

Appendix B:

Paint Sample Analysis

**CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS
80 EAST WHITE HILLS ROAD
ST.JOHN'S , NL A1C5X1
(709) 772-3685**

ATTENTION TO: James Beresford

PROJECT: Cape Spear

AGAT WORK ORDER: 16X125416

OCCUPATIONAL HYGIENE REVIEWED BY: Jason Coughtrey, Inorganics Supervisor

SOIL ANALYSIS REVIEWED BY: Jason Coughtrey, Inorganics Supervisor

TRACE ORGANICS REVIEWED BY: Jennifer Patterson, Organics Supervisor

DATE REPORTED: Aug 24, 2016

PAGES (INCLUDING COVER): 10

VERSION*: 2

Should you require any information regarding this analysis please contact your client services representative at (902) 468-8718

***NOTES**

VERSION 2:Version 2.0 supersedes Version 1.0, updated report, issued August 24, 2016.

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
<http://www.agatlabs.com>

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS
SAMPLING SITE:

ATTENTION TO: James Beresford
SAMPLED BY:

Lead & Mercury in Paint

DATE RECEIVED: 2016-08-11

DATE REPORTED: 2016-08-24

Parameter	Unit	SAMPLE DESCRIPTION:		Alumni Bldg		Alumni Bldg		Fog Alarm Grey		Alumni Shed		Lower Shed	
		SAMPLE TYPE:		Grey		White		Soil		Grey		White	
		DATE SAMPLED:		8/10/2016		8/10/2016		8/10/2016		8/10/2016		8/10/2016	
	G / S	RDL		7765230		7773851		7773852		7773853		7773854	
Lead	µg/g	10		5490		171		8090		952		19800	
Mercury	µg/g	0.01		1.9		5.9		6.9		12		4.5	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:



AGAT Laboratories

Certificate of Analysis

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CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

SAMPLING SITE:

ATTENTION TO: James Beresford

SAMPLED BY:

O. Reg. 558 Lead + Hg

DATE RECEIVED: 2016-08-11

DATE REPORTED: 2016-08-24

SAMPLE DESCRIPTION:		Alumni Bldg		Alumni Bldg		Fog Alarm Grey		Alumni Shed	
		Grey Soil	White Soil	8/10/2016	7773851	8/10/2016	7773852	Grey Soil	8/10/2016
Parameter	Unit	G / S	RDL	DATE SAMPLED:	RDL	DATE SAMPLED:	RDL	DATE SAMPLED:	RDL
Lead Leachate	mg/L	5	0.10	8/10/2016	0.035	8/10/2016	100	8/10/2016	7773853
Mercury Leachate	mg/L	0.1	0.01	<0.01	0.01	<0.01	<0.01	0.010	0.389
SAMPLE DESCRIPTION:		Lower Shed		Alumni Wood		Lower Shed			
		White Soil	Wood	8/10/2016	7773855	Wood	7773856		
Parameter	Unit	G / S	RDL	DATE SAMPLED:	RDL	DATE SAMPLED:	RDL		
Lead Leachate	mg/L	5	0.10	8/10/2016	0.010	8/10/2016	10.2		
Mercury Leachate	mg/L	0.1	0.01	<0.01	0.01	<0.01	<0.01		

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to O. Reg. 558 - Schedule IV Leachate Quality Criteria

7765230-7773856 Please note that due to insufficient sample volume, TCLP analysis was completed on a mass which did not meet the minimum sample requirements to perform the extraction as specified in the reference method.

Elevated RDL indicates the degree of sample dilution prior to the analysis in order to keep analytes within the calibration range of the instrument and to reduce matrix interference.

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

SAMPLING SITE:

ATTENTION TO: James Beresford

SAMPLED BY:

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Total Polychlorinated Biphenyls in Paint											DATE REPORTED: 2016-08-24		
DATE RECEIVED: 2016-08-11													
		SAMPLE DESCRIPTION:		Alumni Bldg		Alumni Bldg		Fog Alarm Grey		Alumni Shed		Lower Shed	
		SAMPLE TYPE:		Grey		White		Soil		Grey		White	
		DATE SAMPLED:		Soil		Soil		Soil		Soil		Soil	
		G / S		8/10/2016		8/10/2016		8/10/2016		8/10/2016		8/10/2016	
Parameter		Unit		7765230		7773851		7773852		7773853		7773854	
Total PCBs		mg/kg		0.5		<0.5		<0.5		<0.5		<0.5	
Surrogate		Unit		Acceptable Limits									
Decachlorobiphenyl		%		50-130		84		98		92		89	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:

J. Patterson



AGAT Laboratories

Guideline Violation

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

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ATTENTION TO: James Beresford

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
7765230	Alumni Bldg Grey	O. Reg 558	O. Reg. 558 Lead + Hg	Lead Leachate	5	51.0
7773852	Fog Alarm Grey	O. Reg 558	O. Reg. 558 Lead + Hg	Lead Leachate	5	100
7773854	Lower Shed White	O. Reg 558	O. Reg. 558 Lead + Hg	Lead Leachate	5	187
7773856	Lower Shed Wood	O. Reg 558	O. Reg. 558 Lead + Hg	Lead Leachate	5	10.2

Quality Assurance

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

ATTENTION TO: James Beresford

SAMPLING SITE:

SAMPLED BY:

Occupational Hygiene Analysis

RPT Date: Aug 24, 2016

DUPLICATE

PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
							Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Lead & Mercury in Paint

Lead	7765230	7765230	5490	5270	4.1%	< 10	107%	80%	120%	103%	80%	120%	98%	70%	130%
Mercury	7765230	7765230	1.9	1.8	5.4%	< 0.01	99%	90%	110%	100%	80%	120%	102%	70%	130%

Certified By:



Quality Assurance

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

ATTENTION TO: James Beresford

SAMPLING SITE:

SAMPLED BY:

Soil Analysis

RPT Date: Aug 24, 2016			DUPLICATE			Method Blank	REFERENCE MATERIAL		METHOD BLANK SPIKE			MATRIX SPIKE			
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 558 Lead + Hg

Lead Leachate	7765230	7765230	51.0	49.3	3.4%	< 0.010	91%	90%	110%	84%	80%	120%	86%	70%	130%
Mercury Leachate	7765230	7765230	<0.01	<0.01	NA	< 0.01	100%	90%	110%	93%	80%	120%	92%	70%	130%

Certified By:



Quality Assurance

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

ATTENTION TO: James Beresford

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Aug 24, 2016

DUPLICATE

REFERENCE MATERIAL

METHOD BLANK SPIKE

MATRIX SPIKE

PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Total Polychlorinated Biphenyls in Paint

Total PCBs	1	7765230	< 0.5	< 0.5	0.0%	< 0.5	113%	60%	140%	120%	60%	130%	NA	60%	130%
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Certified By:



Method Summary

CLIENT NAME: DEPARTMENT OF FISHERIES AND OCEANS

AGAT WORK ORDER: 16X125416

PROJECT: Cape Spear

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SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Occupational Hygiene Analysis			
Lead	MET-93-6106	EPA SW 846 3050B & 6010C	ICP/OES
Mercury	MET-93-6101	EPA SW 846 7471A & 245.5	CVAAS
Soil Analysis			
Lead Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Mercury Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Trace Organics Analysis			
Total PCBs	ORG-120-5107	EPA SW-846 8082	GC/ECD
Decachlorobiphenyl	ORG-120-5106	EAP SW846 3510C/8080/8010	GC/ECD

