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LABORATORY USE ONLY

Work Order: 2456558
Comments: _____

CHAIN OF CUSTODY RECORD

Client: CITY OF IQUALUIT
P.O. Box 460
IQUALUIT, NU X0A 0H0

PASC Quote #: XXXXXXXXXX Page 1 of 1

Client P.O. #: _____
Client Project #: North 40 West 40 Landfill

Contact: GEOFF BAKER

Sampled by: GEOFF BAKER

Phone: (867) 915-8502 Fax: (867) 915-8505

Please specify Guideline (if applicable) _____ JUL 9'04 AM 9:48

Invoice to (if other than above):

Analysis Required:

TAT (Turnaround Time)

PLEASE PROVIDE ADVANCE NOTICE
FOR RUSH PROJECTS

Some exceptions apply. Please contact Lab

STD 5-7 Business Days ☒
RUSH Specify Date: _____
Time: _____

Sample #	Client Sample I.D.	Date Sampled	Time Sampled	OIL + GREASE	BTEX / TVH	PHENOLS	MERCURY	BOD	TSS	GENERAL	Sample Matrix	No. of Containers	Comments/Contamination/ Site History
1	101	July 6/04	12:00 PM	X	X	X	X	X	X	X	WATER	9	Landfill Leachate
2	102	"	12:20 PM	↓	↓	↓	↓	↓	↓	↓	WATER	9	
3	103	"	12:40 PM	↓	↓	↓	↓	↓	↓	↓	WATER	9	
4	104	"	1:00 PM	↓	↓	↓	↓	↓	↓	↓	WATER	9	
5													
6	* SAMPLES WERE PRESERVED UPON RECEIPT IN OTTAWA LOCATION												
7	PHENOLS, MERCURY, OIL + GREASE PRESERVED												
8	BTEX <u>UN</u> PRESERVED												
9													
10													
11													
12													

Samples Relinquished to PASC by: [Signature] Date: July 6/04 Time: _____ Method of Shipment: AIR FREIGHT

Samples Received in lab by: [Signature] Date: July 8/04 Time: 11:55 am Condition of samples upon receipt at lab: 9°C

White: PSC

Yellow: Mail

Pink: Receiver

Goldenrod: Client

19-Jul-2004

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Iqaluit, NV

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Project: West 40 Landfill

PO #:

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Status: Final

Water Samples

Sample Id	pH	Sp. Cond.	F-	Cl-	NO2-N	Br-	NO3-N	PO4-3
	SM 4500B pH Units	SM 2510B umhos/cm	SM 4500F mg/L	SM 4110B mg/L	SM 4110B mg/L	SM 4110B mg/L	SM 4110B mg/L	SM 4110B mg/L
101	7.92	777	0.1	23.8	<0.2	0.6	<0.2	<1
102	7.42	932	0.1	105.	<0.2	0.9	<0.2	<1
103	7.41	1667	0.2	215.	<0.2	2.3	<0.2	<1
104	7.60	1730	0.1	232.	<0.2	2.4	<0.2	<1
Blank	---	1	<0.1	<0.5	<0.2	<0.5	<0.2	<1
QC Standard (found)	7.01	711	2.1	2.1	1.0	2.1	1.0	5
QC Standard (expected)	7.00	718	2.0	2.0	1.0	2.0	1.0	5
Repeat 101	7.83	780	0.1	23.6	<0.2	0.6	<0.2	<1

Sample Id	SO4=	BOD (5)	Oil & Grs.	Oil & Grs(M)	Oil & Grs(A)	Hg	TSS
	SM 4110B mg/L	SM 5210B mg/L	SM 5520B mg/L	SM 5520F mg/L	SM 5520 mg/L	SW 7470 mg/L	SM 2540B mg/L
101	143.	10.2	1		<1	1	<0.0001
102	215.	10.9	1		<1	1	<0.0001
103	398.	5.2	2		1	1	<0.0001
104	332.	15.9	1		<1	1	<0.0001
Blank	<0.5	<0.5	<1		<1	<1	<0.0001
QC Standard (found)	5.0	5.9	58		19	39	0.0010
QC Standard (expected)	5.0	6.0	58		18	40	0.0010
Repeat 101	141.	9.1	1		<1	1	<0.0001



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Water Samples

Sample Id	Phenols SM 5530D mg/L	NH3-N SM 4500H mg/L	Ag ICP/MS mg/L	Al ICP/MS mg/L	As ICP/MS mg/L	B ICP/MS mg/L
101	0.009	3.74	<0.0001	0.013	<0.002	0.312
102	0.008	2.79	<0.0001	0.032	<0.002	0.363
103	0.036	4.42	<0.0001	0.048	0.002	0.710
104	0.008	4.11	<0.0001	0.092	<0.002	0.625
Blank	<0.001	<0.03	<0.0001	<0.005	<0.002	<0.005
QC Standard (found)	0.031	1.63	0.0026	0.985	0.097	0.046
QC Standard (expected)	0.030	1.50	0.0030	1.00	0.100	0.050
Repeat 101	0.009	3.76	<0.0001	0.012	<0.002	0.325

Sample Id	Ba ICP/MS mg/L	Be ICP/MS mg/L	Bi ICP/MS mg/L	Ca ICP/MS mg/L	Cd ICP/MS mg/L	Co ICP/MS mg/L
101	0.077	<0.001	<0.001	110.	0.0001	0.0015
102	0.023	<0.001	<0.001	97.7	0.0019	0.0036
103	0.035	<0.001	<0.001	166.	0.0024	0.0055
104	0.066	<0.001	<0.001	165.	<0.0001	0.0032
Blank	<0.005	<0.001	<0.001	<0.5	<0.0001	<0.0001
QC Standard (found)	0.103	0.005	0.106	5.2	0.0494	0.0511
QC Standard (expected)	0.100	0.005	0.100	5.0	0.0500	0.0500
Repeat 101	0.078	<0.001	<0.001	111.	0.0001	0.0015



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Water Samples

Sample Id	Cr ICP/MS mg/L	Cu ICP/MS mg/L	Fe ICP/MS mg/L	K ICP/MS mg/L	Mg ICP/MS mg/L	Mn ICP/MS mg/L
101	<0.005	0.0067	9.40	9.9	14.8	1.10
102	<0.005	0.0230	3.61	13.6	12.5	0.538
103	<0.005	0.0229	8.86	36.8	26.7	0.903
104	<0.005	0.0015	9.23	31.1	32.8	2.65
Blank	<0.005	<0.0005	<0.03	<0.1	<0.05	<0.005
QC Standard (found)	0.050	0.0497	1.05	1.0	1.07	0.052
QC Standard (expected)	0.050	0.0500	1.00	1.0	1.00	0.050
Repeat 101	<0.005	0.0065	9.51	10.1	15.0	1.12

Sample Id	Mo ICP/MS mg/L	Na ICP/MS mg/L	Ni ICP/MS mg/L	P ICP/MS mg/L	Pb ICP/MS mg/L	Sb ICP/MS mg/L
101	0.004	26.5	0.005	0.08	0.0040	0.0011
102	0.003	54.8	0.011	0.13	0.0100	0.0029
103	0.006	125.	0.016	0.25	0.0191	0.0051
104	0.002	137.	0.005	0.08	0.0006	0.0011
Blank	<0.001	<0.1	<0.001	<0.05	<0.0005	<0.0005
QC Standard (found)	0.050	4.8	0.048	1.07	0.0521	0.0963
QC Standard (expected)	0.050	5.0	0.050	1.00	0.0500	0.100
Repeat 101	0.004	27.0	0.005	0.08	0.0041	0.0009

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Water Samples

Sample Id	Se ICP/MS mg/L	Sn ICP/MS mg/L	Sr ICP/MS mg/L	Ti ICP/MS mg/L	Tl ICP/MS mg/L	U ICP/MS mg/L
101	<0.002	<0.001	0.386	<0.005	<0.00005	0.0006
102	<0.002	<0.001	0.494	<0.005	<0.00005	<0.0001
103	<0.002	0.001	0.860	<0.005	<0.00005	<0.0001
104	<0.002	<0.001	0.689	<0.005	<0.00005	0.0010
Blank	<0.002	<0.001	<0.001	<0.005	<0.00005	<0.0001
QC Standard (found)	0.097	0.104	0.049	0.049	0.106	0.0044
QC Standard (expected)	0.100	0.100	0.050	0.050	0.100	0.0040
Repeat 101	<0.002	<0.001	0.383	<0.005	<0.00005	0.0006

Sample Id	V ICP/MS mg/L	Zn ICP/MS mg/L
101	<0.0005	0.037
102	<0.0005	9.53
103	<0.0005	15.2
104	0.0008	0.131
Blank	<0.0005	<0.005
QC Standard (found)	0.0511	0.050
QC Standard (expected)	0.0500	0.050
Repeat 101	0.0005	0.035



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All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies and QA/QC procedures. Philip Analytical is limited in liability to the actual cost of the pertinent analyses done unless otherwise agreed upon by contractual arrangement. Your samples will be retained by PASC for a period of 30 days following reporting or as per specific contractual arrangements.

Job approved by:

Signed:

.....
Malgorzata Dancziger
Project Manager

15-Jul-2004

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Water Samples

Sample Id	Benzene	Toluene	Ethylbenzene	m-&p-Xylenes	o-Xylene
	HS-GC/PID ug/L	HS-GC/PID ug/L	HS-GC/PID ug/L	HS-GC/PID ug/L	HS-GC/PID ug/L
101	<0.20	0.22	<0.20	<0.40	<0.20
102	0.99	2.64	0.75	1.46	1.83
103	5.84	20.5	4.00	15.6	7.37
104	0.64	2.15	<0.20	0.71	0.55
Blank	<0.20	<0.20	<0.20	<0.40	<0.20
QC Standard (found)	99.0%	98.0%	95.0%	95.0%	93.0%
QC Standard (expected)	100. %	100. %	100. %	100. %	100. %



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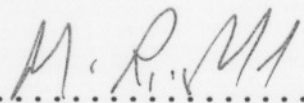
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Job approved by:

Signed:


.....
Medhat Riskallah, Ph.D., C.Chem.
Manager, Gas Chromatography Section

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PROJECT NUMBER 01-3235		SHEET NO. 1	
PROJECT NAME Iqaluit Landfill Facility Expansion		SHEET TOTAL 3	
PROJECT LOCATION Iqaluit, Nunavut		SCALE 1:1000	
PROJECT STATUS PRELIMINARY		DATE 11/03	
PROJECT OWNER City of Iqaluit		PROJECT ENGINEER Dillon Consulting	
PROJECT DESIGNER Dillon Consulting		PROJECT CHECKER Dillon Consulting	
PROJECT APPROVER Dillon Consulting		PROJECT REVIEWER Dillon Consulting	
PROJECT DATE 11/03		PROJECT REVISION 1	