

Hamlet of Whale Cove ATTN: BROCK JUNKIN

PO Box 120

Whale Cove MB X0C 0J0

Date Received: 10-AUG-12

Report Date: 28-AUG-12 15:11 (MT)

Version: FINAL

Client Phone: 867-896-9961

# **Certificate of Analysis**

Lab Work Order #: L1192241

Project P.O. #:

NOT SUBMITTED

Job Reference:

WHALE COVE MONITORING PROGRAM

C of C Numbers: Legal Site Desc:

Paul Necolas

Paul Nicolas Account Manager

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L1192241 CONTD.... PAGE 2 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1192241-1 WHA-2							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
BTEX plus F1-F4		1					
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		22-AUG-12	R2423128
Toluene	<0.0010		0.0010	mg/L		22-AUG-12	R2423128
Ethyl benzene	<0.00050		0.00050	mg/L		22-AUG-12	R2423128
o-Xylene	<0.00050		0.00050	mg/L		22-AUG-12	R2423128
m+p-Xylenes	<0.00050		0.00050	mg/L		22-AUG-12	R2423128
Xylenes	<0.0015		0.0015	mg/L		22-AUG-12	R2423128
F1 (C6-C10)	<0.10		0.10	mg/L		22-AUG-12	R2423128
Surrogate: 4-Bromofluorobenzene (SS)	91.4		70-130	%		22-AUG-12	R2423128
CCME Total Hydrocarbons	10.40		0.40	ma/l		29 ALIC 12	
F1-BTEX Total Hydrocarbons (C6 C50)	<0.10		0.10	mg/L		28-AUG-12 28-AUG-12	
Total Hydrocarbons (C6-C50)	<0.44		0.44	mg/L		20-AUG-12	
F2-F4 PHC method F2 (C10-C16)	<0.25		0.25	mg/L	14-AUG-12	15-AUG-12	R2417438
F3 (C16-C34)	<0.25		0.25	mg/L	14-AUG-12	15-AUG-12	R2417438
F4 (C34-C50)	<0.25		0.25	mg/L	14-AUG-12	15-AUG-12	R2417438
Surrogate: 2-Bromobenzotrifluoride	87.3		65-135	%	14-AUG-12	15-AUG-12	R2417438
Miscellaneous Parameters	07.0		00 100				132337330
Ammonia, Total (as N)	0.363		0.010	mg/L		20-AUG-12	R2420418
Biochemical Oxygen Demand	<6.0		6.0	mg/L	11-AUG-12	16-AUG-12	R2418540
BOD Carbonaceous	<6.0		6.0	mg/L	11-AUG-12	16-AUG-12	R2417882
Fecal Coliforms	4		3	MPN/100mL	117100 12	14-AUG-12	R2417750
	<2.0		2.0	mg/L	14-AUG-12	14-AUG-12	R2416861
Oil and Grease, Total		l.			20-AUG-12	20-AUG-12	R2420494
Phenols (4AAP)	<0.0010		0.0010	mg/L	20-AUG-12		AND DO NOT THE RESERVE AND ADDRESS.
Phosphorus (P)-Total	0.072		0.010	mg/L		13-AUG-12	R2416973
Total Organic Carbon	11.6		1.0	mg/L		22-AUG-12	R2421376
Total Suspended Solids	<5.0		5.0	mg/L		13-AUG-12	R2416364
Routine Soluble + Metal scan							
Alkalinity	475		20	mg/L		11-AUG-12	R2416051
Alkalinity, Total (as CaCO3)	175 198		20 24	mg/L		11-AUG-12	R2416051
Bicarbonate (HCO3)	<12		12	mg/L		11-AUG-12	R2416051
Carbonate (CO3) Hydroxide (OH)	<6.8		6.8	mg/L		11-AUG-12	R2416051
	~0.0		0.0	mg/L		117.00 12	112410001
Chloride by Ion Chromatography Chloride	64.6		0.50	mg/L		11-AUG-12	R2415646
Conductivity	0,,0		0.00				
Conductivity	548		20	umhos/cm		11-AUG-12	R2416051
Hardness Calculated							
Hardness (as CaCO3)	228		0.30	mg/L		15-AUG-12	
Nitrate as N by Ion Chromatography							
Nitrate-N	0.054		0.050	mg/L		11-AUG-12	R2415646
Nitrate+Nitrite							
Nitrate and Nitrite as N	< 0.071		0.071	mg/L		15-AUG-12	
Nitrite as N by Ion Chromatography			272002840000				
Nitrite-N	< 0.050		0.050	mg/L		11-AUG-12	R2415646
Sulfate by Ion Chromatography Sulfate	54.5		0.50	mg/L		11-AUG-12	R2415646
TDS calculated			F.0			15 ALIC 10	
TDS (Calculated)	371	1 (1	5.0	mg/L		15-AUG-12	
Total Metals by ICP-MS							

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1192241 CONTD.... PAGE 3 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier* D.L.	Units	Extracted	Analyzed	Batch
L1192241-1 WHA-2						
Sampled By: CLIENT on 08-AUG-12						
Matrix: WATER						
Total Metals by ICP-MS						
Antimony (Sb)-Total	0.0015	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Arsenic (As)-Total	0.0024	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Barium (Ba)-Total	0.0108	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Beryllium (Be)-Total	< 0.0010	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Bismuth (Bi)-Total	<0.00050	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Boron (B)-Total	0.368	0.030	mg/L	14-AUG-12	14-AUG-12	R241704
Cadmium (Cd)-Total	<0.00020	0.00020	mg/L	14-AUG-12	14-AUG-12	R241704
Calcium (Ca)-Total	69.6	0.20	mg/L	14-AUG-12	14-AUG-12	R241704
Cesium (Cs)-Total	< 0.00050	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Chromium (Cr)-Total	<0.0020	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Cobalt (Co)-Total	0.00074	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Copper (Cu)-Total	0.0050	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Iron (Fe)-Total	1.37	0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Lead (Pb)-Total	<0.0010	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Lithium (Li)-Total	0.0074	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Magnesium (Mg)-Total	13.3	0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Manganese (Mn)-Total	0.232	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Molybdenum (Mo)-Total	0.0385	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Nickel (Ni)-Total	0.0054	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Phosphorus (P)-Total	<0.50	0.50	mg/L	14-AUG-12	14-AUG-12	R241704
Potassium (K)-Total	9.12	0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Rubidium (Rb)-Total	0.00718	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Selenium (Se)-Total	<0.0050	0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Silicon (Si)-Total	1.62	0.30	mg/L	14-AUG-12	14-AUG-12	R241704
Silver (Ag)-Total	<0.0010	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Sodium (Na)-Total	55.5	0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Strontium (Sr)-Total	0.571	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Tellurium (Te)-Total	<0.0010	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Thallium (TI)-Total	<0.0010	0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Thorium (Th)-Total	<0.0030	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tin (Sn)-Total	<0.00060	0.00060	mg/L	14-AUG-12	14-AUG-12	R241704
Titanium (Ti)-Total	0.0016	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tungsten (W)-Total	<0.0020	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Uranium (U)-Total	0.00067	0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Vanadium (V)-Total	<0.0020	0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Zinc (Zn)-Total	<0.020	0.020	mg/L	14-AUG-12	14-AUG-12	R241704
Zirconium (Zr)-Total	<0.020	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
	<0.0010	0.0010	mg/L	14-700-12	14700-12	11241704
<b>pH</b> pH	8.53	0.10	pH units		11-AUG-12	R241605
11-14-14-14-14-14-14-14-14-14-14-14-14-1	0,00	0.10	pridints		717.00 12	112-1000
1192241-2 WHA-3						
ampled By: CLIENT on 08-AUG-12						
Matrix: WATER						
BTEX plus F1-F4						
BTX plus F1 by GCMS	920000000000000000000000000000000000000	500000000000000000000000000000000000000	0000000			
Benzene	<0.00050	0.00050	mg/L		22-AUG-12	R242312
Toluene	<0.0010	0.0010	mg/L		22-AUG-12	R242312
Ethyl benzene	<0.00050	0.00050	mg/L		22-AUG-12	R242312
o-Xylene	<0.00050	0.00050	mg/L		22-AUG-12	R242312
m+p-Xylenes	<0.00050	0.00050	mg/L		22-AUG-12	R242312
Xylenes	<0.0015	0.0015	mg/L		22-AUG-12	R242312
F1 (C6-C10)	< 0.10	0.10	mg/L	l .	22-AUG-12	R242312

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1192241 CONTD.... PAGE 4 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
_1192241-2 WHA-3							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
BTX plus F1 by GCMS							
Surrogate: 4-Bromofluorobenzene (SS)	113.0		70-130	%		22-AUG-12	R2423128
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		28-AUG-12	
Total Hydrocarbons (C6-C50)	< 0.44		0.44	mg/L		28-AUG-12	
F2-F4 PHC method				1925			
F2 (C10-C16)	<0.25		0.25	mg/L	21-AUG-12	22-AUG-12	R2422213
F3 (C16-C34)	<0.25		0.25	mg/L	21-AUG-12	22-AUG-12	R2422213
F4 (C34-C50)	<0.25		0.25	mg/L %	21-AUG-12 21-AUG-12	22-AUG-12 22-AUG-12	R2422213
Surrogate: 2-Bromobenzotrifluoride Miscellaneous Parameters	89.5		65-135	70	21-AUG-12	22-AUG-12	R2422213
Ammonia, Total (as N)	6.6	DLA	1.0	mg/L		22-AUG-12	R2421165
Biochemical Oxygen Demand	6.6 <6.0	DEA	6.0		11-AUG-12	16-AUG-12	R2421103
BOD Carbonaceous	<6.0 <6.0		6.0	mg/L mg/L	11-AUG-12 11-AUG-12	16-AUG-12	R2417882
Fecal Coliforms	5356-615-6000		3	mg/L MPN/100mL	11-400-12	16-AUG-12	R2417882
	4300			a set a contractor de la contractor de l	14 AUG 10	14-AUG-12	11 200 c 125 3 c 4 2 1 2 4 4 2 5
Oil and Grease, Total	<2.0		2.0	mg/L	14-AUG-12		R2416861
Phenols (4AAP)	<0.0010		0.0010	mg/L	20-AUG-12	20-AUG-12	R2420494
Phosphorus (P)-Total	4.53		0.010	mg/L		13-AUG-12	R2416973
Total Organic Carbon	22.4		1.0	mg/L		22-AUG-12	R2421376
Total Suspended Solids	<5.0		5.0	mg/L		13-AUG-12	R2416364
Routine Soluble + Metal scan							
Alkalinity	120		20	mg/L		11-AUG-12	R2416051
Alkalinity, Total (as CaCO3) Bicarbonate (HCO3)	130 159		24	mg/L		11-AUG-12	R2416051
Carbonate (CO3)	<12		12	mg/L		11-AUG-12	R2416051
Hydroxide (OH)	<6.8		6.8	mg/L		11-AUG-12	R2416051
Chloride by Ion Chromatography	-0.0		0.0	g. =			) Assertable Rational
Chloride	78.9		0.50	mg/L		11-AUG-12	R2415646
Conductivity							
Conductivity	541		20	umhos/cm		11-AUG-12	R2416051
Hardness Calculated	APC2777 2.73					No control in the Cartestance	
Hardness (as CaCO3)	85.4		0.30	mg/L		15-AUG-12	
Nitrate as N by Ion Chromatography				2000 PM		44 4110 40	D0445040
Nitrate-N	0.385		0.050	mg/L		11-AUG-12	R2415646
Nitrate+Nitrite	0.566		0.071	mg/L		15-AUG-12	
Nitrate and Nitrite as N	0.566		0.071	mg/L		13-A00-12	
Nitrite as N by Ion Chromatography Nitrite-N	0.181		0.050	mg/L		11-AUG-12	R2415646
Sulfate by Ion Chromatography	0.101			g. –			
Sulfate	19.1		0.50	mg/L		11-AUG-12	R2415646
TDS calculated							
TDS (Calculated)	293		5.0	mg/L		15-AUG-12	
Total Metals by ICP-MS					200 200 200 200		
Aluminum (Al)-Total	0.089		0.020	mg/L	14-AUG-12	14-AUG-12	R2417047
Antimony (Sb)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R2417047
Arsenic (As)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R2417047
Barium (Ba)-Total	0.00233		0.00050	mg/L	14-AUG-12	14-AUG-12	R2417047
Beryllium (Be)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12 14-AUG-12	R2417047
Bismuth (Bi)-Total Boron (B)-Total	<0.00050		0.00050	mg/L mg/L	14-AUG-12 14-AUG-12	14-AUG-12 14-AUG-12	R2417047 R2417047
DUIUL LO E LUM	0.118		0.030	mg/L	14-400-12	14-AUG-12	11241/04/
Cadmium (Cd)-Total	< 0.00020		0.00020	mg/L	14-AUG-12	14-AUG-12	R2417047

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1192241 CONTD.... PAGE 5 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1192241-2 WHA-3							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
Total Metals by ICP-MS							
Cesium (Cs)-Total	<0.00050		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Chromium (Cr)-Total	< 0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Cobalt (Co)-Total	< 0.00050		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Copper (Cu)-Total	0.0106		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Iron (Fe)-Total	0.11		0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Lead (Pb)-Total	< 0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Lithium (Li)-Total	<0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Magnesium (Mg)-Total	6.01		0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Manganese (Mn)-Total	0.0651		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Molybdenum (Mo)-Total	0.00061		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Nickel (Ni)-Total	0.0021		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Phosphorus (P)-Total	4.57		0.50	mg/L	14-AUG-12	14-AUG-12	R241704
Potassium (K)-Total	16.7		0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Rubidium (Rb)-Total	0.0178		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Selenium (Se)-Total	<0.0050		0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Silicon (Si)-Total	2.37		0.30	mg/L	14-AUG-12	14-AUG-12	R241704
Silver (Ag)-Total	< 0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Sodium (Na)-Total	70.2		0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Strontium (Sr)-Total	0.107		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Tellurium (Te)-Total	< 0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Thallium (TI)-Total	< 0.0050		0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Thorium (Th)-Total	< 0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tin (Sn)-Total	<0.00060		0.00060	mg/L	14-AUG-12	14-AUG-12	R241704
Titanium (Ti)-Total	0.0028	1	0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tungsten (W)-Total	< 0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Uranium (U)-Total	< 0.00050		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Vanadium (V)-Total	< 0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Zinc (Zn)-Total	<0.020		0.020	mg/L	14-AUG-12	14-AUG-12	R241704
Zirconium (Zr)-Total	< 0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
pH		1					
pH	7.95		0.10	pH units		11-AUG-12	R241605
.1192241-3 WHA-4							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS						00 4110 40	5040040
Benzene	<0.00050		0.00050	mg/L		22-AUG-12	R242312
Toluene	<0.0010		0.0010	mg/L		22-AUG-12	R242312
Ethyl benzene	<0.00050		0.00050	mg/L		22-AUG-12 22-AUG-12	R242312
o-Xylene	<0.00050		0.00050	mg/L			R242312
m+p-Xylenes	<0.00050		0.00050	mg/L		22-AUG-12	R242312
Xylenes	<0.0015		0.0015	mg/L		22-AUG-12	R242312
F1 (C6-C10)	<0.10		0.10	mg/L		22-AUG-12	R242312
Surrogate: 4-Bromofluorobenzene (SS)	86.5		70-130	%		22-AUG-12	R242312
CCME Total Hydrocarbons	-0.10		0.40	ma/I		28-AUG-12	
F1-BTEX	<0.10		0.10	mg/L			
F2-Naphth	<0.25		0.25	mg/L		28-AUG-12	
F3-PAH	<0.25		0.25	mg/L		28-AUG-12 28-AUG-12	
Total Hydrocarbons (C6-C50)	<0.44		0.44	mg/L		20-AUG-12	
F2-F4 PHC method	-0.0F		0.05	ma/l	16-AUG-12	17.ALIC 12	R241976
F2 (C10-C16)	<0.25	1	0.25	mg/L	10-AUG-12	17-AUG-12	NZ419/0

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1192241 CONTD.... PAGE 6 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1192241-3 WHA-4							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
F2-F4 PHC method							
F3 (C16-C34)	<0.25		0.25	mg/L	16-AUG-12	17-AUG-12	R2419760
F4 (C34-C50)	<0.25		0.25	mg/L	16-AUG-12	17-AUG-12	R2419760
Surrogate: 2-Bromobenzotrifluoride	82.1		65-135	%	16-AUG-12	17-AUG-12	R2419760
Miscellaneous Parameters	02.,			25.5	Ne date de la seco		
Ammonia, Total (as N)	0.044		0.010	mg/L		20-AUG-12	R2420418
Biochemical Oxygen Demand	<6.0		6.0	mg/L	11-AUG-12	16-AUG-12	R2418540
				mg/L	11-AUG-12	16-AUG-12	R2417882
BOD Carbonaceous	<6.0		6.0		11-AUG-12		
Fecal Coliforms	<3		3	MPN/100mL		14-AUG-12	R2417750
Oil and Grease, Total	<2.0		2.0	mg/L	14-AUG-12	14-AUG-12	R2416861
Phenols (4AAP)	<0.0010		0.0010	mg/L	20-AUG-12	20-AUG-12	R2420494
Phosphorus (P)-Total	0.751		0.010	mg/L		13-AUG-12	R2416973
Total Organic Carbon	15.2		1.0	mg/L		22-AUG-12	R2421376
Total Suspended Solids	<5.0		5.0	mg/L		13-AUG-12	R2416364
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Acenaphthene	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Acenaphthylene	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Anthracene	<0.00010	1.0	0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Acridine	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Benzo(a)anthracene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	16-AUG-12	20-AUG-12	R2420032
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Benzo(g,h,i)perylene	<0.000010		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Chrysene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Dibenzo(a,h)anthracene	<0.000050		0.0000050	mg/L	16-AUG-12	20-AUG-12	R2420032
Fluoranthene	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Fluorene	<0.000020	4.0	0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
	<0.000020	100	0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
Indeno(1,2,3-cd)pyrene Naphthalene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Phenanthrene	<0.000050	1	0.000050	mg/L	16-AUG-12	20-AUG-12	R2420032
Nacional Control Contr	<0.000030		0.000030	mg/L	16-AUG-12	20-AUG-12	R2420032
Pyrene	<0.000010		0.000010	mg/L	16-AUG-12	20-AUG-12	R2420032
Quinoline  R(s)P Total Potonov Equivalent	<0.000020		0.000020	mg/L	16-AUG-12	20-AUG-12	R2420032
B(a)P Total Potency Equivalent Surrogate: Acenaphthene d10	81.8		50-150	%	16-AUG-12	20-AUG-12	R2420032
3.40(.) 3.5 (.) - (.) (.) (.) (.) (.) (.) (.) (.) (.) (.)	95.2		50-150	%	16-AUG-12	20-AUG-12	R2420032
Surrogate: Acridine d9	80.7		50-150	%	16-AUG-12	20-AUG-12	R2420032
Surrogate: Chrysene d12			50-150	%	16-AUG-12	20-AUG-12	R2420032
Surrogate: Naphthalene d8	63.5 91.4		50-150	%	16-AUG-12	20-AUG-12	R2420032
Surrogate: Phenanthrene d10	91.4		50-150	76	10-400-12	20-400-12	112420002
Routine Soluble + Metal scan							
Alkalinity Alkalinity Total (as CaCO3)	104		20	mg/L		11-AUG-12	R2416051
Alkalinity, Total (as CaCO3)	194		24	mg/L		11-AUG-12	R2416051
Bicarbonate (HCO3)	157		12	mg/L		11-AUG-12	R2416051
Carbonate (CO3)	39			11 1527 10		11-AUG-12	
Hydroxide (OH)	<6.8		6.8	mg/L		11-AUG-12	R2416051
Chloride by Ion Chromatography Chloride	85.9		0.50	mg/L		11-AUG-12	R2415646
Conductivity Conductivity	547		20	umhos/cm		11-AUG-12	R2416051
Hardness Calculated		1		1			1

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1192241 CONTD.... PAGE 7 of 11 Version: FINAL

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
_1192241-3 WHA-4							
Sampled By: CLIENT on 08-AUG-12							
Matrix: WATER							
Hardness Calculated							
Hardness (as CaCO3)	170		0.30	mg/L		15-AUG-12	
Nitrate as N by Ion Chromatography			20.00.00				
Nitrate-N	< 0.050		0.050	mg/L		11-AUG-12	R241564
Nitrate+Nitrite							
Nitrate and Nitrite as N	< 0.071		0.071	mg/L		15-AUG-12	
Nitrite as N by Ion Chromatography							
Nitrite-N	<0.050		0.050	mg/L		11-AUG-12	R241564
Sulfate by Ion Chromatography							
Sulfate	6.97		0.50	mg/L		11-AUG-12	R241564
TDS calculated							
TDS (Calculated)	366		5.0	mg/L		15-AUG-12	
Total Metals by ICP-MS					1		
Aluminum (Al)-Total	0.024		0.020	mg/L	14-AUG-12	14-AUG-12	R241704
Antimony (Sb)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Arsenic (As)-Total	0.0065		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Barium (Ba)-Total	0.00706		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Beryllium (Be)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Bismuth (Bi)-Total	<0.00050		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Boron (B)-Total	0.150		0.030	mg/L	14-AUG-12	14-AUG-12	R241704
Cadmium (Cd)-Total	<0.00020		0.00020	mg/L	14-AUG-12	14-AUG-12	R241704
Calcium (Ca)-Total	56.4		0.20	mg/L	14-AUG-12	14-AUG-12	R241704
Cesium (Cs)-Total	<0.00050		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Chromium (Cr)-Total	<0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Cobalt (Co)-Total	0.00055		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Copper (Cu)-Total	0.0053		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Iron (Fe)-Total	<0.10		0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Lead (Pb)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Lithium (Li)-Total	0.0036		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Magnesium (Mg)-Total	7.13		0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Manganese (Mn)-Total	0.0348		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Molybdenum (Mo)-Total	0.00089		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Nickel (Ni)-Total	0.0041		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Phosphorus (P)-Total	0.82		0.50	mg/L	14-AUG-12	14-AUG-12	R241704
Potassium (K)-Total	7.65		0.10	mg/L	14-AUG-12	14-AUG-12	R241704
Rubidium (Rb)-Total	0.00557		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Selenium (Se)-Total	<0.0050		0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Silicon (Si)-Total	0.96		0.30	mg/L	14-AUG-12	14-AUG-12	R241704
Silver (Ag)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Sodium (Na)-Total	85.4		0.050	mg/L	14-AUG-12	14-AUG-12	R241704
Strontium (Sr)-Total	0.307		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Tellurium (Te)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Thallium (TI)-Total	<0.0050		0.0050	mg/L	14-AUG-12	14-AUG-12	R241704
Thorium (Th)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tin (Sn)-Total	<0.00060		0.00060	mg/L	14-AUG-12	14-AUG-12	R241704
Titanium (Ti)-Total	0.0019		0.0010	mg/L	14-AUG-12	14-AUG-12	R241704
Tungsten (W)-Total	<0.0020		0.0020	mg/L	14-AUG-12	14-AUG-12	R241704
Uranium (U)-Total	0.00079		0.00050	mg/L	14-AUG-12	14-AUG-12	R241704
Vanadium (V)-Total	<0.0020		0.0020	mg/L	14-AUG-12 14-AUG-12	14-AUG-12 14-AUG-12	R241704
Zinc (Zn)-Total	<0.020		0.020	mg/L		14-AUG-12 14-AUG-12	R241704
Zirconium (Zr)-Total	<0.0010		0.0010	mg/L	14-AUG-12	14-AUG-12	RZ41/04
pH pH	9.40	1 1	0.10	pH units	1	14-AUG-12	R241696

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

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Sample Details/Parameters	Result	Qualifier* D.	L. Units	Extracted	Analyzed	Batch
.1192241-3 WHA-4 Sampled By: CLIENT on 08-AUG-12 Matrix: WATER						

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

# Reference Information

L1192241 CONTD....
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Version: FINAL

Sample Parameter Qualifier Key:

Qualifier

Description

DLA

Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code

Matrix

**Test Description** 

Method Reference\*\*

ALK-TOT-WP

Water

Alkalinity

**APHA 2320B** 

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO3- and H2CO3 endpoints indicated electrometrically.

BOD-CBOD-WP

Water

Carbonaceous BOD

APHA 5210 B-5 day Incub.-O2 electrode

A sample of water is incubated for 5 days at 20 degrees Celcius. Comparison of dissolved oxygen content at beginning and end of incubation provides a measure of Biochemical oxygen demand. If carbonaceous BOD is requested, TCMP is added to the sample to chemically inhibit nitrogenous oxygen demand. If soluble BOD is requested, the sample is filtered prior to analysis.

BOD-WP

Water

Biochemical Oxygen Demand (BOD)

APHA 5210 B

The sample is incubated for 5 days at 20 degrees Celcius. Comparison of dissolved oxygen content at the beginning and end of incubation provides a measure of biochemical oxygen demand. If carbonaceous BOD is requested, TCMP is added to the sample to chemically inhibit nitrogenous oxygen demand. If soluble BOD is requested, the sample is filtered prior to analysis. Surface waters have a DL of 1 mg/L. Effluents are diluted according to their history and will have a sample DL of 6 mg/L or greater, depending on the dilutions used.

BTEXS+F1-HSMS-WP

Water

BTX plus F1 by GCMS

EPA SW846 8260B REV 2 SEPT 1994

The water sample, with added reagents, is heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

C-TOT-ORG-WP

Water

Total Organic Carbon

APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CL-IC-WP

Water

Chloride by Ion Chromatography

EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

FC-WP

Water

Conductivity

**APHA 2510B** 

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-TOT-WP Water

Hardness Calculated

HARDNESS CALCULATED

ETL-SOLIDS-CALC-WP

Water

TDS calculated

Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

CALCULATION

F1-F4-CALC-WP

Water

CCME Total Hydrocarbons

CCME CWS-PHC DEC-2000 - PUB# 1310-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC. In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and

the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons. In samples where BTEX and F1 were analyzed, F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

- 1. All extraction and analysis holding times were met.
- 2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
- 3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

- 1. All extraction and analysis holding times were met.
- 2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.

Reference Information

L1192241 CONTD.... PAGE 10 of 11 Version: FINAL

Test Method References:

**ALS Test Code** 

Matrix

**Test Description** 

Method Reference\*\*

3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.

4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F2-F4-WS-WP

Water

F2-F4 PHC method

EPA 3510/8000

This is the determination of the Petroleum Hydrocarbon fractions in water (F2, F3 and F4). A water sample volume of 200 mL in a 250 mL glass amber bottle is shaken with 10 mL hexane for two hours on a wrist action shaker, and then sonicated for 5 minutes. After extraction, the solvent layer is drawn off and analyzed against C10, C16 and C34 standards on a gas chromatograph equipped with a flame ionization detector.

FC-MPN-WP

Water

Fecal Coliform

APHA 9221A-C

The Most Probable Number (MPN) method is based on the Multiple Tube Fermentation technique. The results of examination of replicate tubes and dilutions of a sample are reported after confirmations specific to total coliform, fecal coliform and E. coli are performed. Results are reported in MPN/100 mL for water and MPN/gram for food and solid samples.

IONBALANCE-OP05-WP Water

Ion Balance Calculation No Reporting

**APHA 1030E** 

MET-T-MS-WP

Water

Total Metals by ICP-MS

U.S. EPA 200.8-T

Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysi of metals by inductively coupled-mass spectrometery.

NH3-COL-WP

Water

Ammonia by colour

APHA 4500 NH3 F

Ammonia in water samples forms indophenol when reacted with hypochlorite and phenol. The intensity is amplified by the addition of sodium nitroprusside and measured colourmetrically.

NO2+NO3-CALC-WP

Water

Nitrate+Nitrite

CALCULATION

NO2-IC-WP

Water

Nitrite as N by Ion Chromatography

EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-IC-WP

Water

Nitrate as N by Ion Chromatography

EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT

Water

Oil and Grease, Total

APHA 5520 B

Sample is extracted with hexane, extract is then evaporated and the residue is weighed to determine total oil and grease.

P-T-COL-WP

Water

Phosphorus, Total

APHA 4500 P PHOSPHORUS

This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorous is determined colourimetrically after persulphate digestion of the sample

PAH PANH-WP

Water

Polyaromatic Hydrocarbons (PAHs)

EPA SW 846/8270-GC/MS

Water is spiked with a surrogate spike mix and extracted using solvent extraction techniques. Analysis is performed by GC/MS in the selected ion monitoring (SIM) mode.

PH-WP

Water

pH

**APHA 4500H** 

The pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.

PHENOLS-4AAP-WT

Water

Phenol (4AAP)

**EPA 9066** 

An automated method is used to distill the sample. The distillate is then buffered to pH 9.4 which reacts with 4AAP and potassium ferricyanide to form a red complex which is measured colorimetrically

SO4-IC-WP

Water

Sulfate by Ion Chromatography

EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

SOLIDS-TOTSUS-WP

Water

Total Suspended Solids

APHA 2540 D (modified)

Total suspended solids in aquesous matrices is determined gravimetrically after drying the residue at 103 105 C.

<sup>\*\*</sup> ALS test methods may incorporate modifications from specified reference methods to improve performance.

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## Reference Information

Test Method References:

ALS Test Code

Matrix Test Description

Method Reference\*\*

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code Laboratory Location

WP ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

WT ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

#### Chain of Custody Numbers:

#### GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

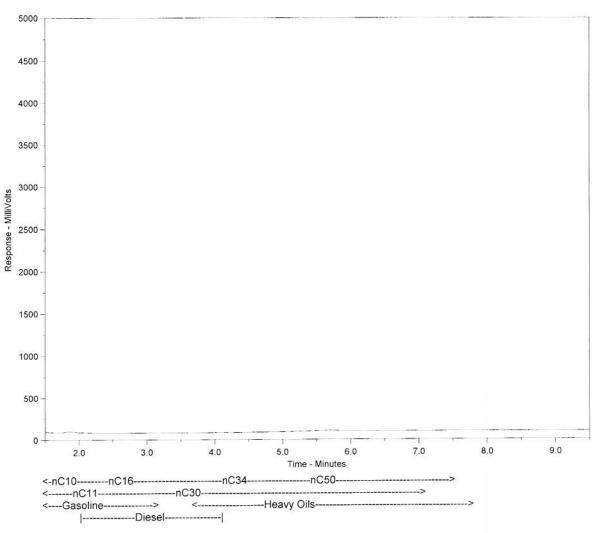
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

# Hydrocarbon Distribution Report



ALS Sample ID: L1192241-1 Client ID: WHA-2



The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

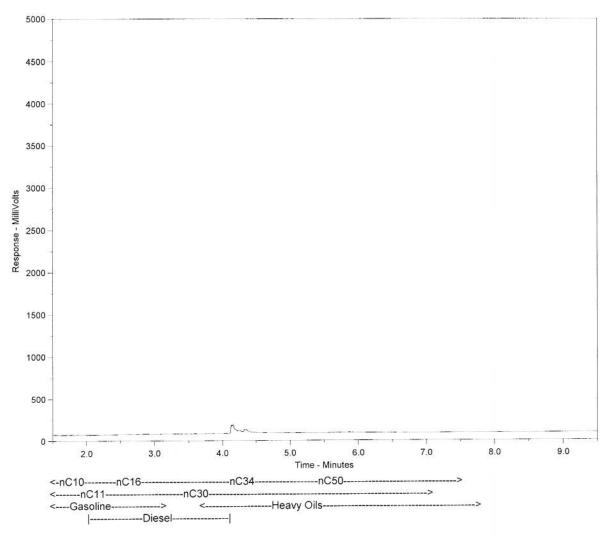
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

# **Hydrocarbon Distribution Report**



ALS Sample ID: L1192241-2 Client ID: WHA-3



The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

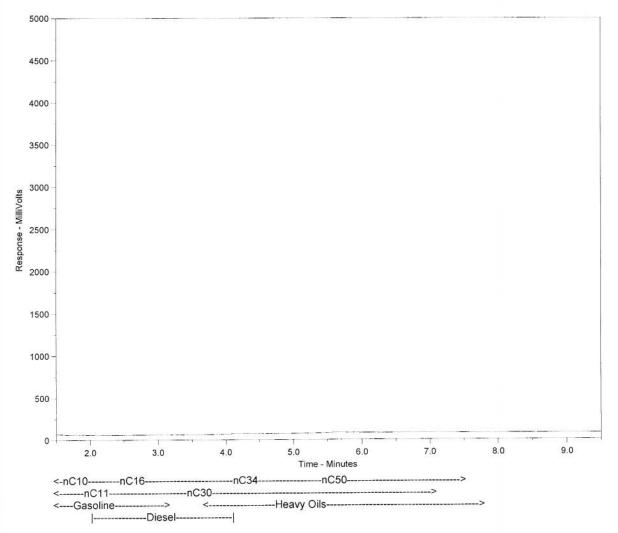
Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

# Hydrocarbon Distribution Report



ALS Sample ID: Client ID:

L1192241-3 WHA-4



The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

# Chain of Custody / Analytical Request Form Canada Toll Free: 1800 668 9878 www.alsglobal.com

ALS) Environmental

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#	E	(This description will appear on the report)	Il appear on the r	eport)	(dd-mmm-yy)	(hh:mm)		!8	_	1	1	4	18	_	A:
	WHA-2				08-Aug-12	4-5pm	Water							+	
	WHA-3				08-Aug-12	4-5pm	Water								
	WHA-4				08-Aug-12	4-5pm	Water							_	
	WHA-7														1
	WHA-8						41								
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	Special Ins	Special Instructions / Regulations with water or land	ulations with wa		use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details	equatic Life/BC C	SR - Commercia	II/AB Tier 1 - Na	tural, etc)	/ Hazard	ous Deta	sils			- 1
															- 1
			Failure to co	mplete all portion	Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.	delay analysis.	Please fill in this	form LEGIBLY							
	Also provided o	By the use of	of this form the of	ser acknowledg	By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.  Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.	the Terms and (	Conditions as pro container / prese	ovided on a sepa rvation / holding	arate Exc	el tab. le for con	nmon ar	alyses.			
	SHIPMENT RELEASE (client use)	EASE (client use	0	S	SHIPMENT RECEPTION (lab use only)	ION (lab use only	(	HS.	SHIPMENT VERIFICATION (lab.useionly))	/ERIFICA	TION (la		(A)		120
Released by:	1	Date (од-ттт-уу) Тіте (т-тт)	Тіте (кһ-тт)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:		Time:		Observatio Yes / No ?	Observations: Yes / No ?	1.
				9	10 They	10 /fug 13:58	13.5 °C		$\dashv$			$\neg$	If Yes	If Yes add SIF	11.

## HAMLET OF WHALE COVE

POST OFFICE BOX 120 WHALE COVE, NUNAVUT, X0C 0J0 Telephone: (867) 896-9961 ~ Fax: (867) 896-9:





# Water Licence Sampling Field Log

Name of Sampler(s): Wayne Putulik
Date of Sampling: August 8, 2012
Time of Sampling:Late afternoon
Monitoring Station Number: <u>WHA-2</u>
GPS Coordinates: N <u>62°10′ 176</u> ″ W <u>92°35′665</u> ″ (bermed pond at dump)
Weather Conditions:Sunny
I L Amber PAH + Pres <sup>1</sup> Don + have  500 mL BOD  250 mL Metals + Pres  250 mL Nutrients + Pres  125 mL Sterile Bacteria Bottle <sup>1</sup> 250 mL Amber Phenols + Pres  11 L Amber Oil & Grease + Pres <sup>1</sup> 100 mL Amber TOC + Pres
Other Notes: (any unusual conditions, any deviation from standard procedures, etc.)
Missing one 250 and one 1,000 ml bottles for PAH/EPH

Footnote 1) Do not rinse this bottle but rinse all others in the sampling pond

#### HAMLET OF WHALE COVE

POST OFFICE BOX 120
WHALE COVE, NUNAVUT, X0C 0J0
Telephone: (867) 896-9961 ~ Fax: (867) 896-910°





# Water Licence Sampling Field L.

Name of Sampler(s): Wayne Putulik
Date of Sampling: August 8, 2012
Time of Sampling:
Monitoring Station Number: <u>WHA-3</u>
GPS Coordinates: N 62°10′ 112″ W 92°35′496″ (lagoon on south side)
Weather Conditions: Sunny
Samples:
1 L Routine 1 L Amber PAH + Pres Dan't how
500 mL BOD 3 x 40 mL BTEX, F1 vials + Pres <sup>1</sup>
250 mL Metals + Pres  2 x 250 mL Amber F2-F4 + Pres <sup>1</sup>
250 mL Nutrients + Pres
125 mL Sterile Bacteria Bottle <sup>1</sup> Other:
250 mL Amber Phenols + Pres
1 L Amber Oil & Grease + Pres <sup>1</sup>
100 mL Amber TOC + Pres
out and a substant and deviation from standard procedures ats.)

Other Notes: (any unusual conditions, any deviation from standard procedures, etc.)

Missing one 1,000ml bottle of PAH.EPH

Footnote 1) Do not rinse this bottle but rinse all others in the sampling pond

#### HAMLET OF WHALE COVE

POST OFFICE BOX 120 WHALE COVE, NUNAVUT, X0C 0J0 Telephone: (867) 896-9961 ~ Fax: (867) 896-9100





# Water Licence Sampling Field L

Name of Sampler(s): Wayne Putulik	
Date of Sampling: August 8, 2012	
Time of Sampling: <u>Late afternoon</u>	
Monitoring Station Number: <u>WHA-4</u>	
GPS Coordinates: N <u>62°10′ 552</u> " W <u>92°35</u>	'712" (below lagoon in water course)
Weather Conditions: Sunny	
1 L Routine 500 mL BOD 250 mL Metals + Pres 250 mL Nutrients + Pres 125 mL Sterile Bacteria Bottle 250 mL Amber Phenols + Pres 1 L Amber Oil & Grease + Pres 100 mL Amber TOC + Pres	1 L Amber PAH + Pres¹  2 x 40 mL BTEX, F1 vials + Pres¹  2 x 250 mL Amber F2-F4 + Pres¹  Other:
Other Notes: (any unusual conditions, any	deviation from standard procedures, etc.)

Footnote 1) Do not rinse this bottle but rinse all others in the sampling pond