogeneous
1219472PLM_3	-				Crushed
02-02-0900- S004	Tar mastic on pipe insulation	10% Chrysotile		90% Other	Black Non Fibrous Heterogeneous
1219472PLM_4	-				Dissolved
02-02-0900- S005	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1219472PLM_5	-				Crushed
02-02-0900- S006 - A	12"x12" VFT, white w brown streaks	None Detected		100% Other	White Non Fibrous Heterogeneous
1219472PLM_6	tile tile				Dissolved
02-02-0900- S006 - B	12"x12" VFT, white w brown streaks	None Detected	2% Cellulose	98% Other	Black Non Fibrous Heterogeneous
1219472PLM_14	mastic				Dissolved
02-02-0900- S007	Textured ceiling coat	None Detected		100% Other	White Non Fibrous Heterogeneous
1219472PLM_7	-				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>US</u> government. Estimated MPL is 0.1%.

Dorlos Ammerman (14)

Analyst

Nathaniel Durham, MS or Approved Signatory



Bulk Asbestos Analysis

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 Attn: Dawn Benteau Curtis Snelgrove

Lab Order ID:	1219472
Analysis ID:	1219472PLM
Date Received:	12/3/2012
Date Reported:	12/7/2012

Project: 02-02-0900 "C-Core Bldg"

Sample ID	Description	Asbestos	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Aspestos	Components	Components	Treatment
02-02-0900- S008	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1219472PLM_8					Crushed
02-02-0900- S009	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1219472PLM_9					Crushed
02-02-0900- S010	Textured ceiling coat	None Detected		100% Other	White Non Fibrous Heterogeneous
1219472PLM_10	-				Crushed
02-02-0900- S011	2"x2" ACT, pinhole & hole	None Detected	50%Cellulose30%Fiber Glass	10%Perlite10%Other	Tan, White Fibrous Heterogeneous
1219472PLM_11	-				Crushed
02-02-0900- S012	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1219472PLM_12	-				Crushed
02-02-0900- S013	DWJC	None Detected		100% Other	White Non Fibrous Homogeneous
1219472PLM_13	1				Crushed

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Dorlos Ammerman (14)

Analyst

Nathaniel Durham, MS or Approved Signatory



Bulk Asbestos Analysis

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



Customer:	Pinchin LeBlanc Environmental	Attn: Dawn Benteau	Lab Order ID:	1308144
	27 Austin St	Paul Staeben	Analysis ID:	1308144_PLM
	2nd Flr St Johns NL A1B 4C3		Date Received:	5/2/2013
Project: ()	2-02-00900;MUN Asbestos and Lead		Date Reported:	5/7/2013

Project: 02-02-00900;MUN Asbestos and Lead Survey

Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
02-02-900- S014 - A	Vinyl Sheet Flooring - Tan	None Detected		100% Other	Tan Non Fibrous Heterogeneous
1308144PLM_1					Dissolved Yellow
02-02-900- S014 - B	Vinyl Sheet Flooring - Tan	None Detected	3% Cellulose	97% Other	Non Fibrous Heterogeneous
1308144PLM_4	mastic				Dissolved
02-02-900- S015	Pipe Elbow Parging	None Detected	30% Fiber Glass	70% Other	Gray Fibrous Heterogeneous
1308144PLM_2	-				Teased
02-02-900- S016	Transite	20% Chrysotile		80% Other	Gray Fibrous Heterogeneous
1308144PLM_3					Teased

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Ired Gulley (4)

Analyst

Approved Signatory

plm_3.3.004

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	Attn:	Dawn Benteau	Lab Order ID:	1219471
	27 Austin St 2nd Flr St Johns NL A1B 4C3			Analysis ID: Date Received:	1219471_PBP 12/3/2012
Destante Of				Date Reported:	12/10/2012

Project: 02-02-0900 "C-Core Building"

Sample ID	Description	Mass	Analytical Sensitivity	Concentration
Lab Sample ID	Lab Notes	(g)	(% by weight)	(% by weight)
02-02-900-L001	White paint	0.0449	0.003%	< 0.009%
1219471PBP_1				
02-02-900-L002	Red paint	0.0482	0.003%	0.040%
1219471PBP_2				

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.

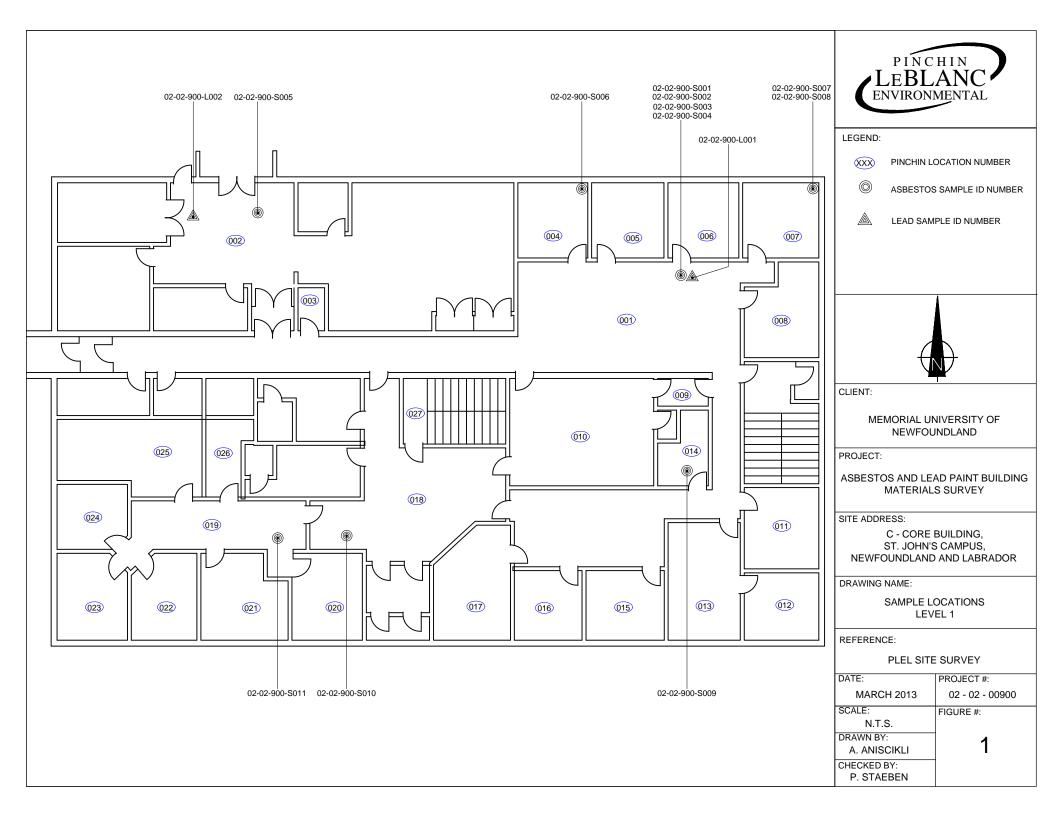
Robert Duke (2)

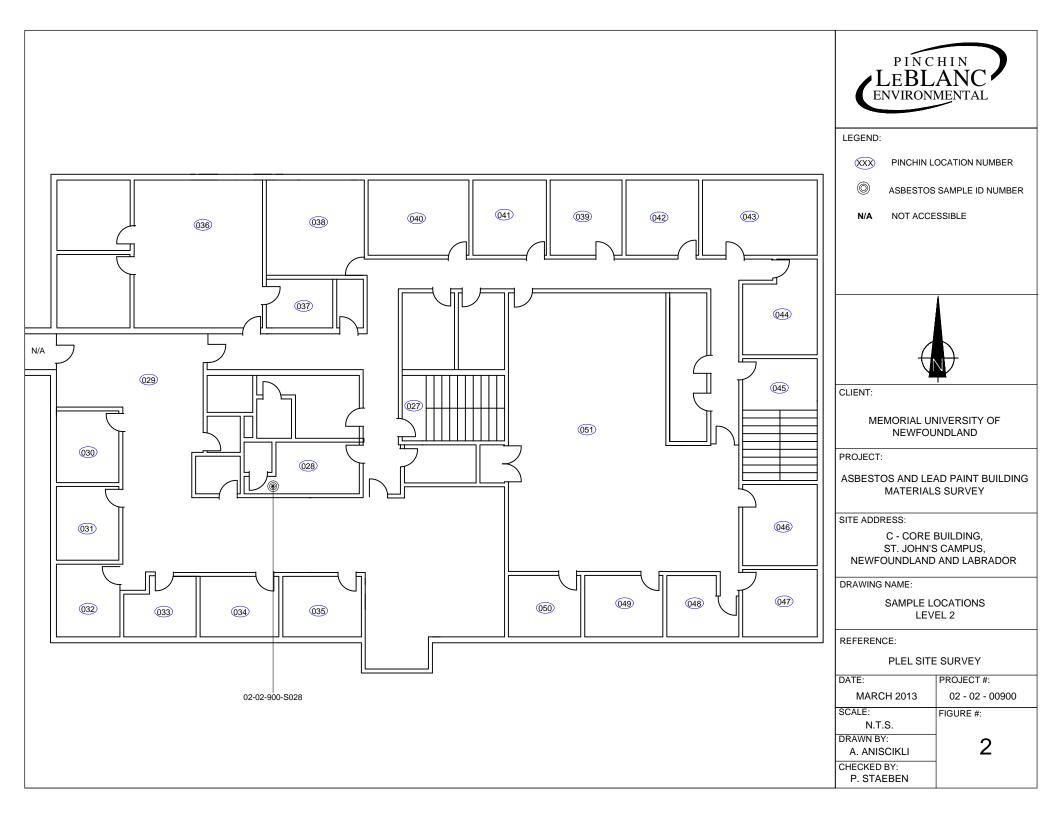
Analyst

Laboratory Director

APPENDIX III

SITE DRAWINGS





APPENDIX IV

SAMPLE LOG

MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING FO	ORM		
Sample #:	S001		Date Sampled:				
Building :	C-Core		Sampler:	Trent Hardy			
Location:	001, room 1C02		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
□ Insulation	X12'x12' Tile	□ T	extured	□ Shingle	X Floor		
\Box Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation		
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	□ Ceiling		
□ Transite Pipe	□ Mastic	\Box D	WJC	🗆 Tar	□ Above Ceiling		
□ Gasket	Wall	$\Box P$	laster		□ Other		
□ Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)				
HVAC	□ Plaster	$\Box M$	lastic	Miscellaneous:			
□ Insulation	DWJC		Structural				
□ Tape		\Box S	teel F. P. ing	No. of Phases:			
□ Paper Wrap			eck F. P. ing	Colour: <u>Cream</u> brown flecks	with abundant		



ASBESTOS BULK SAMPLING FORM							
Sample #:	S002		Date Sampled:				
Building :	C-Core		Sampler:	Trent Hardy			
Location:	001, room 1C02		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
	Bulk Sampling Parameters						
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
□ Insulation	□12'x12' Tile	ΠT	extured	□ Shingle	□ Floor		
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation		
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	X Ceiling		
□ Transite Pipe	□ Mastic	ΠD	ŴJС	🗆 Tar	□ Above Ceiling		
□ Gasket	Wall	$\Box P$	laster		□ Other		
□ Tank Insulation	□ Transite Panel	ΧА	coustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)				
HVAC	□ Plaster	$\Box N$	lastic	Miscellaneous:	2' x 2' pinhole fleck		
□ Insulation	DWJC		Structural		-		
□ Tape		\Box S	teel F. P. ing	No. of Phases:			
Paper Wrap		\Box D	eck F. P. ing	Colour:			



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING F	ORM		
Sample #:	S003		Date Sampled:				
Building :	C-Core		Sampler:	Trent Hardy			
Location:	001, room 1C02		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
\Box Insulation	□12'x12' Tile	П Т	extured	\Box Shingle	□ Floor		
□ Elbow	□ 9'x9'Tile	\Box S	tucco	\Box Rolled	□ Wall Orientation		
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	□ Felt	X Ceiling		
□ Transite Pipe	□ Mastic	$\Box D$	WJC	🗖 Tar	□ Above Ceiling		
□ Gasket	Wall	$\square P$	laster		□ Other		
□ Tank Insulation	□ Transite Panel	X A	coustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)				
HVAC	□ Plaster	\Box Mastic Miscellaneous: <u>2' x 2' parallel</u> <u>fissure and pinhole</u>					
□ Insulation	DWJC		Structural				
□ Tape		\Box S	teel F. P. ing	No. of Phases:			
□ Paper Wrap		$\Box D$	eck F. P. ing	Colour:			



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING F	ORM			
Sample #:	S004		Date Sampled:					
Building :	C-Core		Sampler:	Trent Hardy				
Location:	001, room 1C02		Analysis:	SAI - PLM				
MUN Project #:	02-02-900		Work Order #:					
	Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location			
□ Insulation	□12'x12' Tile	□ T	extured	□ Shingle	□ Floor			
X Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation			
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	□ Ceiling			
□ Transite Pipe	□ Mastic	ΠD	WJC	🗖 Tar	□ Above Ceiling			
□ Gasket	Wall	$\Box P$	laster		X Other			
□ Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)					
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)					
HVAC	□ Plaster	$\Box M$	lastic	Miscellaneous	: <u>Tar mastic</u>			
\Box Insulation	DWJC		Structural					
□ Tape		$\Box S$	teel F. P. ing	No. of Phases:				
Paper Wrap		\Box D	eck F. P. ing	Colour:				



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING FO	ORM
Sample #:	S005		Date Sampled:		
Building :	C-Core		Sampler:	Trent Hardy	
Location:	002, room 1005	2, room 1005 Analysis:		SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
Bulk Sampling Parameters					
Pipe/Tank	Flooring		Ceiling	Roofing	Location
□ Insulation	□12'x12' Tile	ΠT	extured	□ Shingle	□ Floor
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	X Wall Orientation
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	□ Ceiling
□ Transite Pipe	□ Mastic	$\Box D$	WJC	🗆 Tar	□ Above Ceiling
□ Gasket	Wall	$\square P$	laster		□ Other
\Box Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)		
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)		
HVAC	□ Plaster	$\Box M$	lastic	Miscellaneous:	
\Box Insulation	X DWJC		Structural		
□ Tape		\Box S	teel F. P. ing	No. of Phases:	
Paper Wrap		$\Box D$	eck F. P. ing	Colour:	



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING FO	ORM
Sample #:	S006		Date Sampled:		
Building :	C-Core		Sampler:	Trent Hardy	
Location:	004, room 1009	4, room 1009 Analysis:		SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
Bulk Sampling Parameters					
Pipe/Tank	Flooring		Ceiling	Roofing	Location
□ Insulation	X12'x12' Tile	ΠT	extured	□ Shingle	X Floor
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	□ Ceiling
□ Transite Pipe	□ Mastic	\Box D	WJC	🗆 Tar	□ Above Ceiling
□ Gasket	Wall	$\Box P$	laster		□ Other
□ Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)		
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)		
HVAC	□ Plaster	$\Box M$	lastic	Miscellaneous:	
□ Insulation	DWJC		Structural		
□ Tape		\Box S	teel F. P. ing	No. of Phases:	
Paper Wrap		\Box D	eck F. P. ing	Colour: White	with brown streaks



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING FO	ORM	
Sample #:	S007		Date Sampled:			
Building :	C-Core		Sampler:	Trent Hardy		
Location:	007, room 1011	room 1011 Analysis:		SAI - PLM		
MUN Project #:	02-02-900	2-900 Work Order #:				
Bulk Sampling Parameters						
Pipe/Tank	Flooring		Ceiling	Roofing	Location	
□ Insulation	□12'x12' Tile	ΧT	extured	□ Shingle	□ Floor	
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation	
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	🗆 Felt	X Ceiling	
□ Transite Pipe	□ Mastic	\Box D	WJC	🗆 Tar	□ Above Ceiling	
□ Gasket	Wall	$\Box P$	laster		□ Other	
□ Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)			
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)			
HVAC	□ Plaster	$\Box N$	lastic	Miscellaneous:		
□ Insulation	DWJC		Structural			
□ Tape		\Box S	teel F. P. ing	No. of Phases:		
Paper Wrap		\Box D	eck F. P. ing	Colour:		



MEMORIA UNIVERSIT		ASB	ESTOS BULK SA	MPLING FO	ORM
Sample #:	S008		Date Sampled:		
Building :	C-Core		Sampler:	Trent Hardy	
Location:	007, room 1011		Analysis:	SAI - PLM	
MUN Project #:	02-02-900	2-900 Work Order #:			
Bulk Sampling Parameters					
Pipe/Tank	Flooring		Ceiling	Roofing	Location
□ Insulation	□12'x12' Tile	ΠT	extured	□ Shingle	□ Floor
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	X Wall Orientation
□ Fitting	□ Vinyl Sheet	$\Box P$	opcorn	□ Felt	□ Ceiling
□ Transite Pipe	□ Mastic	\Box D	WJC	🗆 Tar	□ Above Ceiling
□ Gasket	Wall	$\Box P$	laster		□ Other
□ Tank Insulation	□ Transite Panel	$\Box A$	coustic Tile (Dropped)		
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)		
HVAC	□ Plaster	$\Box N$	lastic	Miscellaneous:	
\Box Insulation	X DWJC		Structural		
□ Tape		\Box S	teel F. P. ing	No. of Phases:	
Paper Wrap		\Box D	eck F. P. ing	Colour:	

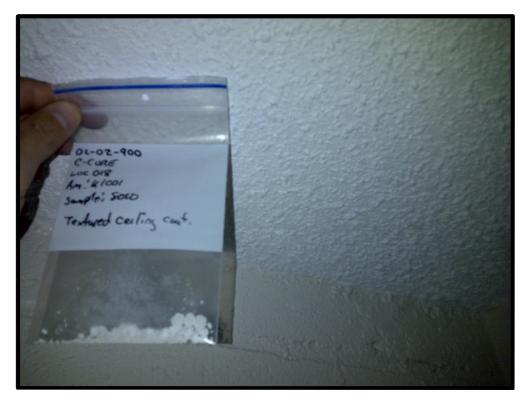


MEMORIA UNIVERSIT		ASBESTOS BULK SA	MPLING F(ORM		
Sample #:	S009	Date Sampled:				
Building :	C-Core	Sampler:	Trent Hardy			
Location:	Room 1014E	Analysis:	SAI - PLM			
MUN Project #:	02-02-900	Work Order #:				
Bulk Sampling Parameters						
Pipe/Tank	Flooring	Ceiling	Roofing	Location		
□ Insulation	□12'x12' Tile	□ Textured	□ Shingle	□ Floor		
\Box 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		
\Box Tank Insulation	□ Transite Panel	□ Acoustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	\Box 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:			



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Sample #:	S010	Date Sampled:		
Building :	C-Core	Sampler:	Trent Hardy	
Location:	018, room 1001	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	DWJC	Structural		
□ Tape		□ Steel F. P. ing	No. of Phases:	
□ Paper Wrap		Deck F. P. ing	Colour:	



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UNIVERSIT	Y				
Sample #:	S011		Date Sampled:		
Building :	C-Core		Sampler:	Trent Hardy	
Location:	019, 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	ΠT	extured	□ Shingle	□ Floor
□ Elbow	□ 9'x9'Tile	\Box S	tucco	□ Rolled	□ Wall Orientation
□ Fitting	\Box Vinyl Sheet \Box Popcorn		opcorn	🗆 Felt	X Ceiling
□ Transite Pipe	□ Mastic	\Box D	WJC	🗆 Tar	□ Above Ceiling
□ Gasket	Wall	$\Box P$	laster		□ Other
□ Tank Insulation	□ Transite Panel	ΧА	coustic Tile (Dropped)		
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)		
HVAC	□ Plaster	$\Box N$	lastic	Miscellaneous:	2' x 2' pinhole
\Box Insulation	□ DWJC		Structural		
□ Tape			teel F. P. ing	No. of Phases:	
□ Paper Wrap		\Box D	eck F. P. ing	Colour:	



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Sample #:	S012	Date Sampled:		
Building :	C-Core	Sampler:	Trent Hardy	
Location:	028, room 2011	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	\Box Rolled	X Wall Orientation
□ Fitting	\Box Vinyl Sheet \Box 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:	



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Sample #:	S013	Date Sampled:					
Building :	C-Core	Sampler:	Trent Hardy				
Location:	031, room 2016	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	\Box 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:				



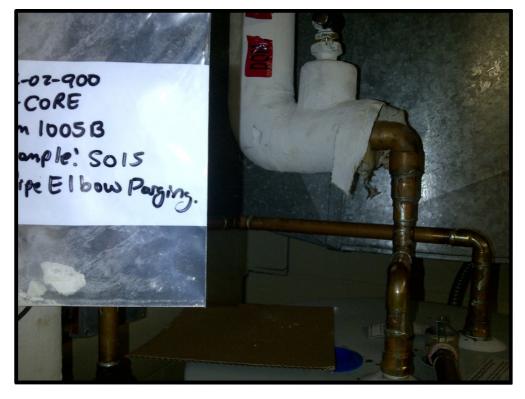
ASBESTOS BULK SAMPLING FORM							
Sample #:	S014	Ι	Date Sampled:	May 2, 2013			
Building :	C-Core Samp		Sampler:	Trent Hardy			
Location:	Room 1001		Analysis:	SAI - PLM			
MUN Project #:	02-02-900 W		Vork Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring	Ceiling		Roofing	Location		
□ Insulation	□12'x12' Tile	□ Textured		□ Shingle	X Floor		
\Box Elbow	□ 9'x9'Tile	□ Stucco		□ Rolled	□ Wall Orientation		
□ Fitting	X Vinyl Sheet	Popcorn		□ Felt	□ Ceiling		
□ Transite Pipe	□ Mastic	□ DWJC		🗆 Tar	□ Above Ceiling		
□ Gasket	Wall	🗆 Plas	ster		□ Other		
□ Tank Insulation	□ Transite Panel	\Box Acc	oustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	\Box Acc	oustic Tile (Glued-on)				
HVAC	□ Plaster	□ Mastic		Miscellaneous	: Tan		
\Box Insulation	DWJC		Structural				
□ Tape		□ Steel F. P. ing No. of Phases:					
□ Paper Wrap		Deck F. P. ing		Colour:			

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ASBESTOS BULK SAMPLING FORM							
Sample #:	S015	Date Sampled:	May 2, 2013	May 2, 2013			
Building :	C-Core Sampler:		Trent Hardy				
Location:	Room 1005B	Analysis:	SAI - PLM				
MUN Project #:	02-02-900 Work Order #:						
Bulk Sampling Parameters							
Pipe/Tank	Flooring	Ceiling	Roofing	Location			
\Box Insulation	□12'x12' Tile	□ Textured	\Box Shingle	□ Floor			
X Elbow	□ 9'x9'Tile	□ Stucco	□ Rolled	X Wall Orientation			
□ Fitting	□ Vinyl Sheet	□ Popcorn	🗆 Felt	□ Ceiling			
□ Transite Pipe	□ Mastic	□ DWJC	🗆 Tar	□ Above Ceiling			
□ Gasket	Wall	\Box Plaster \Box Other		□ Other			
□ Tank Insulation	□ Transite Panel	□ Acoustic Tile (Dropped)					
□ Pipe Wrap	□ Textured Wall	\Box Acoustic Tile (Glued-on)					
HVAC	□ Plaster	□ Mastic	Miscellaneous: Parging				
\Box Insulation	□ DWJC	Structural					
□ Tape		□ Steel F. P. ing	No. of Phases:				
□ Paper Wrap		Deck F. P. ing	Colour:				

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ASBESTOS BULK SAMPLING FORM							
Sample #:	S016		Date Sampled:	May 2, 2013			
Building :	C-Core	Core Sampler:		Trent Hardy			
Location:	Room 1005C	om 1005C Analysis:		SAI - PLM			
MUN Project #:	02-02-900	-02-900 Work Order #:					
Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
□ Insulation	□12'x12' Tile	□ Textured		□ Shingle	□ Floor		
\Box 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	X Transite Panel	$\Box A$	coustic Tile (Dropped)				
□ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)				
HVAC	□ Plaster	□ Mastic		Miscellaneous:			
□ Insulation	DWJC		Structural				
□ Tape		\Box S	teel F. P. ing	No. of Phases:			
Paper Wrap		\Box D	eck F. P. ing	Colour:			

