

Appendix B

Norwest Laboratory Results



Agri-Food & Environmental Group
Calgary Edmonton Winnipeg Lethbridge Surrey

Sample Custody

9938-67 Avenue
Edmonton, AB. T6E 0P5
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Transport Canada
Report to: Transport Canada
Environmental Services
1100, 9700 Jasper Avenue
Edmonton, AB. Canada
T5J 4E6
Attn: Tim Johnson

Project ID:
Name: Resolute Bay Landfill
Location: Resolute Bay
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 72290
Control Number: E 45118
Date Received: Jul 21, 2000
Date Reported: Jul 28, 2000
Report Number: 91862

Sampled By:

Sample Disposal Date: Aug 20, 2000

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the upper right of this page.

_____ **Extend Sample Storage Until** _____ (MM/DD/YY)

The following charges apply to extended sample storage:

Storage for 1 to 5 samples per month	\$ 10.00
Storage for 6 to 20 samples per month	\$ 15.00
Storage for 21 to 50 samples per month	\$ 30.00
Storage for 51 to 200 samples per month	\$ 60.00
Storage for more than 200 samples per month	\$ 110.00

_____ **Return Sample, collect, to the address below via:**

_____ Greyhound
_____ Loomis
_____ Purolator
_____ Other (Specify) _____

Name: _____
Company: _____
Address: _____

Phone: _____
Fax: _____
Signature: _____

If no other arrangements have been made, samples will be disposed of on Aug 20, 2000.



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Analytical Report

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		NWL Number:		72290-1	72290-2	72290-3
		Sample Date:				
		Sample Description:		Soil 04074-1	Freshwater 04074-2	Saltwater 04074-3
Analyte	Units	Results	Results	Results	Detection Limit	
Microtox						
Microtox Model 500 unit #		330	174	330		
Sample Type		Soil 1to1	Water	Water		
Turbidity	As Received	High	None	None		
Colour	As Received	Dark Brown	Clear	Clear		
Clarification		Yes	Yes	Yes		
Centrifugation		Yes	No	No		
Turbidity	As Tested	None	None	None		
Colour	As Tested	Clear	Clear	Clear		
pH	Clarified Sample- Initial	8.3	7.8	8.1	0.1	
pH	Clarified Sample- Final	Not Adjusted	Not Adjusted	Not Adjusted		
Osmotic Adjustment		Yes	Yes	Yes		
Lab Treatment		None	None	None		
EC50	5 minutes	% Sample	>100	>100	>100	
95% Confidence Factor	(EC50 - 5 Minutes)		N/A	N/A	N/A	0.1
EC20	5 minutes	% Sample	>100	>100	>100	
95% Confidence Factor	(EC20 - 5 Minutes)		N/A	N/A	N/A	0.1
EC50	15 minutes	% Sample	>100	>100	>100	
95% Confidence Factor	(EC50 - 15 Minutes)		N/A	N/A	N/A	0.1
EC20	15 minutes	% Sample	>100	>100	>100	
95% Confidence Factor	(EC20 - 15 Minutes)		N/A	N/A	N/A	0.1
Colour Corrected Data		No	No	No		
Interpretation (AEUB, G-50)		Pass	Pass	Pass		

1/1



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Sampled By:

Page. 5 of 7

NWL Number: 72290-4 72290-5
Sample Date:
Sample Description: Sediment 4074-4 Freshwater #2

Analyte	Units	Results	Results	Results	Detection Limit
Microtox					
Microtox Model 500 unit #		330	174		
Sample Type		Soil 1 to 1	Water		
Turbidity	As Received	High	None		
Colour	As Received	Dark Brown	Blue		
Clarification		Yes	Yes		
Centrifugation		Yes	Yes		
Turbidity	As Tested	None	None		
Colour	As Tested	Clear	Blue		
pH	Clarified Sample- Initial	8.1	8.9		0.1
pH	Clarified Sample- Final	Not Adjusted	8.8		0.1
Osmotic Adjustment		Yes	Yes		
Lab Treatment		None	None		
EC50	5 minutes	% Sample	>100		
95% Confidence Factor	(EC50 - 5 Minutes)	N/A	N/A		0.1
EC20	5 minutes	% Sample	>100		
95% Confidence Factor	(EC20 - 5 Minutes)	N/A	N/A		0.1
EC50	15 minutes	% Sample	>100		
95% Confidence Factor	(EC50 - 15 Minutes)	N/A	N/A		0.1
EC20	15 minutes	% Sample	>100		
95% Confidence Factor	(EC20 - 15 Minutes)	N/A	N/A		0.1
Colour Corrected Data		No	No		
Interpretation (AEUB, G-50)		Pass	Pass		

Approved by: 



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NWL Lot ID: 72290
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NWL Number: 72290-1 72290-4
Sample Date:
Sample Description: Soil 04074-1 Sediment 4074-4

Analyte	Units	Results	Results	Results	Detection Limit
Aggregate Organic Constituents					
Phenol	Total	mg/kg	0.09	0.08	0.01
Metals Strong Acid Extractable					
Mercury	Strong Acid Extractable	ug/g	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	ug/g	<0.3	0.35	0.3
Arsenic	Strong Acid Extractable	ug/g	1.1	0.99	0.5
Barium	Strong Acid Extractable	ug/g	19.0	13.4	0.01
Beryllium	Strong Acid Extractable	ug/g	0.12	0.10	0.03
Cadmium	Strong Acid Extractable	ug/g	0.11	0.13	0.03
Chromium	Strong Acid Extractable	ug/g	3.68	4.40	0.04
Cobalt	Strong Acid Extractable	ug/g	1.10	0.838	0.07
Copper	Strong Acid Extractable	ug/g	2.37	2.57	0.05
Lead	Strong Acid Extractable	ug/g	3.50	3.61	0.1
Molybdenum	Strong Acid Extractable	ug/g	0.568	0.45	0.05
Nickel	Strong Acid Extractable	ug/g	3.32	2.83	0.05
Selenium	Strong Acid Extractable	ug/g	<0.2	<0.2	0.2
Silver	Strong Acid Extractable	ug/g	<0.05	<0.05	0.05
Thallium	Strong Acid Extractable	ug/g	<0.2	<0.2	0.2
Tin	Strong Acid Extractable	ug/g	1.2	1.1	0.2
Vanadium	Strong Acid Extractable	ug/g	5.38	5.18	0.05
Zinc	Strong Acid Extractable	ug/g	16.3	12.3	0.03
Salinity					
pH	Saturated Paste	pH	7.7	7.4	0.1
Conductivity		dS/m	0.37	0.96	0.01
SAR			0.5	0.6	
% Saturation		%	27	35	1
Calcium		meq/L	2.41	6.58	1
Calcium		mg/kg	13.0	45.5	1
Magnesium		meq/L	0.8	2.1	0.1
Magnesium		mg/kg	2.7	9.4	0.5
Sodium		meq/L	0.1	1.3	1
Sodium		mg/kg	4.2	10.1	1
Potassium		meq/L	0.1	0.5	0.03
Potassium		mg/kg	1.6	6.97	0.5



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P.O.:
Acct. Code:

NWL Lot ID: 72290
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Sampled By:

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NWL Number: 72290-1 72290-4
Sample Date:
Sample Description: Soil 04074-1 Sediment 4074-4

Analyte		Units	Results	Results	Results	Detection Limit
Salinity - Continued						
Chloride		meq/L	0.6	5.2		1
Chloride		mg/kg	6.1	63.3		1
Sulphate-S		meq/L	0.7	8.0		1
Sulphate-S		mg/kg	2.9	44.2		1
Nitrate - N	Saturated Paste	meq/L	<0.06	<0.06		
Nitrate - N	Saturated Paste	mg/kg	<0.02	<0.03		
Nitrite - N	Saturated Paste	meq/L	<0.01	<0.01		
Nitrite - N	Saturated Paste	mg/kg	<0.01	<0.01		
TGR		T/ac	<0.1	<0.1		0.1



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Sampled By:

Page: 4 of 7

NWL Number: 72290-2 72290-3
Sample Date:
Sample Description: Freshwater Saltwater 04074-3
04074-2

Analyte		Units	Results	Results	Results	Detection Limit
Metals Total						
Arsenic	Total	mg/L	<0.01	0.01		0.01
Chromium	Total	mg/L	0.0014	<0.0009		0.0009
Copper	Total	mg/L	0.007	<0.001		0.001
Iron	Total	mg/L	0.094	0.027		0.003
Nickel	Total	mg/L	0.004	0.003		0.001
Zinc	Total	mg/L	0.0169	<0.0007		0.0007
Mercury	Total	mg/L	0.00002	<0.00001		5
Metals Total (Trace)						
Aluminum	Total	mg/L	0.0214	0.0220		0.0009
Cadmium	Total	mg/L	0.00063	0.00019		7e-005
Lead	Total	mg/L	0.0010	0.0004		0.0003
Silver	Total	mg/L	0.00010	0.00010		6e-005
Metals Total by AA						
Selenium	Hydride Total	mg/L	<0.0002	<0.0002		0.0002
Routine Water						
pH			7.82	8.10		0.01
Conductivity		uS/cm	311	4690		0.1



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Methodology and Notes

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Report Number: 91862

Sampled By:

Page: 6 of 7

Method of Analysis:

Test	Reference	Method	Date of Analysis	Location	Analyst
Alkalinity, pH, and EC in water	APHA	Electrometric Method, 4500-H+ B	Jul 24, 2000	Norwest Edmonton	Matt Cummings
Mercury in Soil	SW-846	Laboratory Method, 2510 B	Jul 24, 2000	Norwest Edmonton	Matt Cummings
		Microwave Ass Acid Digest of Sed., Sludges, Soils and Oils, EPA 3051	Jul 24, 2000	Norwest Edmonton	To Thong
Mercury Low Level (Total) in water	APHA	Cold Vapour Atomic Absorption Spectrometric Method, 3112 B	Jul 28, 2000	Norwest Edmonton	Stef Pavlyshyn
Metals Hydride (Total) in water	APHA	Continuous Hydride Generation - Atomic Absorption Spectromet, 3114 C	Jul 27, 2000	Norwest Edmonton	Stef Pavlyshyn
Metals Trace (Total) in water	APHA	Inductively Coupled Plasma (ICP) Method, 3120 B	Jul 25, 2000	Norwest Edmonton	Jodi Johnston
Metals Trace in soil	APHA	Inductively Coupled Plasma (ICP) Method, 3120 B	Jul 24, 2000	Norwest Edmonton	Jodi Johnston
Metals UltraTrace (Total) in water	APHA	Inductively Coupled Plasma (ICP) Method, 3120 B	Jul 24, 2000	Norwest Edmonton	To Thong
Microtox - 15 Minute Multiple Concentration, Acute, Static, EC50 Bioassay Saturated Paste in General Soil	Environment Canada	Biological Test Method: Toxicity Test Luminescent Bacteria, 1/RM/24	Jul 24, 2000	Norwest Edmonton	Michelle Tessier
	McKeague	Soluble Salts in Saturation Extract, 3.21	Jul 25, 2000	Norwest Edmonton	Jesse Dang



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Page.

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References:

APHA	Standard Methods for the Examination of Water and Wastewater
Environment Canada	Toxicity Test Using Luminescent Bacteria
McKeague	Manual on Soil Sampling and Methods of Analysis
SW-846	Test Methods for Evaluating Solid Waste

Comments:

Norwest Labs strongly recommends that this report is not reproduced except in full.



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Fax (403) 291-2021
Fax (780) 434-8586
Fax (403) 327-8527
Fax (604) 514-3323
Fax (204) 275-6019

TO: Transport Canada - Environmental Services

ATTN: Tim Johnson

DATE SAMPLED:

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 31-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill
Resolute Bay

SAMPLE CUSTODY

General Soil Sample Disposal Date: August 30, 2000

General soil samples will be stored for 30 days unless we receive instructions prior to disposal date.

Please indicate your preference below:

_____ We are aware that there is a charge for long term storage of samples past 30 days (refer to page 117 of NWL price schedule). Please retain the samples until _____ and invoice us accordingly.

_____ Please ship the sample to us collect by:

_____ Greyhound

_____ Loomis

_____ Purolator

_____ Other (specify) _____

Signature _____



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ATTN: Tim Johnson

DATE SAMPLED:

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 31-Jul-00

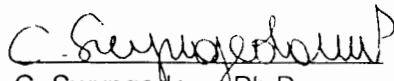
LAB FILE#: 72290

PROJECT: Resolute Bay Landfill
Resolute Bay

Page 1

HYDROCARBON ASSESSMENT - SOIL

LAB #	1	4	Detection
CLIENT #	Soil	Sediment	Limit
¹Non-Halogenated Aromatics:			
Benzene	<0.02	<0.02	0.02
Toluene	<0.02	<0.02	0.02
Ethylbenzene	<0.02	<0.02	0.02
Total Xylenes (o, m & p)	<0.02	<0.02	0.02
¹Total Purgeables (C5-C10)	<0.1	<0.1	0.1
²Total Extractables (C11-C40+)	<10	142	10


C. Swyngedouw Ph.D.
Assistant Lab Manager

Results expressed in mg/kg dry wt. (ppm)

¹Assessment as per US EPA Method 8020/8015

²Assessment as per Alta. Env. Method A108.0



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TO: Transport Canada - Environmental Services

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DATE SAMPLED:

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 31-Jul-00

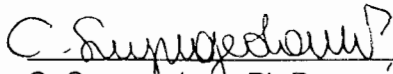
LAB FILE#: 72290

PROJECT: Resolute Bay Landfill
Resolute Bay

Page 1

HYDROCARBON ASSESSMENT - WATER

LAB #	2	3	Detection
CLIENT #	Freshwater	Saltwater	Limit
¹Non-Halogenated Aromatics:			
Benzene	<0.001	<0.001	0.001
Toluene	<0.001	<0.001	0.001
Ethylbenzene	<0.001	<0.001	0.001
Total Xylenes (o, m & p)	<0.001	<0.001	0.001
¹Total Purgeables (C₅ - C₁₀)	<0.01	<0.01	0.01
²Total Extractables (C₁₁ - C₄₀₊)	<0.1	<0.1	0.1


C. Swyngedouw Ph.D.
Assistant Lab Manager

Results expressed in mg/L (ppm)

¹Assessment as per US EPA Method 8020/8015

²Assessment as per Alta. Env. Method A108.0



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TO: Transport Canada - Environmental Services

ATTN: Tim Johnson

DATE SAMPLED:

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 31-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill
Resolute Bay

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BTEX QUALITY ASSURANCE DATA

(This QA/QC data is representative of the lab based quality assurance program and is not to be utilized as field data.)

Calibration - Check (CC)

	Expected Amt. (ng)	Detected Amt. (ng)	% Rec.	Acceptable Range
Benzene	50.0	53.4	107	80-120
Toluene	50.0	50.7	101	80-120
Ethyl Benzene	50.0	50.1	100	80-120
M & P Xylenes	100.0	100.4	100	80-120
O-Xylene	50.0	49.9	100	80-120

$$\text{Accuracy} = \frac{\text{Ave \% Rec. MS} + \text{Ave \% Rec. MSD}}{2} = \underline{110} \% \text{ Accuracy}$$

$$\% \text{ RSD} = \frac{\text{Ave \% Rec. MS} - \text{Ave \% Rec. MSD}}{\% \text{ Accuracy}} = \underline{7.0} \% \text{ RSD}$$

The calculated values are based on matrix spike and duplicate recovery data performed at the time of analysis.

Date Acquired: 00-07-24

Analyst: Tim Servage



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TO: Transport Canada - Environmental Services

ATTN: Tim Johnson

DATE SAMPLED:

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 31-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill
Resolute Bay

Page 3

**TOTAL EXTRACTABLE HYDROCARBONS
QUALITY ASSURANCE DATA**

*(This QA/QC data is representative of the lab based quality
assurance program and is not to be utilized as field data.)*

Calibration Check (CC)

	Actual Amt. (ng)	Detected Amt. (ng)	% Rec.
Diesel	6562	6778	103
Accuracy	$\frac{\text{Ave \% Rec. MS} + \text{Ave \% Rec. MSD}}{2}$		= <u>116</u> % Accuracy
% RSD	$\frac{\text{Ave \% Rec. MS} - \text{Ave \% Rec. MSD}}{\% \text{ Accuracy}}$		= <u>7.8</u> % RSD

The calculated values are based on matrix spike and duplicate recovery data performed at the time of analysis.

Date Acquired: 00-07-24

Analyst: Tim Servage



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TO: Transport Canada

ATTN: Tim Johnson

DATE SAMPLED: na
DATE RECEIVED: 22-Jul-00
DATE REPORTED: 31-Jul-00
LAB FILE#: 72290
PROJECT#: Resolute Bay Landfill

Page 1

POLYCHLORINATED BIPHENYLS IN SOIL

LAB #	1	4	Method	
CLIENT #	Soil	Sediment	Blank	Detection
			26-Jul-00	Limit
PCB Content	<0.1	<0.1	<0.1	0.1
Aroclor Type	----	----	----	

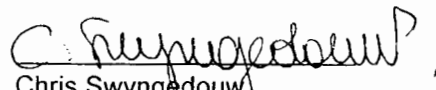
QUALITY ASSURANCE DATA

(This QA/QC data is representative of the lab based quality assurance program and is not to be utilized as field data.)

Surrogate Recovery %

Decachlorobiphenyl	93	81	87
--------------------	----	----	----

Results expressed in mg/kg (ppm) dry weight basis.
Reference Methods-based on EPA 3580A, EPA 8082


Chris Swyngedouw
Lab Manager



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TO: Transport Canada

ATTN: Tim Johnson

DATE SAMPLED: na
DATE RECEIVED: 22-Jul-00
DATE REPORTED: 31-Jul-00
LAB FILE#: 72290
PROJECT#: Resolute Bay Landfill

Page 2

POLYCHLORINATED BIPHENYLS QUALITY ASSURANCE DATA

*(This QA/QC data is representative of the lab based quality assurance
program and is not to be utilized as field data.)*

Calibration Check (CC)

Date Acquired: 26-Jul-00

**Actual
Amt. (ng/ul)**

**Detected
Amt. (ng/ul)**

**%
Rec.**

**Aroclor
1254**

1.00

1.00

100

QA/QC Sample

Date Acquired: 18-Jul-00

**Actual
Amt. (ug/g)**

Recovered

**%
Rec.**

Aroclor

1242/1254/1260

1.0

0.998

100

$$\text{Accuracy} = \frac{\text{Ave \% Rec. MS} + \text{Ave \% Rec. MSD}}{2} = 101 \% \text{ Accuracy}$$

$$\% \text{ RSD} = \frac{\text{Ave \% Rec. MS} - \text{Ave \% Rec. MSD}}{\% \text{ Accuracy}} = 0.1 \% \text{ RSD}$$

The calculated values are based on matrix spike and duplicate recovery data performed on your samples at the time of analysis.

Date Acquired: 18-Jul-00

Analyst: Inna Kazakov



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Page 1

POLYCHLORINATED BIPHENYLS IN WATER

LAB #	2	3	Method	
CLIENT #	Freshwater	Saltwater	Blank	Detection
			26-Jul-00	Limit
PCB Content	<0.1	<0.1	<0.1	0.1
Aroclor Type	-----	-----	-----	

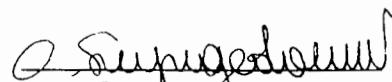
QUALITY ASSURANCE DATA

(This QA/QC data is representative of the lab based quality assurance program and is not to be utilized as field data.)

Surrogate Recovery %

Decachlorobiphenyl	104	78	90
--------------------	-----	----	----

Results expressed in ug/L (ppb)


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POLYCHLORINATED BIPHENYLS QUALITY ASSURANCE DATA

*(This QA/QC data is representative of the lab based quality assurance
program and is not to be utilized as field data.)*

Calibration Check (CC)

Date Acquired:	26-Jul-00		
	Actual	Detected	%
	Amt. (ng/ul)	Amt. (ng/ul)	Rec.

Aroclor			
1254	1.00	1.00	100

QA/QC Sample

Date Acquired:	18-Jul-00		
	Actual	Recovered	%
	Amt. (ug/g)		Rec.

Aroclor			
1242/1254/1260	1.0	0.998	100

Accuracy = $\frac{\text{Ave \% Rec. MS} + \text{Ave \% Rec. MSD}}{2}$ = 101 % Accuracy

% RSD = $\frac{\text{Ave \% Rec. MS} - \text{Ave \% Rec. MSD}}{\text{\% Accuracy}}$ = 0.1 % RSD

The calculated values are based on matrix spike and duplicate recovery data performed on your samples at the time of analysis.

Date Acquired: 18-Jul-00

Analyst: Inna Kazakov



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ATTN: Tim Johnson

DATE SAMPLED: Not Available

DATE RECEIVED: 22-Jul-00

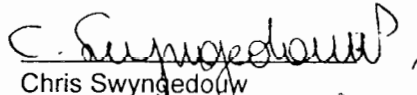
DATE REPORTED: 27-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill

GLYCOL SCREEN IN WATER

Date Analyzed	26-Jul-00	26-Jul-00	
LAB #	2	3	Detection
CLIENT#	Freshwater	Saltwater	Limit
Ethylene Glycol	<10	<10	10
Propylene Glycol	<10	<10	10
Diethylene Glycol	<10	<10	10
Triethylene Glycol	<10	<10	10
Tetraethylene Glycol	<10	<10	10


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Assistant Lab Manager

Results expressed in mg/L (ppm)



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DATE SAMPLED: Not Available

DATE RECEIVED: 22-Jul-00

DATE REPORTED: 27-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill

Page 2

**GLYCOLS
QUALITY ASSURANCE DATA**

(This QA/QC data is representative of the lab based quality assurance program and is not to be utilized as field data.)

Calibration - Check (CC)

	Expected Amt. (mg/L)	Detected Amt. (mg/L)	% Rec.	Acceptable Range
Ethylene Glycol	100	105	105	80-120
Propylene Glycol	102	104	102	80-120
Diethylene Glycol	100	103	103	80-120
Triethylene Glycol	100	103	103	80-120
Tetraethylene Glycol	101	100	99	80-120

$$\text{Accuracy} = \frac{\text{Ave \% Rec. MS} + \text{Ave \% Rec. MSD}}{2} = \frac{105}{2} \% \text{ Accuracy}$$

$$\% \text{ RSD} = \frac{\text{Ave \% Rec. MS} - \text{Ave \% Rec. MSD}}{\% \text{ Accuracy}} = \frac{3.5}{\% \text{ Accuracy}} \% \text{ RSD}$$

The calculated values are based on matrix spike and duplicate recovery.

Date Acquired: July 26, 2000

Analyst: Erhard Schneider



TO: Transport Canada

ATTN: Tim Johnson

DATE SAMPLED:

DATE RECEIVED: 21-Jul-00

DATE REPORTED: 31-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill

Page 1

EPA 8260 VOLATILES SCREEN - WATER

Date Analyzed:	28-Jul-00	28-Jul-00	28-Jul-00	
Lab #	2	3	Method	Detection
CLIENT #	Freshwater	Saltwater	Blank	Limit
Acetone	<50	<50	<50	50
Acetonitrile	<25	<25	<25	25
Acrylonitrile	<25	<25	<25	25
Allyl Chloride	<1	<1	<1	1
Benzene	<1	<1	<1	1
Bromobenzene	<1	<1	<1	1
Bromochloromethane	<1	<1	<1	1
Bromodichloromethane	<1	<1	<1	1
Bromoform	<1	<1	<1	1
Bromomethane	<10	<10	<10	10
2-Butanone (MEK)	<50	<50	<50	50
n-Butylbenzene	<1	<1	<1	1
sec-Butylbenzene	<1	<1	<1	1
tert-Butylbenzene	<1	<1	<1	1
Carbon Tetrachloride	<1	<1	<1	1
Chlorobenzene	<1	<1	<1	1
Chloroethane	<10	<10	<10	10
2-Chloroethyl vinyl ether	<1	<1	<1	1
Chloroform	<1	<1	<1	1
Chloromethane	<10	<10	<10	10
2-Chlorotoluene	<1	<1	<1	1
4-Chlorotoluene	<1	<1	<1	1
Dibromochloromethane	<1	<1	<1	1
1,2-Dibromo-3-Chloropropane	<1	<1	<1	1
1,2-Dibromoethane	<1	<1	<1	1
Dibromomethane	<1	<1	<1	1
1,4-Dichloro-2-Butene(cis)	<50	<50	<50	50
1,4-Dichloro-2-Butene(trans)	<50	<50	<50	50
1,2-Dichlorobenzene	<1	<1	<1	1
1,3-Dichlorobenzene	<1	<1	<1	1
1,4-Dichlorobenzene	<1	<1	<1	1

Results expressed in ug/L (ppb)



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DATE REPORTED: 31-Jul-00

LAB FILE#: 72290

PROJECT: Resolute Bay Landfill

Page 2

EPA 8260 VOLATILES SCREEN - WATER

Lab # CLIENT #	2 Freshwater	3 Saltwater	Method Blank	Detection Limit
1,1-Dichloroethane	<1	<1	<1	1
1,2-Dichloroethane	<1	<1	<1	1
1,1-Dichloroethene	<1	<1	<1	1
1,2-Dichloroethene(cis)	<1	<1	<1	1
1,2-Dichloroethene(trans)	<1	<1	<1	1
Dichlorodifluoromethane	<10	<10	<10	10
1,2-Dichloropropane	<1	<1	<1	1
1,3-Dichloropropane	<1	<1	<1	1
2,2-Dichloropropane	<10	<10	<10	10
1,1-Dichloropropene	<1	<1	<1	1
1,3-Dichloropropene(cis)	<1	<1	<1	1
1,3-Dichloropropene(trans)	<1	<1	<1	1
Ethylbenzene	<1	<1	<1	1
Ethyl Methacrylate	<1	<1	<1	1
Hexachlorobutadiene	<1	<1	<1	1
Hexachloroethane	<1	<1	<1	1
2-Hexanone	<25	<25	<25	25
Iodomethane	<1	<1	<1	1
p-Isopropyltoluene	<1	<1	<1	1
Methacrylonitrile	<25	<25	<25	25
Methylene Chloride	<25	<25	<25	25
Methyl Methacrylate	<1	<1	<1	1
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	25
Naphthalene	<5	<5	<5	5
Pentachloroethane	<1	<1	<1	1
Propionitrile	<25	<25	<25	25
iso-Propylbenzene	<1	<1	<1	1
n-Propylbenzene	<1	<1	<1	1
Styrene	<1	<1	<1	1
1,1,1,2-Tetrachloroethane	<1	<1	<1	1
1,1,2,2-Tetrachloroethane	<1	<1	<1	1

Results expressed in ug/L (ppb)



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PROJECT: Resolute Bay Landfill

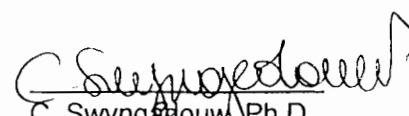
Page 3

EPA 8260 VOLATILES SCREEN - WATER

Lab #	2	3	Method	Detection
CLIENT #	Freshwater	Saltwater	Blank	Limit
Tetrachloroethene	<1	<1	<1	1
Toluene	<1	<1	<1	1
1,2,3-Trichlorobenzene	<1	<1	<1	1
1,2,4-Trichlorobenzene	<1	<1	<1	1
1,1,1-Trichloroethane	<1	<1	<1	1
1,1,2-Trichloroethane	<1	<1	<1	1
Trichloroethene	<1	<1	<1	1
Trichlorofluoromethane	<1	<1	<1	1
1,2,3-Trichloropropane	<1	<1	<1	1
1,2,4-Trimethylbenzene	<1	<1	<1	1
1,3,5-Trimethylbenzene	<1	<1	<1	1
Vinyl Chloride	<10	<10	<10	10
Total Xylenes	<1	<1	<1	1

Results expressed in ug/L (ppb)

Surrogate:	% Recovery			Recovery Range
Dibromofluoromethane	98	96	97	86-118
Toluene-d8	98	99	99	88-110
Bromofluorobenzene	100	100	100	86-115


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Assistant Lab Manager



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LAB FILE#: 72290

PROJECT: Resolute Bay Landfill

EPA 8260 VOLATILES SCREEN

QAQC

Calibration Checks

Component	Total nanograms		28-Jul-00
	Actual	Recovered	%-Recovery
Chloroform	50	47	94
1,1-Dichloroethene	50	45	90
1,2-Dichloropropane	50	46	92
Ethyl Benzene	50	48	96
Toluene	50	48	96
Vinyl Chloride	50	59	118

Duplicate Analysis

Component			28-Jul-00
	Run 1	Run 2	%-Difference*
Chloroform	117	117	0.0
Bromodichloromethane	24	24	0.0
Chlorodibromomethane	6	6	0.0

* - this is the difference between the duplicate samples, divided by the average of the two results.

Appendix C

Site Photographs



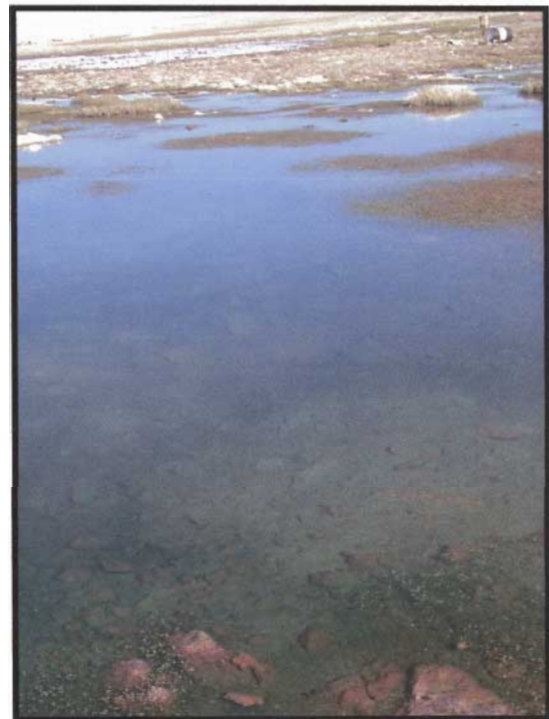
Picture 1. Resolute Bay Airport Landfill



Picture 2. Resolute Bay Airport Landfill



Picture 3. Freshwater Sampling



Picture 4. Standing water with a noticeable blue colour



Picture 5. Soil Sampling