



ASBESTOS AND LEAD PAINT BUILDING MATERIALS SURVEY FOR: OCEAN SCIENCES CENTER, MAIN BUILDING AND ANNEX MEMORIAL UNIVERSITY OF NEWFOUNDLAND



Prepared for:

Memorial University of Newfoundland

St. John's, NL

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

March 22, 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: OCEAN SCIENCES CENTER MAIN BUILDING AND ANNEX

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

A summary of the findings for the 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. Friable asbestos containing materials identified inside the Site Building include: spray fireproofing DEBRIS, parging cement on pipe elbows/fittings, tank insulation, and boiler exhaust insulation.
- Non-friable asbestos containing materials with the potential to become friable during renovation or construction activities have been identified inside the Site Building, specifically drywall joint compound.
- 3. Non-friable asbestos containing materials identified inside the Site Building specifically vinyl floor tiles, transite, and textile materials.
- 4. Analytical results indicate that four (4) 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 in room AX-1001 the yellow paint in room AX-1001, the black paint in room AX-3C01, and the blue paint in room AX-3C01.

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: OCEAN SCIENCES CENTER, MAIN BUILDING AND ANNEX

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

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.

5.0 Recommendations

2.0 SURVEY INFORMATION

The survey was conducted on between November 29th and November 30th, 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 twenty-seven (27) representative bulk samples were collected for analysis for asbestos content and eight (8) 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

Debris present on the ceiling and surfaces in room OS-2002 was sampled and contains 60% amosite asbestos (reference samples 02-02-900-S026). This DEBRIS is suspected to be associated with spray applied fireproofing previously located on the ceiling of this room. For locations and conditions of this material at the time of the building survey refer to location & data excel document.

3.2 Mechanical Insulation

Five (5) samples were collected of the parging cement used on the elbows and fittings in the site building and contains 25% Chrysotile asbestos in two (2) of the five (5) samples (reference sample 02-02-900-S075 and 02-02-900-S076). For locations and conditions of this material at the time of the building survey refer to location & data excel document.

3.2.1 Straight Run Pipe Insulations

Suspect asbestos containing straight pipe insulation was not observed in the Site Building. The majority of piping straight sections observed is insulated with non-asbestos fiberglass wrapped in canvas jacketing.

3.2.2 Pipe Elbows and Fittings

Friable insulating cement, commonly referred to as parging cement, is present on various elbows and fittings in the Site Building. A summary of the results for these samples is described below. For locations and conditions of this material at the time of the survey refer to location & data excel document.

- Parging cement present on 6" water lines in room AX-1001 was sampled, and contains 30% chrysotile asbestos (reference sample 02-02-900-S005).
- Parging cement present on 4" water lines in room AX-1001 was sampled, and contains 30% chrysotile asbestos (reference sample 02-02-900-S004).
- Parging cement present on 6" water lines near the eyewash station was sampled in room AX-1001. Analysis of this sample did not identify the presence of asbestos (reference sample 02-02-900-S003).

3.2.3 Tanks and Boilers

Suspect asbestos-containing materials present on tanks and boilers in the Site Building were collected. A summary of the results for these samples is provided below. For locations and conditions of this material at the time of the building survey refer to location & data excel document.

- Friable mechanical insulation present on the steam header in room AX1001 was sampled, and contains 15% amosite and 10% chrysotile asbestos (reference sample 02-02-900-S001).
- Friable mechanical insulation present on the boiler exhaust in room AX-1001 was sampled and contains 40% chrysotile asbestos (reference sample 02-02-900-S002).
- Friable mechanical insulation present on the tank in room AX-1000 was sampled, and contains 30% chrysotile asbestos (reference sample 02-02-900-S007).
- Non-friable textile cloth expansion joints present on ducting in room OS-2002 was sampled, and contains 50% chrysotile asbestos (reference sample 02-02-900-S027).
- Non-friable textile gaskets present on the heads of boilers #1 and #2 in room AX-1001 was sampled. Analysis of this sample did not identify the presence of asbestos (reference sample 02-02-900-S006).

3.3 Acoustic Ceiling Tiles

Two (2) types of acoustic ceiling tiles were observed in the Site Building. A summary of the results for these samples is provided below. For locations and conditions of this material at the time of the survey refer to location & data excel document.

- 2'x 4' acoustic ceiling tile distinguished with a longitudinal fissure and pinhole pattern were sampled in room AX-2S02. Analysis of this sample did not identify the presence of asbestos (reference sample 02-02-900-S014).
- 2'x 4' acoustic ceiling tile distinguished with a longitudinal fissure and pinhole pattern were sampled in room AX-3C01. Analysis of this sample did not identify the presence of asbestos (reference sample 02-02-900-S017).

3.4 Drywall, Plaster, and Texture Finishes

Drywall was used as a wall and ceiling finish throughout the building. Until the early to mid1980s, 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.

Six (6) samples, in total, of drywall joint compound were collected in the Site Building. Results from two (2) of the six (6) samples collected contain 3% chrysotile asbestos (reference samples, 02-02-900-S020, and 02-02-900-S022). For locations and conditions of this material at the time of the survey refer to location & data excel document.

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.

3.5 Vinyl Flooring Materials

3.5.1 Vinyl Floor Tiles

Samples were collected of eight (8) types of vinyl floor tiles observed in the Site Building. A summary of the results for these samples is provided below. For locations and conditions of this material at the time of the survey refer to location & data excel document.

3.5.1.1 Asbestos Containing Vinyl Floor Tiles

- Beige with thick brown streak, 12"x 12" vinyl floor tiles were sampled in room OS-3C01 and contain 5% chrysotile asbestos (reference sample 02-02-900-S016).
- Beige with thick brown streak, 9"x 9" vinyl floor tiles were sampled in room OS-3016 and contain 6% chrysotile asbestos (reference sample 02-02-900-S023).
- Brown with thick brown streak, 12"x 12" vinyl floor tiles were sampled in room OS-2000/200A and contain 5% chrysotile asbestos (reference sample 02-02-900-S016).

3.5.1.2 Non-Asbestos Containing Vinyl Floor Tiles

- White with brown streak, 12"x 12" vinyl floor tiles were sampled in room AX-2002.
 Analysis of the sample and associated tar mastic adhesive did not identify the presence of asbestos (reference sample 02-02-900-S009).
- White with brown streak, 12"x 12" vinyl floor tiles were sampled in room AX-2003. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S011).
- Beige with brown streak, 12"x 12" vinyl floor tiles were sampled in room AX-3C01.
 Analysis of the sample and associated tar mastic adhesive did not identify the presence of asbestos (reference sample 02-02-900-S015).
- Grey 12"x 12" vinyl floor tiles were sampled in room AX-3001B. Analysis of the sample and associated tar mastic adhesive did not identify the presence of asbestos (reference sample 02-02-900-S019).
- White with abundant blue fleck, 12"x 12" vinyl floor tiles were sampled in room AX-4013. Analysis of the sample and associated tar mastic adhesive did not identify the presence of asbestos (reference sample 02-02-900-S021).

3.6 Asbestos Cement Products

Transite present in room AX-2001B was sampled and contains 20% chrysotile asbestos (reference sample 02-02-900-S013). For locations and conditions of this material at the time of the building survey refer to location & data excel document.

3.7 Vermiculite Insulation

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

3.8 Other Asbestos Containing Building Materials

Tar roofing material present above the ceiling in room AX-2S02 was sampled. Analysis of this sample did not identify the presence of asbestos (reference sample 02-02-900-S010).

4.0 LBP SURVEY FINDINGS

Analytical results indicate that four (4) 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 in room AX-1001 (reference sample 02-02-900-L002), the yellow paint in room AX-1001 (reference sample 02-02-900-L003), the black paint in room AX-3C01 (reference sample 02-02-900-L004), and the blue paint in room AX-3C01 (reference sample 02-02-900-L005) and the same paint colours located elsewhere should be managed as lead containing.

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

All paints observed inside the Site Building were observed in GOOD condition.

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: spray fireproofing DEBRIS, parging cement on pipe elbows/fittings, tank insulation, and boiler exhaust insulation.

- Any DEBRIS associated with friable asbestos containing materials should be abated as soon as reasonably possible to prevent worker exposure. Entry into these spaces should follow Type II (moderate risk) entry procedures until the hazard can be removed. Abatement of the DEBRIS and residual material would be completed using Type III (high risk) asbestos abatement procedures.
- 2. Type III (high risk) asbestos abatement procedures should be carried out for the scheduled removal of greater than 1ft² of friable asbestos containing materials. Alternatively, Type II (moderate risk) glove bag abatement procedures may be applied where practical;

3. 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 1ft² of material;

Potentially Friable Materials

Non-friable asbestos containing materials with the potential to become friable during renovation or construction activities have been identified inside the Site Building, specifically drywall joint compound.

1. Under the NL guidance documents for moderate and low risk asbestos abatement procedures, quantities of plaster within an enclosure exceeding 100 ft² should be removed using Type III (high risk) asbestos abatement procedures. Quantities less than 100 ft² but exceeding 10ft² should be removed using Type II (moderate risk) asbestos abatement procedures, while quantities less than 10 ft² should be removed using Type I (low risk) asbestos abatement procedures.

Non-Friable Materials

Non-friable asbestos containing materials identified inside the Site Building include: vinyl floor tiles, transite, and textile materials.

- 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.

Lead Based Paints

Do not grind, sand, torch or cut lead materials without using proper procedures, as material poses a health hazard if disturbed by these methods.

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

March 6, 2013 Project No. 02-02-00900

Prepared by;

APPENDIX I

ASBESTOS ANALYTICAL REPORT



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



Customer: Pinchin LeBlanc Environmental

Attn: Paul Staeben

Lab Order ID: 1219843

27 Austin St

Dawn Benteau Analysis ID:

1219843_PLM

2nd Flr St Johns NL A1B 4C3

Date Received: 12/10/2012

Project: 02-02-00900 MUN Asbestos an

Date Reported: 12/14/2012

Date Amended:

3/22/2013

Attributes

02-02-00900 MUN	Asbestos and Lead
Survey - OSC Main	Bulding and Annex

Description

— ASDESIUS		Fibrous Components	Non-Fibrous Components	Attributes Treatment	
02-02-900- S001	Mechanical Insulation on Steam Header	15% Amosite 10% Chrysotile		75% Other	White Fibrous Homogeneous
1219843PLM_1					Tensed
02-02-900- S002	Mechanical Insulation on Boiler Exhaust	40% Chrysotile		60% Other	Gray Fibrous Homogeneous
1219843PLM_2	1				Teased
02-02-900- S003	Parging Cement on 6" Water Lines	None Detected	30% Mineral Wool	70% Other	White Fibrous Homogeneous
1219843PLM_3	1				Teased
02-02-900- S004	Parging Cement on 4" Water Lines	30% Chrysotile		70% Other	Gray Fibrous Homogeneous
1219843PLM_4					Teased
02-02-900- S005	Parging Cement on 6" Water Lines	30% Chrysotile		70% Other	Gray Fibrous Homogeneous
1219843PLM_5	1				Tensed
02-02-900- S006	Textile Gasket on Boilers 1 and 2	None Detected	90% Cellulose	10% Other	Tan Fibrous Heterogeneous
1219843PIM_6	<u> </u>				Teased, Dissolved
02-02-900- S007	Tank Insulation	30% Chrysotile		70% Other	Gray, White Fibrous Heterogeneous
1219843PLM_7					Teased
02-02-900- S008	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1219843PIM_8					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 beterogeneous soil samples be conducted by TEM for confirmation of "Nove Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. 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%.

Snaron Donaid (31)	Talka O ble
Analyst	Approved Signatory



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



Customer: Pinchin LeBlanc Environmental

ental Attn: Paul Staeben
Dawn Benteau

Lab Order ID: 1219843

27 Austin St 2nd Flr

Analysis ID:

1219843_PLM

St Johns NL A1B 4C3

Date Received:

12/10/2012

Project: 02-02-00900 MUN Asbestos and Lead

Date Reported:

12/14/2012

Survey - OSC Main Bulding and Annex

Date Amended:

3/22/2013

Sample ID	Description	Asbestos	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	TISDESTOS	Components	Components	Treatment
02-02-900- S009 - A	12"x12" Vinyl Floor Tiles - White With Brown Streaks	None Detected		100% Other	Brown, White Non Fibrous Heterogeneous
1219843PLM_9	tile				Dissolved
02-02-900- S009 - B	12"x12" Vinyl Floor Tiles - White With Brown Streaks	None Detected	2% Cellulose	98% Other	Black Non Fibrous Homogeneous
1219843PLM_28	mastic				Dissolved
02-02-900- S010	Tar Roof Material	None Detected		100% Other	White Non Fibrous Homogeneous
1219843PIM_10					Crushed
02-02-900- S011	12"x 12" Vinyl Floor Tiles - White With Abundant Brown Flecks	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1219843PLM_11					Dissolved
02-02-900- S012	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1219843PIM_12					Crushed
02-02-900- S013	Transite	20% Chrysotile		80% Other	Gray Fibrous Heterogeneous
1219843PIM_13	1				Teased
02-02-900- S014	2'x4' Acoustic Ceiling Tiles - Longitudinal Fissure and Pinhole Pattern	None Detected	60% Mineral Wool 30% Cellulose	10% Other	Gray Fibrous Heterogeneous
1219843PLM_14					Teased
02-02-900- S015 - A	12"x 12" Vinyl Floor Tiles ~ Beige with Brown Streaks	None Detected		100% Other	Brown, Beige Non Fibrous Heterogeneous
	tile				Dissolved

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Sharon Donald (31)	Talky belle
Analyst	Approved Signatory



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

Dawn Benteau

Attn: Paul Staeben



Customer: Pinchin LeBlanc Environmental

27 Austin St

2nd Flr

St Johns NL A1B 4C3

Project: 02-02-00900 MUN Asbestos and Lead

Survey - OSC Main Bulding and Annex

Lab Order ID: 1219843

Analysis ID:

1219843_PLM

Date Received:

12/10/2012

Date Reported:

12/14/2012

Date Amended:

3/22/2013

Sample ID	Description	Asbestos Fibrous		Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Aspestos	Components	Components	Treatment
02-02-900- S015 - B	12"x 12" Vinyl Floor Tiles - Beige with Brown Streaks	None Detected	2% Cellulose	98% Other	Black Non Fibrous Homogeneous
1219843PLM_29	mastic				Dissolved
02-02-900- S016	12"x12" Vinyl Floor Tiles - Beige with Thick Brown Streaks	5% Chrysotile		95% Other	Beige Non Fibrous Heterogeneous
1219843PLM_16	tile only				Dissolved
02-02-900- S017	2'x4' Acoustic Ceiling Tiles - Pinhole and Fleck Pattern	None Detected	50% Cellulose 30% Mineral Wool	10% Perlite 10% Other	White Fibrous Helerogeneous
1219843PIM_17					Teased
02-02-900- S018	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1219843PLM_18					Crushed
02-02-900- S019 - A	12"x12" Vinyl Floor Tiles - Grey	None Detected		100% Other	Gray Non Fibrous Heterogeneous
1219843PIM_19	tile				Dissolved
02-02-900- S019 - B	12"x12" Vinyl Floor Tiles - Grey	None Detected	2% Cellulose	98% Other	Black Non Fibrous Homogeneous
1219843PLM_30	mastic-small sample				Dissolved
02-02-900- S020	Drywall Joint Compound	3% Chrysotile		97% Other	Cream Non Fibrous Homogeneous
219843PLM_20	1				Crushed
02-02-900- S021 - A	12"x 12" Vinyl Floor Tiles - White with Abundant Blue Flecks	None Detected		100% Other	White Non Fibrous Heterogeneous
219843PLM_21	tile				Dissolved

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Shaon Donaid (31)	Talkano Sh
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 MUN Asbestos and Lead

Survey - OSC Main Bulding and Annex

Attn: Paul Staeben Lab Order ID: 1219843 Dawn Benteau

Analysis ID: 1219843_PLM

Date Received: 12/10/2012 Date Reported: 12/14/2012

Date Amended: 3/22/2013

Sample ID	Description	Asbestos	Fibrous	Non-Fibrous	Attributes
Lah Sample ID	Lab Notes	Components		Components	Treatment
02-02-900- S021 - B	12"x 12" Vinyl Floor Tiles - White with Abundant Blue Flecks	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1219843PLM_31	mastic-small sample				Dissolved
02-02-900- S022	Drywall Joint Compound	3% Chrysotile		97% Other	Cream Non Fibrous Homogeneous
1219843PLM_22					Crushed
02-02-900- S023	9"x9" Vinyl Floor Tiles - Beige with Thick Brown Streaks	6% Chrysotile		94% Other	Beige Non Fibrous Heterogeneous
1219843PLM_23	tile only				Dissolved
02-02-900- S024	Drywall Joint Compound	None Detected		100% Other	White Non Fibrous Homogeneous
1219843PIM_24	1				Crushed
02-02-900- S025	12"x12" Vinyl Floor Tiles - Brown with Thick Brown Streaks	5% Chrysotile		95% Other	Beige Non Fibrous Heterogeneous
1219843PLM_25	tile only				Dissolved
02-02-900- S026	Sprayed Fireproofing	60% Amosite		40% Other	Gray Fibrous Homogeneous
1219843PIM_26					Teased
02-02-900- S027	Textile Cloth on Ductwork	50% Chrysotile	20% Cellulose	30% Other	White, Green Fibrous Heterogeneous
1219443PLM_27	1				Teased

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Sharon Donald (31)

APPENDIX II

LEAD PAINT ANALYTICAL REPORT



Analysis for Lead Concentration in Paint Chips

AIHA LAP, LLC ACCREDITED LABORATORY ENVIRONMENTAL LEAD ISOAEC 17025:2005 LAS #173190

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

Customer: Pinchin LeBlanc Environmental

Attn: Paul Staeben

Lab Order ID:

1219842

27 Austin St 2nd Fir

Dawn Benteau

Analysis ID:

1219842_PBP

St Johns NL A1B 4C3

Date Received:

12/10/2012

Date Reported: 12/18/2012

Project: 02-02-00900 MUN Asbestos and Lead Survey OSC Main Building and Annex

Sample ID	Description Lab Notes	Mass (g)	Analytical Sensitivity (% by weight)	Concentration (% by weight)	
02-02-900-L001	Grey- main boiler room	0.0453	0.003%	< 0.009%	
1219842PBP_1					
02-02-900-L002	Off white- main boiler room	0.0626	0.002%	0.12%	
1219842PBP_2					
02-02-900-L003	Yellow- main boiler room	0.0696	0.002%	0.12%	
1219642PBP_3					
02-02-900-L004	Black-3rd floor hallway	0.0477	0.003%	0.42%	
1219842PBP_4					
02-02-900-L005	Blue-3rd floor hallway	0.0440	0.003%	0.12%	
1219842PBP_5				3422.0	
02-02-900-L006	Sky blue-OS-4000	0.0327	0.004%	< 0.012%	
1219842PBP_6					
02-02-900-L007	Tan-OS-2003	0.0778	0.002%	< 0.005%	
1219842PBP_7		3.37.0	3.002.70	. 0.000 /0	
02-02-900-L008	Green-room OS-2002	0.0508	0.003%	0.009%	
1219842PBP_8					

The quality control samples run with the samples in this report bave 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.

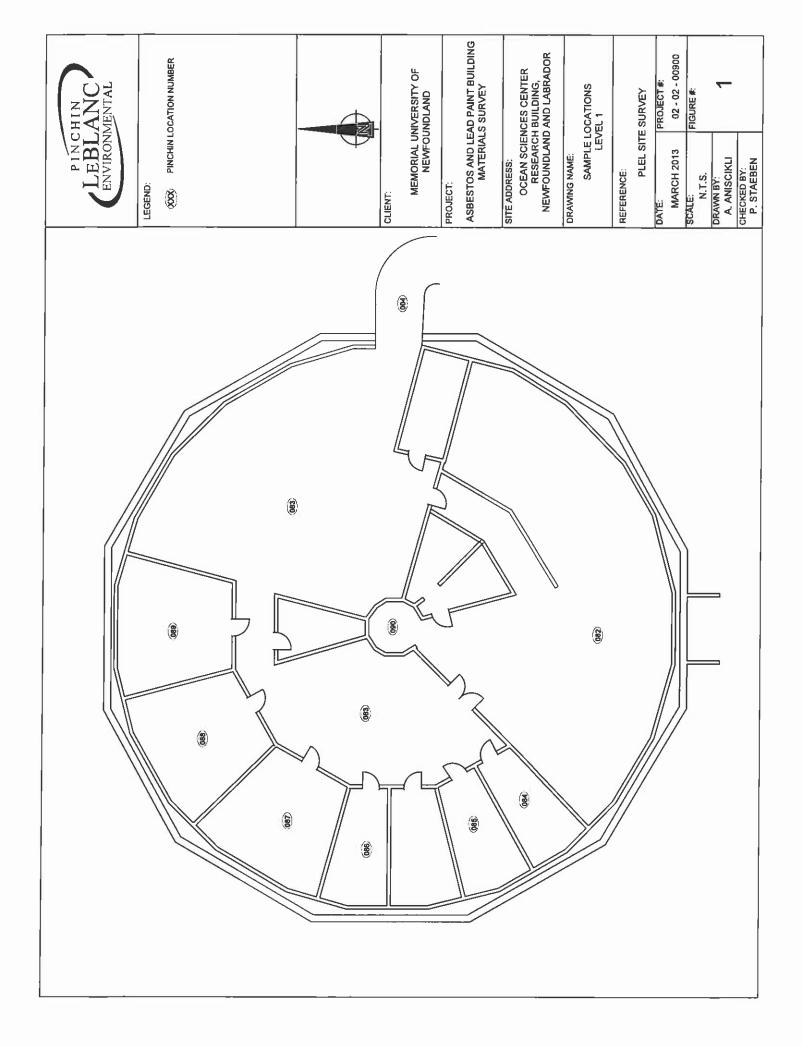
Robert Duke (8)

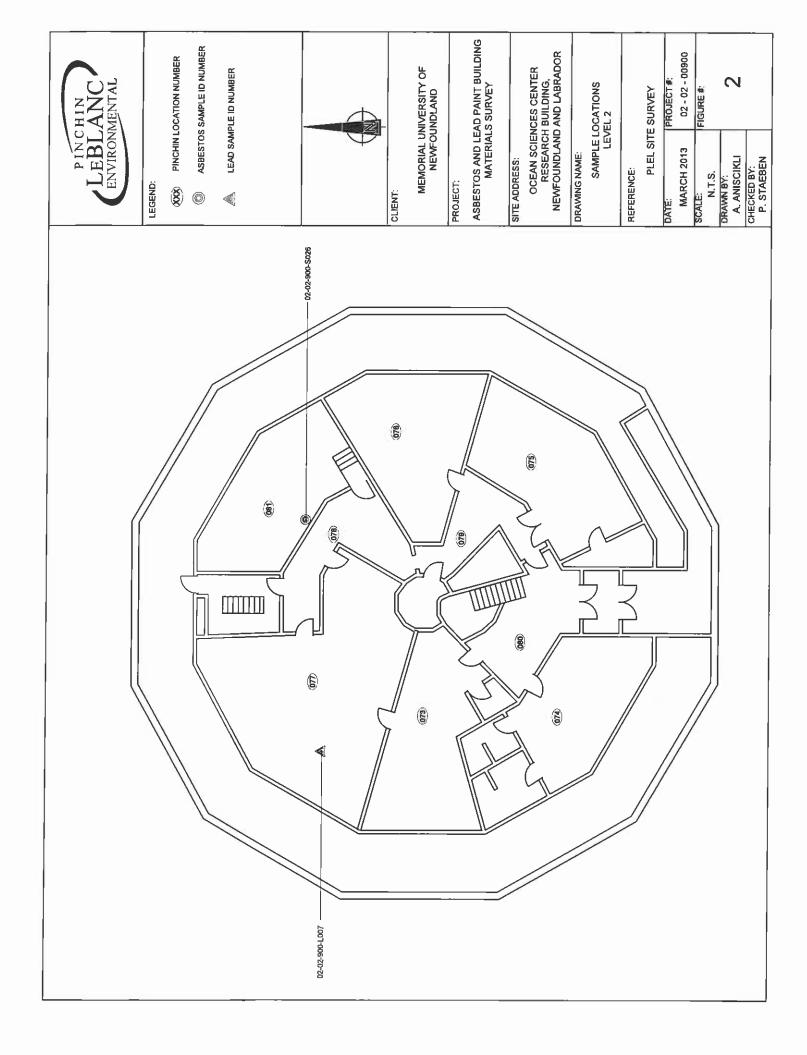
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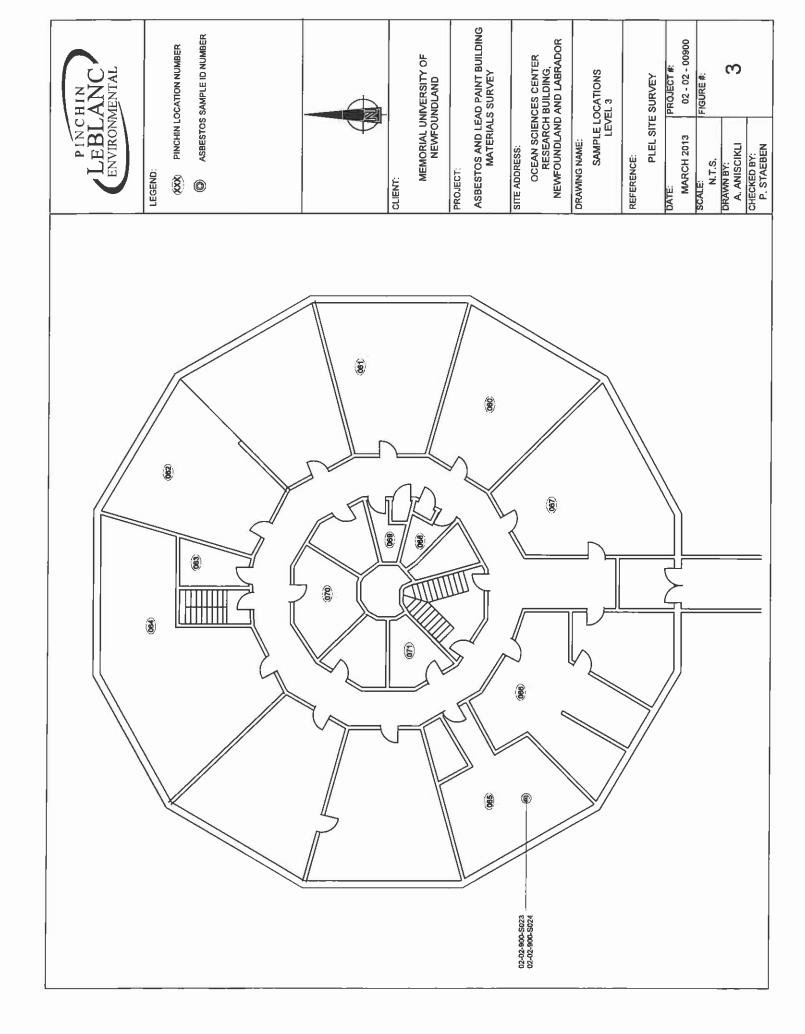
Laboratory Director

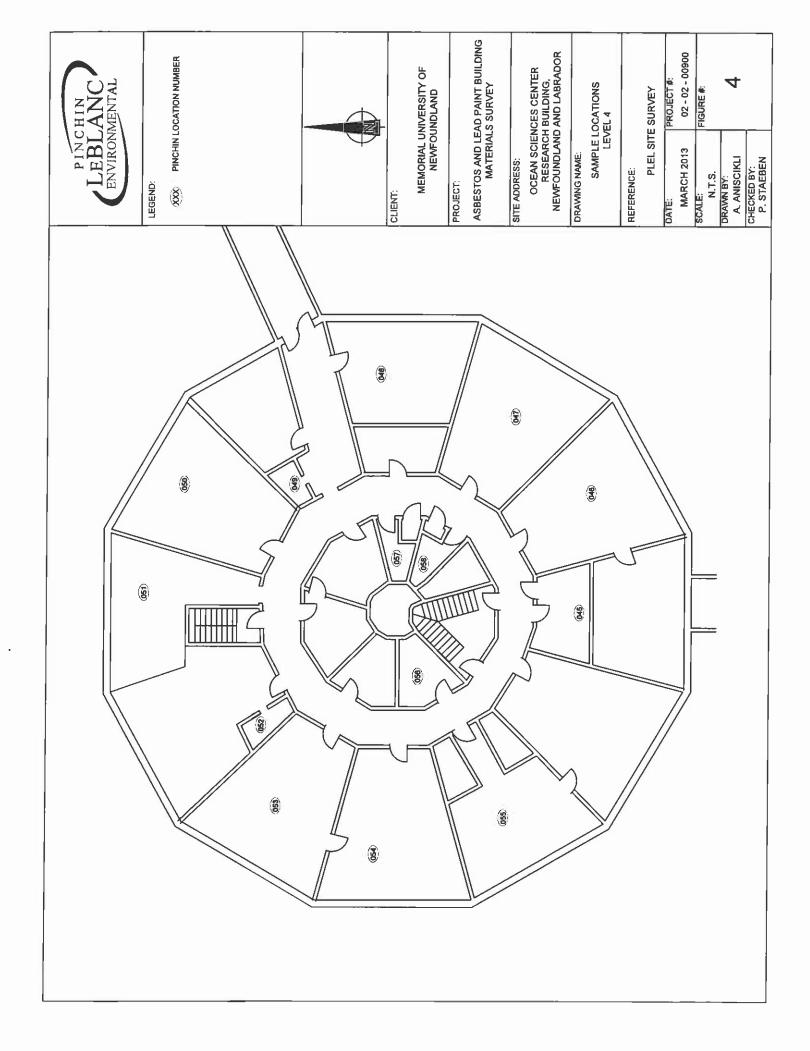
APPENDIX III

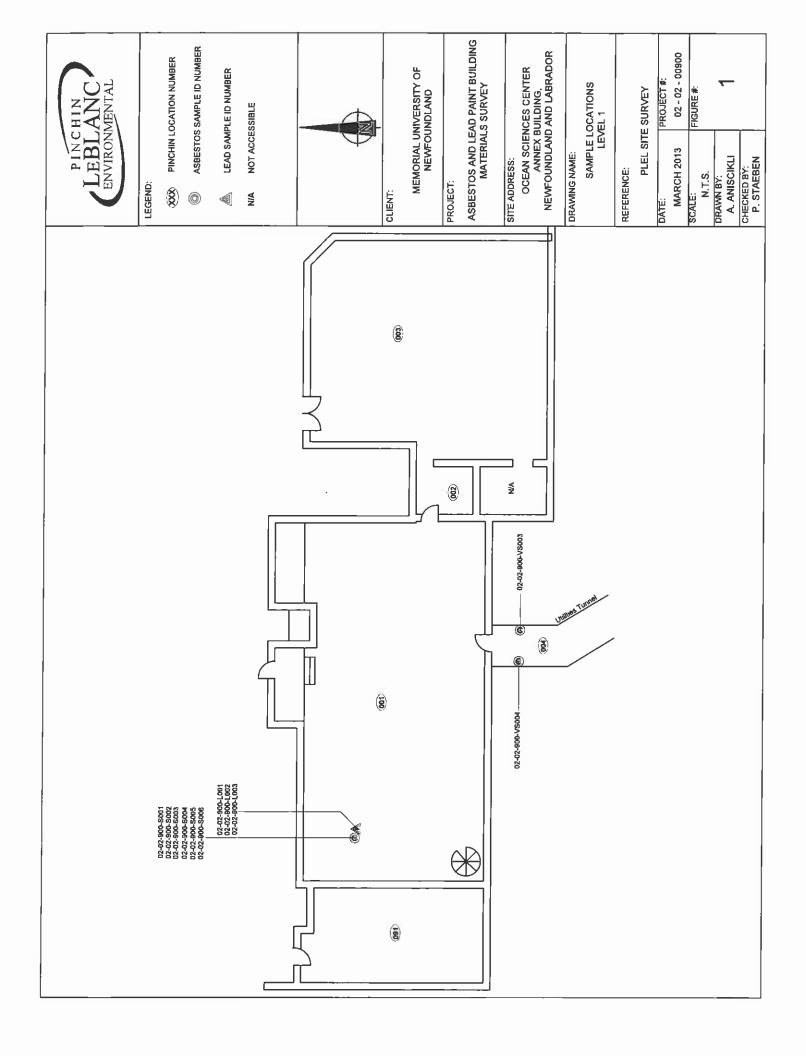
SITE DRAWINGS

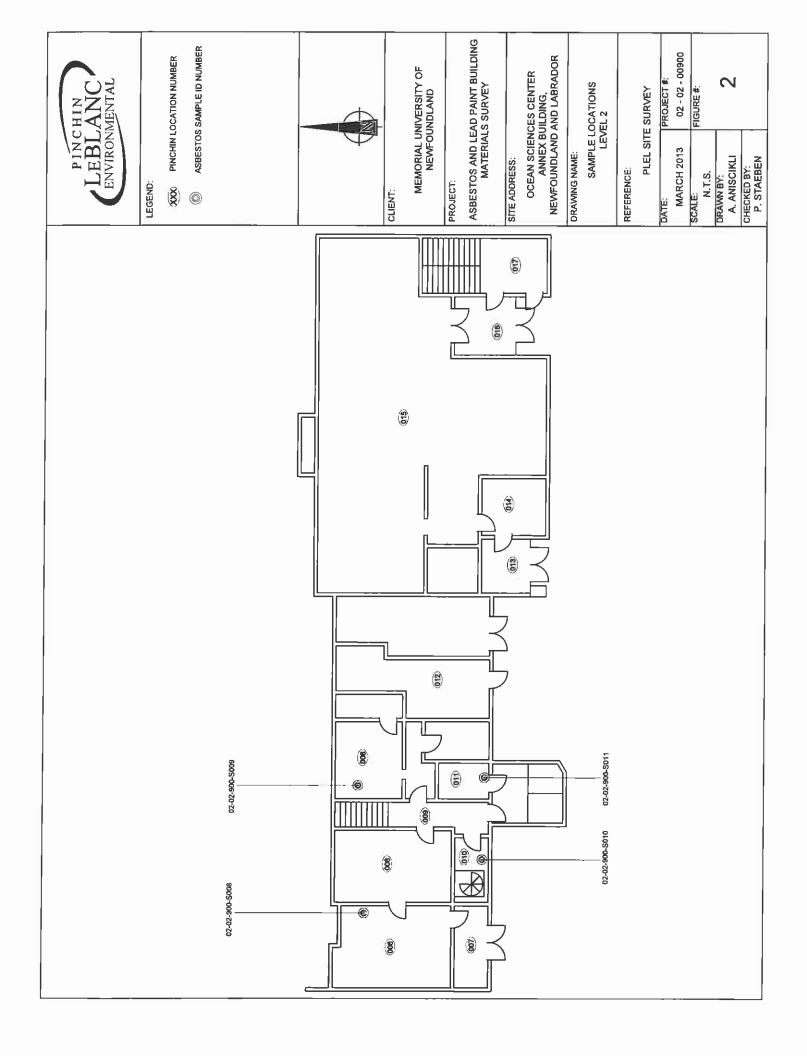


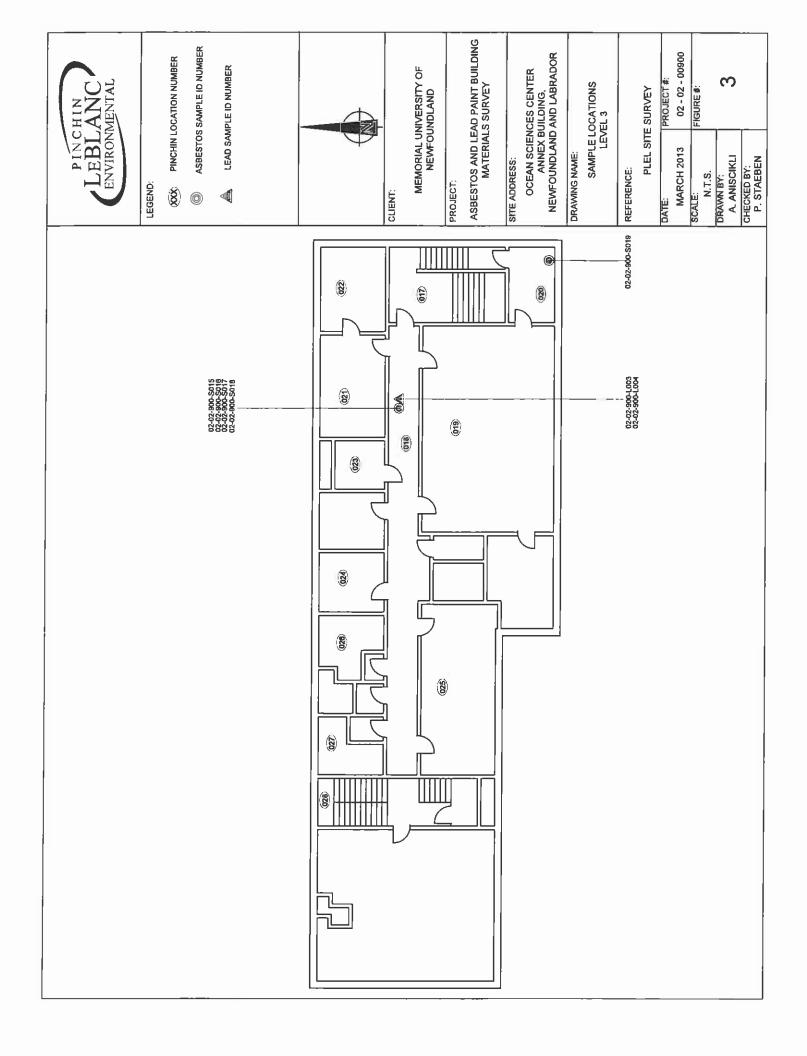


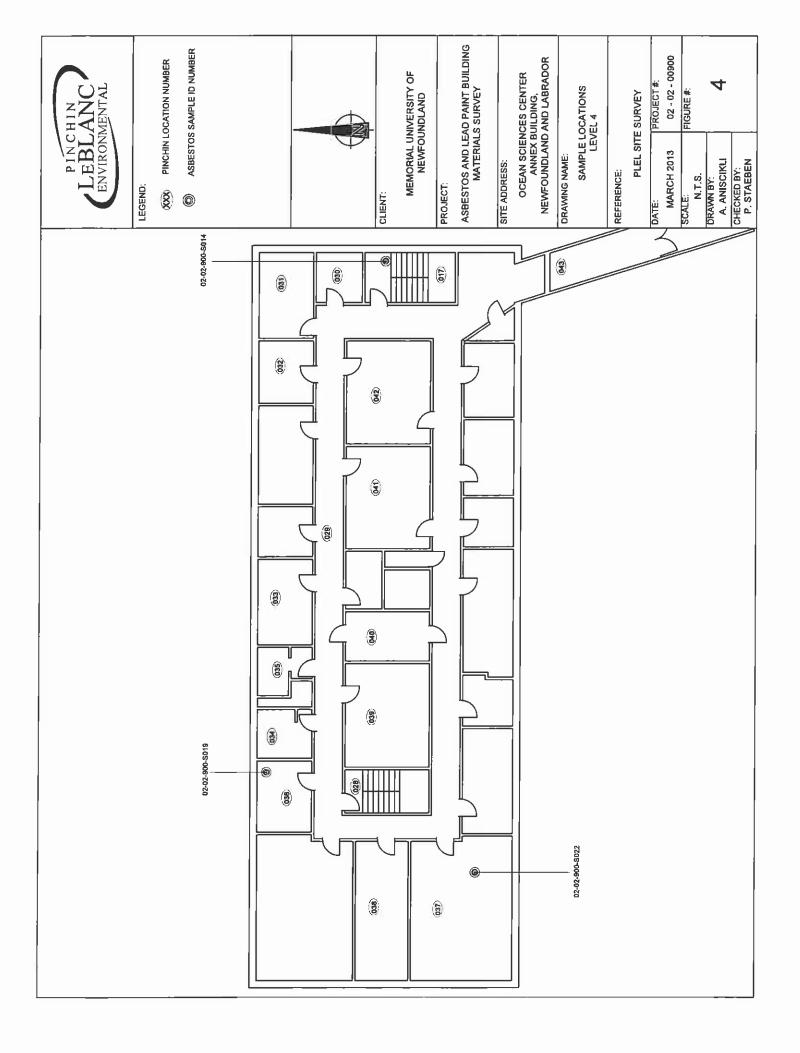


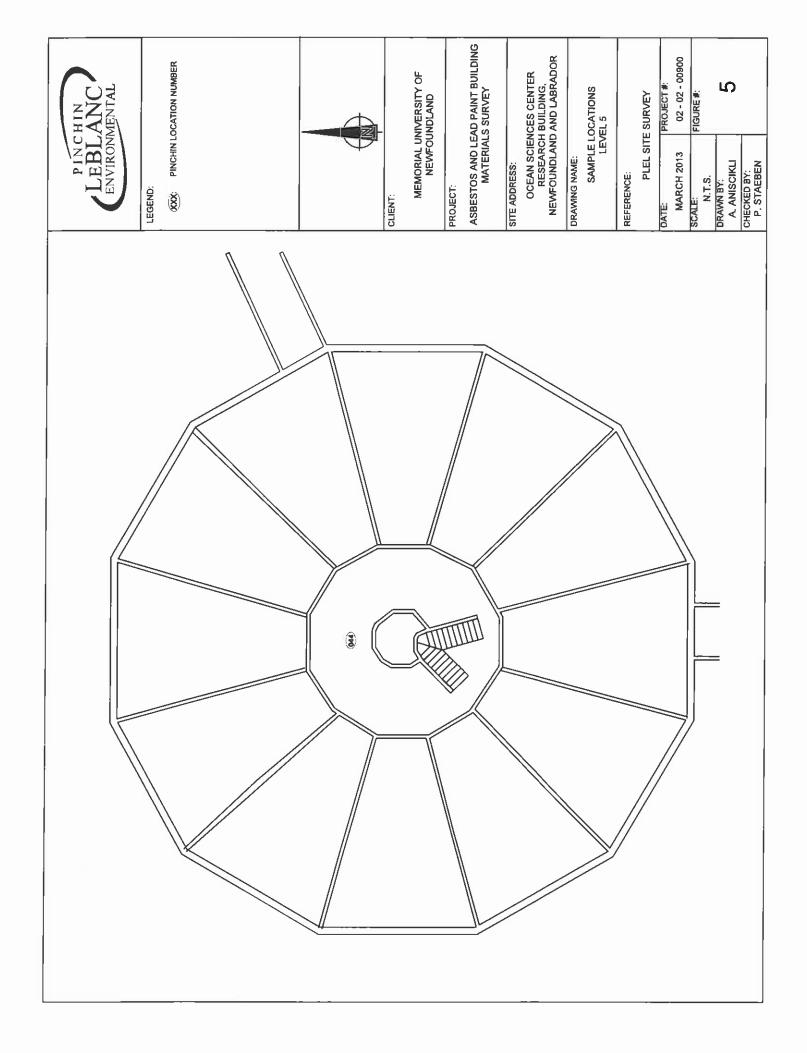












APPENDIX IV

SAMPLE LOG



UNIVERSIT	Y				
Sample #:	S001		Date Sampled:	November 29, 2	012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
	Annex				
Location:	001, room AX1001		Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
X Insulation	□12'x12' Tile	\Box T	extured	☐ Shingle	☐ Floor
☐ Elbow	□ 9'x9'Tile	\square S	tucco	☐ Rolled	☐ Wall Orientation
☐ Fitting	□ Vinyl Sheet	☐ Popcom		☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	□P	laster		X Other (steam header)
☐ Tank Insulation	☐ Transite Panel	ПΑ	coustic Tile (Dropped)		neader y
☐ Pipe Wrap	☐ Textured Wall		coustic Tile (Glued-on)		
HVAC	☐ Plaster		fastic (Miscellaneous:	
☐ Insulation	□ DWJC		Structural		
☐ Tape		\square S	teel F. P. ing	No. of Phases:	
☐ Paper Wrap		\Box D	eck F. P. ing	Colour:	



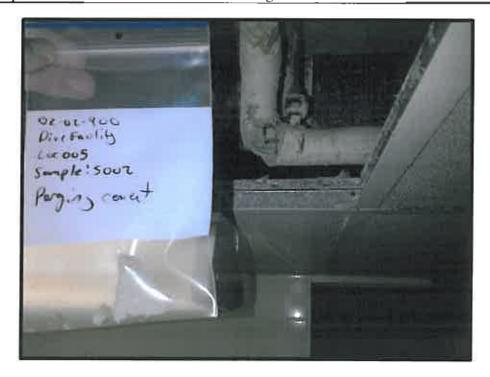


UNIVERSIT	Υ				
Sample #:	S002		Date Sampled:	November 29, 2	2012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
	Annex				
Location:	001, room AX1001		Analysis:	SAI - PLM	
MUN Project #:	02-0 2-900		Work Order#:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
X Insulation	□12'x12' Tile	\Box 1	`extured	☐ Shingle	□ Floor
☐ Elbow	□ 9'x9'Tile	☐ Stucco		☐ Rolled	□ Wall Orientation
☐ Fitting	□ Vinyl Sheet	□ P	opcom	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic)WJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	□P	laster		X Other (boiler exhaust)
☐ Tank Insulation	☐ Transite Panel	\Box A	coustic Tile (Dropped)		
☐ Pipe Wrap	□ Textured Wall	$\Box A$	coustic Tile (Glued-on)		
HVAC	☐ Plaster	\square V	1astic	Miscellaneous:	
☐ Insulation	□ DWJC		Structural		
☐ Tape			teel F. P. ing	No. of Phases:	
☐ Paper Wrap			eck F. P. ing	Colour:	



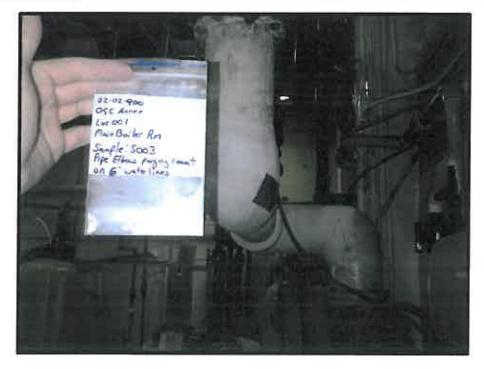


ONIVERSITI							
Sample #:	S002		Date Sampled:	November 30, 2012			
Building:	OSC Main BLDG and		Sampler:	Trent Hardy			
	Annex						
Location:	005, room DV1001		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring	Ceiling		Roofing	Location		
☐ 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	□P	laster		☐ Other		
☐ Tank Insulation	☐ Transite Panel	□A	coustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	\Box A	coustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic		Miscellaneous:			
☐ Insulation	□ DWJC		Structural				
☐ Tape		\square S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap			eck F. P. ing	Colour:			





UNIVERSIT	Y						
Sample #:	S003		Date Sampled:	November 29, 2012			
Building:	OSC Main BLDG and		Sampler:	Trent Hardy			
	Annex						
Location:	001, room AX1001		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	☐ Above Ceiling		
☐ Gasket	Wall	□ Plaster			X Other (6" waterlines)		
☐ Tank Insulation	□ Transite Panel	☐ Acoustic Tile (Dropped)					
☐ Pipe Wrap	□ Textured Wall	\square A	coustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic		Miscellaneous:			
☐ Insulation	□ DWJC		Structural				
☐ Tape			teel F. P. ing	No. of Phases:			
☐ Paper Wrap			eck F. P. ing	Colour:			





UNIVERSIT	Y						
Sample #:	S004		Date Sampled:	November 29, 2	r 29, 2012		
Building:	OSC Main BLDG and		Sampler:	Trent Hardy			
	Annex						
Location:	001, room AX1001		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	□ Popcom		☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DŴJC		☐ Tar	☐ Above Ceiling		
☐ Gasket	Wall	☐ Plaster			X Other (4" waterlines)		
☐ Tank Insulation	☐ Transite Panel	$\square A$	coustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	$\square A$	coustic Tile (Glued-on)				
HVAC	☐ Plaster	\square N	1 astic	Miscellaneous:			
☐ Insulation	□ DWJC		Structural				
☐ Tape		\square S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap			eck F. P. ing	Colour:			



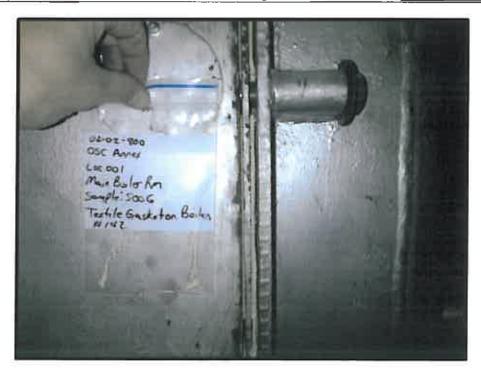


O I I I I Z I I O I I							
Sample #:	S005		Date Sampled:	November 29, 2012			
Building:	OSC Main BLDG and		Sampler:	Trent Hardy			
_	Annex						
Location:	001, room AX1001		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
☐ Insulation	□12'x12' Tile	☐ Textured		☐ Shingle	☐ Floor		
X Elbow	□ 9'x9'Tile	☐ Stucco		□ Rolled	☐ Wall Orientation		
☐ Fitting	□ Vinyl Sheet	□ Popcom		☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DŴJC		☐ Tar	☐ Above Ceiling		
☐ Gasket	Wall	\Box P	laster		X Other (6" pipes)		
☐ Tank Insulation	☐ Transite Panel	$\Box A$	Acoustic Tile (Dropped)		` ' ' '		
☐ Pipe Wrap	□ Textured Wall		Acoustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic		Miscellaneous:			
☐ Insulation	□ DWJC		Structural		_		
☐ Tape		\square S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap			Deck F. P. ing	Colour:			





UNIVERSITY							
Sample #:	S006		Date Sampled:	November 29, 2	2012		
Building:	OSC Main BLDG and		Sampler:	Trent Hardy			
	Annex		_				
Location:	001, room AX1001		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	☐ Popcom		☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic	□ DWJC		☐ Tar	☐ Above Ceiling		
☐ Gasket Wall		□ Plaster			X Other (boilers 1		
LI Casket	YY AII		iastei		& 2)		
☐ Tank Insulation	☐ Transite Panel	$\Box A$	coustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	\square A	coustic Tile (Glued-on)				
HVAC	☐ Plaster	☐ Mastic		Miscellaneous: <u>Textile gasket</u>			
☐ Insulation	□ DWJC		Structural				
☐ Tape		\square S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap		\Box D	eck F. P. ing	Colour:	_		





DIALAEKSII	I								
Sample #:	S007		Date Sampled:	November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
_	Annex								
Location:	003, room AX1000)	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	\square P	opcom	☐ Felt	☐ Ceiling				
☐ Transite Pipe	☐ Mastic		DWJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	\square P	laster		X Other (tank)				
☐ Tank Insulation	☐ Transite Panel		Acoustic Tile (Dropped)		` '				
☐ Pipe Wrap	□ Textured Wall		Acoustic Tile (Glued-on)						
HVAC	□ Plaster	\square N	/lastic	Miscellaneous:	_				
☐ Insulation	□ DWJC		Structural						
☐ Tape		\square S	teel F. P. ing	No. of Phases:					
☐ Paper Wran			leck F P ing	Colour					





UNIVERSIT	Y								
Sample #:	S008		Date Sampled:	November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
	Annex								
Location:	005, room AX2005	A	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	□P	opcom	☐ Felt	X Ceiling				
☐ Transite Pipe	☐ Mastic	ΧD	WJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	□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	l astic	Miscellaneous:					
☐ Insulation	□ DWJC		Structural						
☐ Tape		\square S	teel F. P. ing	No. of Phases:					
☐ Paper Wrap			eck F. P. ing	Colour:					





Sample #:	S009	S009		November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
	Аплех								
Location:	009, hallway 2C01		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	□ P	opcorn	☐ Felt	☐ Ceiling				
☐ Transite Pipe	☐ Mastic)WJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	□ 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	fastic	Miscellaneous:					
☐ Insulation	□ DWJC		Structural						
□ Tape		\square S	teel F. P. ing	No. of Phases:					
☐ Paper Wrap			eck F. P. ing	Colour: White	with brown streaks				





UNIVERSII	Y							
Sample #:	S010		Date Sampled:	November 29, 2012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex		_					
Location:	010, hallway AX2S	302	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	\square P	opcom	☐ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic	\Box D	WJC	X Tar	X 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 M	lastic	Miscellaneous:				
☐ Insulation	□ DWJC		Structural					
☐ Tape			teel F. P. ing	No. of Phases:				
☐ Paper Wrap		\Box D	eck F. P. ing	Colour:				



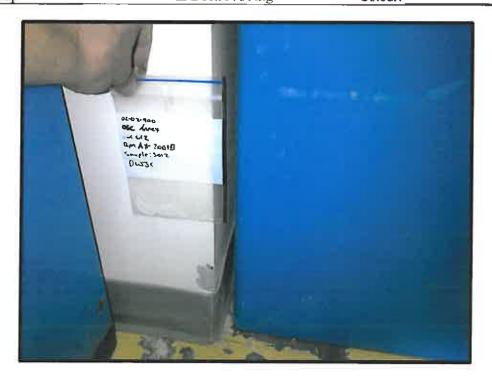


UNIVERSIT	Υ							
Sample #:	S011		Date Sampled:	November 29, 2	2012			
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	011, room AX2003	3	Analysis:	SAI - PLM				
MUN Project #:	02-02-900		Work Order #:					
Bulk Sampling Parameters								
Pipe/Tank	Flooring		Ceiling	Roofing	Location			
☐ Insulation	X12'x12' Tile	\square T	extured	☐ Shingle	X Floor			
☐ Elbow	□ 9'x9'Tile	☐ Stucco		☐ Rolled	☐ Wall Orientation			
☐ Fitting	□ Vinyl Sheet	\square P	opcom	☐ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic		WJC	☐ Tar	☐ Above Ceiling			
☐ Gasket	Wall	□P	laster		☐ Other			
☐ Tank Insulation	☐ Transite Panel		coustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall	\Box A	coustic Tile (Glued-on)					
HVAC	☐ Plaster	\square N	lastic	Miscellaneous:				
☐ Insulation	□ DWJC		Structural					
☐ Tape		\Box S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour: White flecks	with abundant brown			





OMIVERSII	Y							
Sample #:	S012		Date Sampled:	November 29, 2012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	012, room AX2001	В	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	\square P	opcorn	☐ Felt	☐ Ceiling			
☐ Transite Pipe	□ Mastic		WJC	□ 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	1astic	Miscellaneous:				
☐ Insulation	X DWJC		Structural					
□ Tape		\square S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour:				



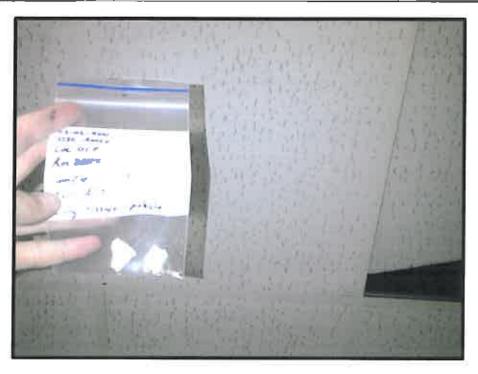


DIMINERSHI	T					
Sample #:	S013		Date Sampled:	November 29, 2012		
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy		
	Annex	Annex		·		
Location:	012, room AX200	1B	Analysis:	SAI - PLM		
MUN Project #:	02-02-900		Work Order #:			
		Bulk	Sampling Parameters			
Pipe/Tank	Flooring		Ceiling	Roofing	Location	
☐ Insulation	□12'x12' Tile	T	extured extured	☐ Shingle	☐ Floor	
☐ Elbow	□ 9'x9'Tile		tucco	☐ Rolled	X Wall Orientation	
☐ Fitting	□ Vinyl Sheet	□ P	opcom	☐ Felt	□ Ceiling	
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling	
☐ Gasket	Wall	□ P	laster		☐ Other	
☐ Tank Insulation	X Transite Panel	\Box A	coustic Tile (Dropped)			
☐ Pipe Wrap	□ Textured Wall	\Box A	coustic Tile (Glued-on)			
HVAC	☐ Plaster	\square N	fastic	Miscellaneous	<u> </u>	
☐ Insulation	□ DWJC		Structural			
☐ Tape		\square S	teel F. P. ing	No. of Phases:		
☐ Paper Wrap	•		eck F. P. ing	Colour:		





OMIAEKSII	F								
Sample #:	S014		Date Sampled:	November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
	Annex								
Location:	017, stairwell 2S01		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	☐ Stucco		☐ Rolled	☐ Wall Orientation				
☐ Fitting	□ Vinyl Sheet	☐ Popcom		☐ Felt	X Ceiling				
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	\square P	laster		☐ Other				
☐ Tank Insulation	☐ Transite Panel	ΧA	coustic Tile (Dropped)						
☐ Pipe Wrap	☐ Textured Wall		coustic Tile (Glued-on)						
HVAC	☐ Plaster		fastic	Miscellaneous:	2' x 4' longitudinal				
IIVAC	Li i iastei	⊔ 1 v	iastic	fissure and pinh	<u>iole_</u>				
☐ Insulation	□ DWJC		Structural						
□ Tape			teel F. P. ing	No. of Phases:					
□ Paper Wrap			eck F. P. ing	Colour:					





01117 1117 011									
Sample #:	S015		Date Sampled:	November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
	Annex								
Location:	017, stairwell 2S01		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	\square P	opcom	☐ Felt	☐ Ceiling				
☐ Transite Pipe	☐ Mastic)WJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	\square P	laster		☐ Other				
☐ Tank Insulation	☐ Transite Panel	$\square A$	coustic Tile (Dropped)						
☐ Pipe Wrap	☐ Textured Wall	$\square A$	coustic Tile (Glued-on)						
HVAC	☐ Plaster	\square N	fastic	Miscellaneous:					
☐ Insulation	□ DWJC		Structural						
☐ Tape		\square S	teel F. P. ing	No. of Phases:					
☐ Paper Wrap		\Box D	eck F. P. ing	Colour: Beige v	with brown streaks				





UNIVERSIT	Y								
Sample #:	S016		Date Sampled:	November 29, 2012					
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
	Annex								
Location:	017, stairwell 2S01		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	\square P	opcom	☐ Felt	☐ Ceiling				
☐ Transite Pipe	☐ Mastic	\Box D	WJC	□ 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 M	lastic	Miscellaneous:					
☐ Insulation	□ DWJC		Structural						
☐ Tape			teel F. P. ing	No. of Phases:					
☐ Paper Wrap		□D	eck F. P. ing	Colour: Beige v	with thick brown				





UNIVERSIT	Y									
Sample #:	S017		Date Sampled:	November 29, 2012						
Building:	OSC Main BLDG and Annex		Sampler:	Trent Hardy						
Location:	017, stairwell 2S01		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	□ P	opcorn	☐ Felt	X Ceiling					
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling					
☐ Gasket	Wall	□P	laster		☐ Other					
☐ Tank Insulation	☐ Transite Panel	ΧA	coustic Tile (Dropped)							
☐ Pipe Wrap	☐ Textured Wall	\square A	coustic Tile (Glued-on)							
HVAC	☐ Plaster	☐ Mastic		Miscellaneous: fleck	2' x 4' pinhole and					
☐ Insulation	□ DWJC		Structural							
☐ Tape		\square S	teel F. P. ing	No. of Phases:						
☐ Paper Wrap			eck F. P. ing	Colour:						





* * * * * * * * * * * * * * * * * * * *								
Sample #:	S018		Date Sampled:	November 29, 2	2012			
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	017, stairwell 2S01		Analysis:	SAI - PLM				
MUN Project #:	02-02-900		Work Order #:					
Bulk Sampling Parameters								
Pipe/Tank	Flooring		Ceiling	Roofing	Location			
☐ Insulation	□12'x12' Tile	r 🗆	'extured	☐ Shingle	☐ Floor			
☐ Elbow	□ 9'x9'Tile	☐ Stucco		☐ Rolled	X Wall Orientation			
☐ Fitting	□ Vinyl Sheet	\square P	opcom	☐ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic)WJC	□ Таг	☐ Above Ceiling			
☐ Gasket	Wall	□ P	laster		□ Other			
☐ Tank Insulation	☐ Transite Panel	$\Box A$	coustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall	$\square A$	coustic Tile (Glued-on)					
HVAC	☐ Plaster	\square V	1astic	Miscellaneous:				
☐ Insulation	X DWJC		Structural					
☐ Tape		\square S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour:				



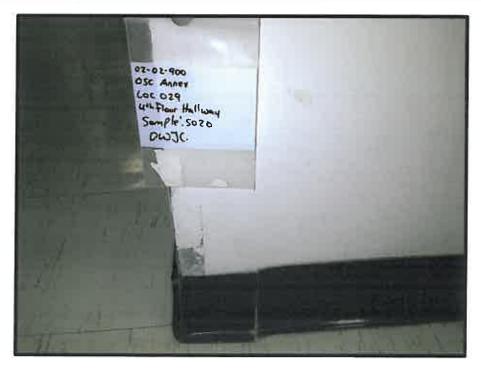


Sample #:	S019		Date Sampled:	November 29, 2	012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
	Annex				
Location:	020, room 3001B		Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
		Bulk	Sampling Parameters	•	
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	X12'x12' Tile	☐ Textured		☐ Shingle	X Floor
□ Elbow	□ 9'x9'Tile	☐ Stucco		☐ Rolled	☐ Wall Orientation
☐ Fitting	□ Vinyl Sheet	□P	орсого	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic		ŴJC	☐ Tar	☐ Above Ceiling
☐ Gasket	Wall	\square P	laster		☐ Other
☐ Tank Insulation	☐ Transite Panel	□A	coustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	\Box A	coustic Tile (Glued-on)		
HVAC	☐ Plaster	\square M	fastic	Miscellaneous:	
☐ Insulation	□ DW1C		Structural	,	
☐ Tape			teel F. P. ing	No. of Phases:	
☐ Paper Wrap		\Box D	eck F. P. ing	Colour: Grey	





ONIVERSITY								
Sample #:	S020		Date Sampled:	November 29, 2012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex		_					
Location:	031, room AX4001		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	\square P	opcorn	☐ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic		WJC	🛘 Таг	☐ Above Ceiling			
☐ Gasket	Wall	\square P	laster		☐ Other			
☐ Tank Insulation	☐ Transite Panel	\Box A	coustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall	\square A	coustic Tile (Glued-on)					
HVAC	☐ Plaster	\square M	fastic (Miscellaneous:				
☐ Insulation	X DWJC		Structural					
☐ Tape		\square S	teel F. P. ing	No. of Phases:				
□ Paper Wrap			eck F. P. ing	Colour:				





UNIVERSIT	Y					
Sample #:	S021		Date Sampled:	pled: November 29, 2012		
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy		
	Annex					
Location:	036, room 4013		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	\square P	opcorn	☐ Felt	☐ Ceiling	
☐ Transite Pipe	☐ Mastic	\Box D	WJC	☐ 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 M	lastic	Miscellaneous:		
☐ Insulation	□ DWJC		Structural			
☐ Tape			teel F. P. ing	No. of Phases:		
☐ Paper Wrap		□D	eck F. P. ing	Colour: White v	with abundant blue	



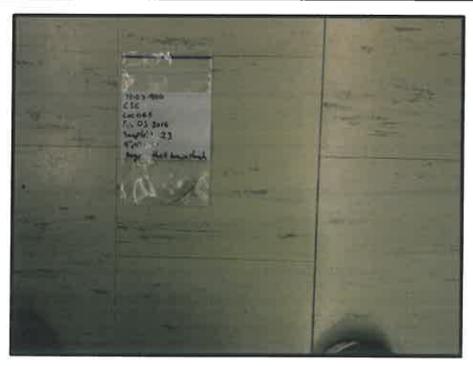


ALLIA PICALI					
Sample #:	S022		Date Sampled:	November 29, 2	012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
	Annex				
Location:	037, room 4016		Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order#:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	☐ Textured		☐ Shingle	☐ Floor
□ Elbow	☐ 9'x9'Tile	☐ Stucco		☐ Rolled	X Wall Orientation
☐ Fitting	□ Vinyl Sheet	□ P	opcom	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic		OWJC	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	\square P	laster		☐ Other
☐ Tank Insulation	☐ Transite Panel	$\square A$	coustic Tile (Dropped)		
☐ Pipe Wrap	□ Textured Wall	\square A	coustic Tile (Glued-on)		
HVAC	□ Plaster	\square N	Mastic	Miscellaneous:	
☐ Insulation	X DWJC		Structural		
☐ Tape		\square S	teel F. P. ing	No. of Phases:	
☐ Paper Wrap			eck F. P. ing	Colour:	



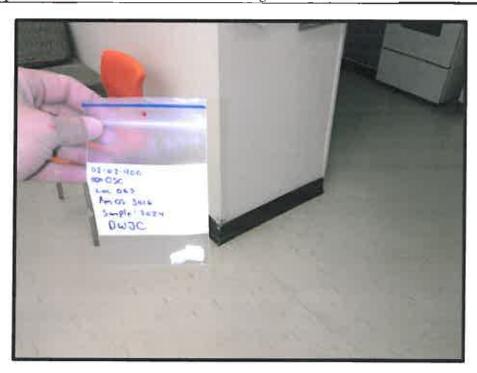


ONIVERSH	Y						
Sample #:	S023	S023		November 29, 2	2012		
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	· ·		
	Annex						
Location:	065, room OS3016		Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
Bulk Sampling Parameters							
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
☐ Insulation	□12'x12' Tile	T	'extured	☐ Shingle	X Floor		
☐ Elbow	X 9'x9'Tile	☐ Stucco		☐ Rolled	□ Wall Orientation		
☐ Fitting	□ Vinyl Sheet	□P	opcom	☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	□ P	laster		☐ Other		
☐ Tank Insulation	☐ Transite Panel	$\square A$	coustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	\Box A	coustic Tile (Glued-on)				
HVAC	☐ Plaster	\square N	fastic	Miscellaneous:			
☐ Insulation	□ DWJC		Structural				
☐ Tape		\Box S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap			eck F. P. ing	Colour: Beige streaks	with thick brown		





Sample #:	S024		Date Sampled:	November 29, 2012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	065, room OS3016		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	☐ Stucco		□ Rolled	X Wall Orientation			
☐ Fitting	Vinyl Sheet	\square P	opcom	□ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic)WJC	□ Tar	☐ Above Ceiling			
☐ Gasket	Wall	□P	laster		☐ Other			
☐ Tank Insulation	☐ Transite Panel	$\Box A$	coustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall	$\square A$	coustic Tile (Glued-on)					
HVAC	☐ Plaster	☐ Mastic		Miscellaneous:				
☐ Insulation	X DWJC		Structural		_			
☐ Tape		\square S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour:				





OMIAEKSII	T T							
Sample #:	S025		Date Sampled:	November 29, 2012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	075, room OS2000		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	\square P	opcom	□ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic)WJC	☐ Tar	☐ Above Ceiling			
☐ Gasket	Wall	\Box P	laster		□ Other			
☐ Tank Insulation	☐ Transite Panel	\square A	coustic Tile (Dropped)					
☐ Pipe Wrap	☐ Textured Wall		coustic Tile (Glued-on)					
HVAC	☐ Plaster	\square N	1astic	Miscellaneous:				
☐ Insulation	□ DWJC		Structural					
☐ Tape		\Box S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour: Brown brown streaks	with thick dark			



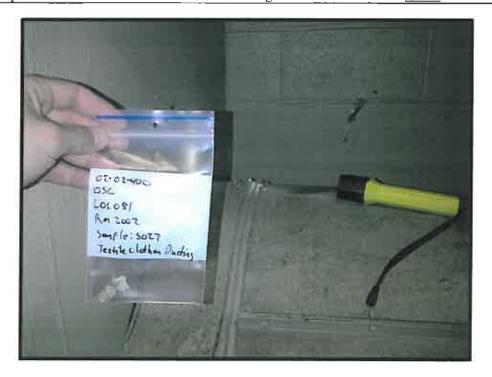


OMINEKSII	I								
Sample #:	S026		Date Sampled:	November 29, 2	012				
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy					
_	Annex		·						
Location:	081, room OS2002		Analysis:	SAI - PLM					
MUN Project #:	02-02-900		Work Order#:						
	Bulk Sampling Parameters								
Pipe/Tank	Flooring		Ceiling	Roofing	Location				
☐ Insulation	□12'x12' Tile	ΠΠ	`extured	☐ Shingle	☐ Floor				
□ Elbow	□ 9'x9'Tile	\square S	tucco	☐ Rolled	☐ Wall Orientation				
☐ Fitting	□ Vinyl Sheet	\Box P	орсого	☐ Felt	☐ Ceiling				
☐ Transite Pipe	☐ Mastic)WJC	□ Tar	☐ Above Ceiling				
☐ Gasket	Wall	\square P	laster		☐ Other				
☐ Tank Insulation	☐ Transite Panel	\square A	coustic Tile (Dropped)						
☐ Pipe Wrap	□ Textured Wall	\Box A	coustic Tile (Glued-on)						
HVAC	☐ Plaster	\square N	lastic	Miscellaneous:					
☐ Insulation	□ DWJC		Structural						
☐ Tape		\Box S	teel F. P. ing	No. of Phases:					
☐ Paper Wrap		ΧD	eck F. P. ing	Colour:					



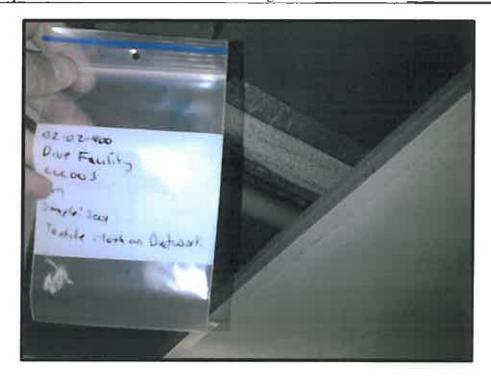


01414 51311					
Sample #:	S027		Date Sampled:	November 29, 2	2012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
_	Annex				
Location:	081, room OS2002		Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	T	`extured	☐ Shingle	☐ Floor
□ Elbow	□ 9'x9'Tile		tucco	☐ Rolled	☐ Wall Orientation
☐ Fitting	□ Vinyl Sheet	\Box P	opcom	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	\Box D	OWJC .	□ Tar	☐ Above Ceiling
☐ Gasket	Wall	\square P	laster		X Other (ducts)
☐ Tank Insulation	☐ Transite Panel	\Box A	coustic Tile (Dropped)		
☐ Pipe Wrap	☐ Textured Wall	□A	coustic Tile (Glued-on)		
HVAC	☐ Plaster	$\square N$	1astic	Miscellaneous:	Textile cloth
☐ Insulation	□ DWJC		Structural		
☐ Tape			teel F. P. ing	No. of Phases:	
☐ Paper Wrap		\Box D	eck F. P. ing	Colour: Green	





9 1 1 2 2 2 2 2	The second secon				
Sample #:	S001		Date Sampled:	November 30, 2	2012
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy	
	Annex				
Location:	001, room DV1000)B	Analysis:	SAI - PLM	
MUN Project #:	02-02-900		Work Order #:		
		Bulk	Sampling Parameters		
Pipe/Tank	Flooring		Ceiling	Roofing	Location
☐ Insulation	□12'x12' Tile	ПП	'extured	☐ Shingle	□ Floor
□ Elbow	□ 9'x9'Tile	☐ Stucco		☐ Rolled	☐ Wall Orientation
☐ Fitting	□ Vinyl Sheet	\square P	opcom	☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic		WJC	☐ Tar	X Above Ceiling
☐ Gasket	Wall	\square P	laster		☐ Other
☐ Tank Insulation	□ Transite Panel	$\square A$	coustic Tile (Dropped)		
☐ Pipe Wrap	□ Textured Wall	$\square A$	coustic Tile (Glued-on)		
HVAC	☐ Plaster	\square N	lastic	Miscellaneous:	Textile cloth
□ Insulation	□ DWJC		Structural		
☐ Tape		\square S	teel F. P. ing	No. of Phases:	
☐ Paper Wrap			eck F. P. ing	Colour:	





V 111 C 111 C 111								
Sample #:	S003		Date Sampled:	November 30, 2	2012			
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy				
	Annex							
Location:	006 , room DV2003	3	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	\square P	opcom	□ Felt	☐ Ceiling			
☐ Transite Pipe	☐ Mastic)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	\square N	fastic .	Miscellaneous:				
☐ Insulation	X DWJC		Structural					
☐ Tape		\square S	teel F. P. ing	No. of Phases:				
☐ Paper Wrap			eck F. P. ing	Colour:				





2 1 11	1 0004			132 2 22 2			
Sample #:	S004		Date Sampled:	November 30, 2	November 30, 2012		
Building:	OSC Main BLDG	and	Sampler:	Trent Hardy			
	Annex						
Location:	008, room DV2001	[Analysis:	SAI - PLM			
MUN Project #:	02-02-900		Work Order #:				
		Bulk	Sampling Parameters				
Pipe/Tank	Flooring		Ceiling	Roofing	Location		
☐ Insulation	□12'x12' Tile	ПП	extured	☐ Shingle	X Floor		
☐ Elbow	□ 9'x9'Tile	☐ Stucco		□ Rolled	☐ Wall Orientation		
☐ Fitting	X Vinyl Sheet	\Box P	орсоги	☐ Felt	☐ Ceiling		
☐ Transite Pipe	☐ Mastic		WJC	□ Tar	☐ Above Ceiling		
☐ Gasket	Wall	\square P	laster		☐ Other		
☐ Tank Insulation	□ Transite Panel	\square A	coustic Tile (Dropped)				
☐ Pipe Wrap	☐ Textured Wall	$\square A$	coustic Tile (Glued-on)				
HVAC	☐ Plaster		fastic	Miscellaneous:			
☐ Insulation	□ DWJC	Structural					
☐ Tape		\Box S	teel F. P. ing	No. of Phases:			
☐ Paper Wrap			eck F. P. ing	Colour: Grey a	nd white specks		





OIAIAFKOII	1				_
Sample #:	S005		Date Sampled:	November 30, 2012	
Building:	OSC Main BLDG and		Sampler:	Trent Hardy	
	Annex		-	_	
Location:	009, room DV2000		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	□ Popcom		☐ Felt	☐ Ceiling
☐ Transite Pipe	☐ Mastic	□ DWJC		☐ 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	☐ Mastic		Miscellaneous:	
☐ Insulation	X DWJC		Structural		
□ Tape			teel F. P. ing	No. of Phases:	
☐ Paper Wrap			eck F. P. ing	Colour:	

