ANNUAL REPORT
FOR THE HAMLET OF CORAL HARBOUR

YEAR BEING REPORTED: 2017

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water License No. **3BM-COR1521** issued to the Hamlet of Coral Harbour.

i)- iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are results for Monitoring station COR-1, as well as detailed chemical, physical and biological analysis required at COR-3, COR-4 and COR-6.

Month Reported	Quantity of Water Obtained from all sources (m^3)	Quantity of Sewage Waste Discharged (Estimated, m^3)
January	3,374,069.70	Same
February	3,311,784.00	Same
March	3,242,105.60	Same
April	3,149,222.10	Same
May	3,137,467.00	Same
June	3,050,120.00	Same
July	2,928,401.00	Same
August	3,056,689.00	Same
September	3,041,811.00	Same
October	3,269,239.00	Same
November	3,087,642.00	Same
December	3,285,353.00	Same
ANNUAL TOTAL	37,933,903.40	37,933,903.40

Note: No meter exists to measure the sewage discharge volume, therefore water consumption volume is considered as equal volume to the sewage discharge volume.

iv. a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;

- No modifications and/or major work was carried out at the Solid Waste Site or the Sewage Treatment Facilities in 2017.

- Improved segregation is taking place at the Solid Waste Site. Batteries have been collected and are stored in battery boxes.

- The new Water Treatment Plant was substantially completed December 2016 and warranty work is still being completed (Regional CGS Project Management Office). Repairs to the chlorine system were completed during the fall 2017.

v. a list of unauthorized discharges and summary of follow-up action taken;
- Spills:

Spill No.	Date	Site Description	Commodity	Quantity
2017073	2017-03-06	Coral Harbour Carpenter shop located north of the community	Heating Fuel P-50	205 L

vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

-
- none

vii. a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;

-none

viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

- none

ix. Updates or revisions to the approved Operation and Maintenance Plans.

- The updated O&M Manual for the new Water Treatment Plant will be submitted following project completion.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

- The Hamlet is working with the Water Compliance Working Group to implement the Solid Waste Workplan goals.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- The INAC Inspection took place on July 24, 2017. A copy of the inspection report has not been received.
- The following Monitoring Program Station locations were confirmed with the INAC Inspector:

Monitoring Program Station Identification	Description	GPS Coordinates
COR-3	Effluent from Sewage Containment Cell	N64°09.790' W083°11.502'
COR-4	Station within the Wetland	N64°09.785' W083°11.326'
COR-5	Discharge from the Wetland (Compliance Point)	N64°09.718' W083°11.243'
COR-6	Run-off from the Solid Waste Disposal Facility	N64°09.722' W083°11.638
COR-7	Run-off below Waste Metals area.	N64°09.628' W083°11.541'

List of Appendixes:

Appendix A: COR-4 Effluent Quality Limits – 1 page
Appendix B: Weekly Inspections at Monitoring Stations – 1 page
Appendix C: Certificate of Analysis June 27, 2017 – 20 pages
Appendix D: Certificate of Analysis July 25, 2017 – 20 pages
Appendix E: Certificate of Analysis August 29, 2017 – 15 pages
Appendix F: Hazardous Materials Spill Database, Coral Harbour 2017 – 1 page

3BM-COR1521 Coral Harbour Monitoring Program Results 2017
Part D, Item 2: COR-5 Effluent Quality Limits

Parameter	Maximum Average Concentration	COR-5	
		27-Jun-17	25-Jul-17
BOD_5	30 mg/L	19.7	7
Total Suspended Solids	30 mg/L	11.0	29.0
Fecal Coliforms	$1x10^4$ CFU/100 mL	10	10
Oil and Grease	No visible sheen	7.5	5.0
pH	Between 6 and 9	8.65	7.86

Nunavut Water Board Licence No. 3BM-COR1521
Coral Harbour, NU
Part H: Weekly Inspections at Monitoring Program Stations, June to August

Week	Starting Date	COR-3 Water Present (check)			COR-4 Water Present (check)			COR-5 Water Present (check)			COR-6 Water Present (check)			COR-7 Water Present (check)			Checked By
		Yes	No	Frozen	Yes	No	Frozen	Yes	No	Frozen	Yes	No	Frozen	Yes	No	Frozen	
1	29-May-17		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓	C.S.
2	05-Jun-17		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓	
3	12-Jun-17		✓	✓		✓	✓		✓	✓	✓				✓	✓	C.E.
4	19-Jun-17				✓			✓			✓				✓	✓	C.S.
5	26-Jun-17	✓			✓			✓			✓			✓			C.S.
6	03-Jul-17	✓			✓			✓			✓			✓			DW
7	10-Jul-17																
8	17-Jul-17																
9	24-Jul-17																
10	31-Jul-17																
11	07-Aug-17																
12	12-Aug-17																
13	21-Aug-17																
14	28-Aug-17																
15	29-Aug-16																

Monitoring Program Station Locations:

COR-3: Effluent from Sewage Containment Cell
COR-4: Station within Wetland
COR-5: Discharge from Wetland
COR-6: Run-off from the Solid Waste Disposal Facility
COR-7: Run-off below Waste metals area

* Fax Sheets Weekly to Connor Faulkner at CGS- Rankin Inlet, Fax: (867) 645-8141

Hamlet of Coral Harbour
ATTN: LEONIE PAMEOLIK
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 30-JUN-17
Report Date: 13-JUL-17 07:37 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L1951645

Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Hua Wo
Chemistry Laboratory Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-1 COR-3							
Sampled By: CLIENT							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	429		1.2	mg/L		01-JUL-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-JUL-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-JUL-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	352		1.0	mg/L		30-JUN-17	R3760167
Ammonia by colour							
Ammonia, Total (as N)	57.6		2.0	mg/L		07-JUL-17	R3767915
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	105	BODQ	20	mg/L		30-JUN-17	R3766986
Carbonaceous BOD							
BOD Carbonaceous	84	BODQ	20	mg/L		30-JUN-17	R3766986
Chloride in Water by IC							
Chloride (Cl)	44.6		0.50	mg/L		02-JUL-17	R3765465
Conductivity							
Conductivity	813		1.0	umhos/cm		30-JUN-17	R3760167
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	20		10	MPN/100mL		30-JUN-17	R3760070
Hardness Calculated							
Hardness (as CaCO3)	107	HTC	0.25	mg/L		06-JUL-17	
Mercury Total							
Mercury (Hg)-Total	0.0000158		0.0000050	mg/L	30-JUN-17	05-JUL-17	R3766324
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		02-JUL-17	R3765465
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		06-JUL-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		02-JUL-17	R3765465
Oil & Grease - Gravimetric							
Oil and Grease	6.3		5.0	mg/L		10-JUL-17	R3768790
Phenol (4AAP)							
Phenols (4AAP)	0.031	DLM	0.010	mg/L		12-JUL-17	R3770534
Phosphorus, Total							
Phosphorus (P)-Total	8.55		0.25	mg/L		05-JUL-17	R3765590
Sulfate in Water by IC							
Sulfate (SO4)	10.0		0.30	mg/L		02-JUL-17	R3765465
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0871		0.0050	mg/L	05-JUL-17	05-JUL-17	R3766035
Arsenic (As)-Total	0.00086		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Cadmium (Cd)-Total	0.000044		0.000010	mg/L	05-JUL-17	05-JUL-17	R3766035
Calcium (Ca)-Total	35.1		0.10	mg/L	05-JUL-17	05-JUL-17	R3766035
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	05-JUL-17	05-JUL-17	R3766035
Cobalt (Co)-Total	0.00070		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Copper (Cu)-Total	0.0275		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Iron (Fe)-Total	0.431		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Lead (Pb)-Total	0.000423		0.000090	mg/L	05-JUL-17	05-JUL-17	R3766035
Magnesium (Mg)-Total	4.79		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Manganese (Mn)-Total	0.0482		0.00030	mg/L	05-JUL-17	05-JUL-17	R3766035
Nickel (Ni)-Total	0.0029		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-1 COR-3							
Sampled By: CLIENT							
Matrix:							
Total Metals by ICP-MS							
Potassium (K)-Total	22.9		0.020	mg/L	05-JUL-17	05-JUL-17	R3766035
Sodium (Na)-Total	46.1		0.030	mg/L	05-JUL-17	05-JUL-17	R3766035
Zinc (Zn)-Total	0.0193		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Total Organic Carbon by Combustion							
Total Organic Carbon	70.6		2.5	mg/L		09-JUL-17	R3768459
Total Suspended Solids							
Total Suspended Solids	120		20	mg/L		07-JUL-17	R3768512
pH							
pH	7.34		0.10	pH units		30-JUN-17	R3760167
L1951645-2 COR-4							
Sampled By: CLIENT							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	298		1.2	mg/L		01-JUL-17	
Alkalinity, Carbonate							
Carbonate (CO3)	6.48		0.60	mg/L		01-JUL-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-JUL-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	255		1.0	mg/L		30-JUN-17	R3760167
Ammonia by colour							
Ammonia, Total (as N)	9.4		2.0	mg/L		07-JUL-17	R3767915
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	16.7	BODQ	6.0	mg/L		30-JUN-17	R3766986
Carbonaceous BOD							
BOD Carbonaceous	10.6	BODQ	2.0	mg/L		30-JUN-17	R3766986
Chloride in Water by IC							
Chloride (Cl)	33.8		0.50	mg/L		02-JUL-17	R3765465
Conductivity							
Conductivity	542		1.0	umhos/cm		30-JUN-17	R3760167
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	10		10	MPN/100mL		30-JUN-17	R3760070
Hardness Calculated							
Hardness (as CaCO3)	185	HTC	0.25	mg/L		06-JUL-17	
Mercury Total							
Mercury (Hg)-Total	0.0000052		0.0000050	mg/L	30-JUN-17	05-JUL-17	R3766324
Nitrate in Water by IC							
Nitrate (as N)	0.704		0.020	mg/L		02-JUL-17	R3765465
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.811		0.070	mg/L		06-JUL-17	
Nitrite in Water by IC							
Nitrite (as N)	0.107		0.040	mg/L		02-JUL-17	R3765465
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		10-JUL-17	R3768790
Phenol (4AAP)							
Phenols (4AAP)	0.0012		0.0010	mg/L		12-JUL-17	R3770534
Phosphorus, Total							
Phosphorus (P)-Total	1.51		0.050	mg/L		05-JUL-17	R3765590
Sulfate in Water by IC							
Sulfate (SO4)	7.15		0.30	mg/L		02-JUL-17	R3765465

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-2 COR-4							
Sampled By: CLIENT							
Matrix:							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0172		0.0050	mg/L	05-JUL-17	05-JUL-17	R3766035
Arsenic (As)-Total	0.00171		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Cadmium (Cd)-Total	0.000050		0.000010	mg/L	05-JUL-17	05-JUL-17	R3766035
Calcium (Ca)-Total	65.4		0.10	mg/L	05-JUL-17	05-JUL-17	R3766035
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	05-JUL-17	05-JUL-17	R3766035
Cobalt (Co)-Total	0.00165		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Copper (Cu)-Total	0.00496		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Iron (Fe)-Total	0.556		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Lead (Pb)-Total	0.000122		0.000090	mg/L	05-JUL-17	05-JUL-17	R3766035
Magnesium (Mg)-Total	5.34		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Manganese (Mn)-Total	0.0900		0.00030	mg/L	05-JUL-17	05-JUL-17	R3766035
Nickel (Ni)-Total	0.0048		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Potassium (K)-Total	15.1		0.020	mg/L	05-JUL-17	05-JUL-17	R3766035
Sodium (Na)-Total	38.1		0.030	mg/L	05-JUL-17	05-JUL-17	R3766035
Zinc (Zn)-Total	0.0038		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Total Organic Carbon by Combustion							
Total Organic Carbon	16.4		0.50	mg/L		07-JUL-17	R3768090
Total Suspended Solids							
Total Suspended Solids	10		10	mg/L		07-JUL-17	R3768512
pH							
pH	8.40		0.10	pH units		30-JUN-17	R3760167
L1951645-3 COR-5							
Sampled By: CLIENT							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	235		1.2	mg/L		01-JUL-17	
Alkalinity, Carbonate							
Carbonate (CO3)	12.8		0.60	mg/L		01-JUL-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-JUL-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	214		1.0	mg/L		30-JUN-17	R3760167
Ammonia by colour							
Ammonia, Total (as N)	2.29		0.10	mg/L		07-JUL-17	R3767915
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	19.7	BODQ	6.0	mg/L		30-JUN-17	R3766986
Carbonaceous BOD							
BOD Carbonaceous	11.3	BODQ	2.0	mg/L		30-JUN-17	R3766986
Chloride in Water by IC							
Chloride (Cl)	35.6		0.50	mg/L		02-JUL-17	R3765465
Conductivity							
Conductivity	492		1.0	umhos/cm		30-JUN-17	R3760167
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10		10	MPN/100mL		30-JUN-17	R3760070
Hardness Calculated							
Hardness (as CaCO3)	189	HTC	0.25	mg/L		06-JUL-17	
Mercury Total							
Mercury (Hg)-Total	0.0000059		0.0000050	mg/L	30-JUN-17	05-JUL-17	R3766324
Nitrate in Water by IC							
Nitrate (as N)	2.70		0.020	mg/L		02-JUL-17	R3765465

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-3 COR-5							
Sampled By: CLIENT							
Matrix:							
Nitrate+Nitrite							
Nitrate and Nitrite as N	2.82		0.070	mg/L		06-JUL-17	
Nitrite in Water by IC							
Nitrite (as N)	0.119		0.040	mg/L		02-JUL-17	R3765465
Oil & Grease - Gravimetric							
Oil and Grease	7.5		5.0	mg/L		10-JUL-17	R3768790
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		12-JUL-17	R3770534
Phosphorus, Total							
Phosphorus (P)-Total	1.15		0.050	mg/L		05-JUL-17	R3765590
Sulfate in Water by IC							
Sulfate (SO4)	10.7		0.30	mg/L		02-JUL-17	R3765465
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0136		0.0050	mg/L	05-JUL-17	05-JUL-17	R3766035
Arsenic (As)-Total	0.00140		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Cadmium (Cd)-Total	0.000089		0.000010	mg/L	05-JUL-17	05-JUL-17	R3766035
Calcium (Ca)-Total	66.7		0.10	mg/L	05-JUL-17	05-JUL-17	R3766035
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	05-JUL-17	05-JUL-17	R3766035
Cobalt (Co)-Total	0.00148		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Copper (Cu)-Total	0.00410		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Iron (Fe)-Total	0.039		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Lead (Pb)-Total	<0.000090		0.000090	mg/L	05-JUL-17	05-JUL-17	R3766035
Magnesium (Mg)-Total	5.34		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Manganese (Mn)-Total	0.0184		0.00030	mg/L	05-JUL-17	05-JUL-17	R3766035
Nickel (Ni)-Total	0.0049		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Potassium (K)-Total	10.2		0.020	mg/L	05-JUL-17	05-JUL-17	R3766035
Sodium (Na)-Total	44.5		0.030	mg/L	05-JUL-17	05-JUL-17	R3766035
Zinc (Zn)-Total	0.0048		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Total Organic Carbon by Combustion							
Total Organic Carbon	16.6		0.50	mg/L		07-JUL-17	R3768090
Total Suspended Solids							
Total Suspended Solids	11.0		5.0	mg/L		07-JUL-17	R3768512
pH							
pH	8.65		0.10	pH units		30-JUN-17	R3760167
L1951645-4 COR-6							
Sampled By: CLIENT							
Matrix:							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225
Toluene	<0.0010		0.0010	mg/L		06-JUL-17	R3767225
Ethyl benzene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225
o-Xylene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225
m+p-Xylenes	<0.00050	DLB	0.00050	mg/L		06-JUL-17	R3767225
F1 (C6-C10)	<0.10		0.10	mg/L		06-JUL-17	R3767225
Surrogate: 4-Bromofluorobenzene (SS)	115.5		70-130	%		06-JUL-17	R3767225
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	05-JUL-17	06-JUL-17	R3767089
F3 (C16-C34)	0.44		0.25	mg/L	05-JUL-17	06-JUL-17	R3767089
F4 (C34-C50)	<0.25		0.25	mg/L	05-JUL-17	06-JUL-17	R3767089
Surrogate: 2-Bromobenzotrifluoride	88.7		60-140	%	05-JUL-17	06-JUL-17	R3767089
CCME Total Hydrocarbons							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-4 COR-6							
Sampled By: CLIENT							
Matrix:							
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-JUL-17	
F2-Naphth	<0.10		0.10	mg/L		10-JUL-17	
F3-PAH	0.44		0.25	mg/L		10-JUL-17	
Total Hydrocarbons (C6-C50)	0.44		0.38	mg/L		10-JUL-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00071		0.00071	mg/L		07-JUL-17	
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Acenaphthene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Acenaphthylene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Anthracene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Acridine	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(a)anthracene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Chrysene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Fluoranthene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Fluorene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Naphthalene	<0.000050		0.000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Phenanthrene	<0.000050		0.000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Pyrene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Quinoline	<0.0002	DLM	0.00020	mg/L	05-JUL-17	06-JUL-17	R3768615
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	05-JUL-17	06-JUL-17	R3768615
Surrogate: Acenaphthene d10	96.4		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Acridine d9	101.7		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Chrysene d12	93.9		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Naphthalene d8	88.3		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Phenanthrene d10	87.1		40-130	%	05-JUL-17	06-JUL-17	R3768615
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	189		1.2	mg/L		01-JUL-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-JUL-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-JUL-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	155		1.0	mg/L		30-JUN-17	R3760167
Ammonia by colour							
Ammonia, Total (as N)	0.246		0.010	mg/L		07-JUL-17	R3767915
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	11.8	BODQ	2.0	mg/L		30-JUN-17	R3766986
Carbonaceous BOD							
BOD Carbonaceous	8.0	BODQ	2.0	mg/L		30-JUN-17	R3766986
Chloride in Water by IC							
Chloride (Cl)	34.0		0.50	mg/L		02-JUL-17	R3765465
Conductivity							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-4 COR-6							
Sampled By: CLIENT							
Matrix:							
Conductivity							
Conductivity	385		1.0	umhos/cm		30-JUN-17	R3760167
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10		10	MPN/100mL		30-JUN-17	R3760070
Hardness Calculated							
Hardness (as CaCO3)	172	HTC	0.25	mg/L		06-JUL-17	
Mercury Total							
Mercury (Hg)-Total	0.0000075		0.0000050	mg/L	30-JUN-17	05-JUL-17	R3766324
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		02-JUL-17	R3765465
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		06-JUL-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		02-JUL-17	R3765465
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		10-JUL-17	R3768790
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		12-JUL-17	R3770534
Phosphorus, Total							
Phosphorus (P)-Total	0.453		0.010	mg/L		05-JUL-17	R3765590
Sulfate in Water by IC							
Sulfate (SO4)	36.1		0.30	mg/L		02-JUL-17	R3765465
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.168		0.0050	mg/L	05-JUL-17	05-JUL-17	R3766035
Arsenic (As)-Total	0.00100		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Cadmium (Cd)-Total	0.000011		0.000010	mg/L	05-JUL-17	05-JUL-17	R3766035
Calcium (Ca)-Total	53.6		0.10	mg/L	05-JUL-17	05-JUL-17	R3766035
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	05-JUL-17	05-JUL-17	R3766035
Cobalt (Co)-Total	0.00023		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Copper (Cu)-Total	0.00281		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Iron (Fe)-Total	0.533		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Lead (Pb)-Total	0.000443		0.000090	mg/L	05-JUL-17	05-JUL-17	R3766035
Magnesium (Mg)-Total	9.19		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Manganese (Mn)-Total	0.0939		0.00030	mg/L	05-JUL-17	05-JUL-17	R3766035
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Potassium (K)-Total	10.3		0.020	mg/L	05-JUL-17	05-JUL-17	R3766035
Sodium (Na)-Total	31.8		0.030	mg/L	05-JUL-17	05-JUL-17	R3766035
Zinc (Zn)-Total	0.0060		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Total Organic Carbon by Combustion							
Total Organic Carbon	22.0		0.50	mg/L		07-JUL-17	R3768090
Total Suspended Solids							
Total Suspended Solids	47.0		5.0	mg/L		07-JUL-17	R3768512
pH							
pH	7.71		0.10	pH units		30-JUN-17	R3760167
L1951645-5 COR-7							
Sampled By: CLIENT							
Matrix:							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225
Toluene	<0.0010		0.0010	mg/L		06-JUL-17	R3767225
Ethyl benzene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225
o-Xylene	<0.00050		0.00050	mg/L		06-JUL-17	R3767225

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-5 COR-7							
Sampled By: CLIENT							
Matrix:							
BTX plus F1 by GCMS							
m+p-Xylenes	<0.00050	DLB	0.00050	mg/L		06-JUL-17	R3767225
F1 (C6-C10)	<0.10		0.10	mg/L		06-JUL-17	R3767225
Surrogate: 4-Bromofluorobenzene (SS)	85.2		70-130	%		06-JUL-17	R3767225
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	05-JUL-17	06-JUL-17	R3767089
F3 (C16-C34)	<0.25		0.25	mg/L	05-JUL-17	06-JUL-17	R3767089
F4 (C34-C50)	<0.25		0.25	mg/L	05-JUL-17	06-JUL-17	R3767089
Surrogate: 2-Bromobenzotrifluoride	81.3		60-140	%	05-JUL-17	06-JUL-17	R3767089
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-JUL-17	
F2-Naphth	<0.10		0.10	mg/L		10-JUL-17	
F3-PAH	<0.25		0.25	mg/L		10-JUL-17	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		10-JUL-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00071		0.00071	mg/L		07-JUL-17	
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Acenaphthene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Acenaphthylene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Anthracene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Acridine	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(a)anthracene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Chrysene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Fluoranthene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Fluorene	<0.000020		0.000020	mg/L	05-JUL-17	06-JUL-17	R3768615
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Naphthalene	<0.000050		0.000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Phenanthrene	<0.000050		0.000050	mg/L	05-JUL-17	06-JUL-17	R3768615
Pyrene	<0.000010		0.000010	mg/L	05-JUL-17	06-JUL-17	R3768615
Quinoline	<0.0002	DLM	0.00020	mg/L	05-JUL-17	06-JUL-17	R3768615
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	05-JUL-17	06-JUL-17	R3768615
Surrogate: Acenaphthene d10	96.9		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Acridine d9	108.3		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Chrysene d12	90.6		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Naphthalene d8	88.5		40-130	%	05-JUL-17	06-JUL-17	R3768615
Surrogate: Phenanthrene d10	92.4		40-130	%	05-JUL-17	06-JUL-17	R3768615
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	194		1.2	mg/L		01-JUL-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-JUL-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-JUL-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	159		1.0	mg/L		30-JUN-17	R3760167

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1951645-5 COR-7							
Sampled By: CLIENT							
Matrix:							
Ammonia by colour							
Ammonia, Total (as N)	0.169		0.010	mg/L		07-JUL-17	R3767915
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	3.5	BODQ	2.0	mg/L		30-JUN-17	R3766986
Carbonaceous BOD							
BOD Carbonaceous	2.4	BODQ	2.0	mg/L		30-JUN-17	R3766986
Chloride in Water by IC							
Chloride (Cl)	7.45		0.50	mg/L		02-JUL-17	R3765465
Conductivity							
Conductivity	719		1.0	umhos/cm		30-JUN-17	R3760167
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10		10	MPN/100mL		30-JUN-17	R3760070
Hardness Calculated							
Hardness (as CaCO3)	404	HTC	0.25	mg/L		06-JUL-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	30-JUN-17	05-JUL-17	R3766324
Nitrate in Water by IC							
Nitrate (as N)	0.066		0.020	mg/L		02-JUL-17	R3765465
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		06-JUL-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		02-JUL-17	R3765465
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		10-JUL-17	R3768790
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		12-JUL-17	R3770534
Phosphorus, Total							
Phosphorus (P)-Total	0.170		0.010	mg/L		05-JUL-17	R3765590
Sulfate in Water by IC							
Sulfate (SO4)	265		0.30	mg/L		02-JUL-17	R3765465
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0112		0.0050	mg/L	05-JUL-17	05-JUL-17	R3766035
Arsenic (As)-Total	0.00051		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Cadmium (Cd)-Total	0.000014		0.000010	mg/L	05-JUL-17	05-JUL-17	R3766035
Calcium (Ca)-Total	148		0.10	mg/L	05-JUL-17	05-JUL-17	R3766035
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	05-JUL-17	05-JUL-17	R3766035
Cobalt (Co)-Total	0.00039		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Copper (Cu)-Total	0.00280		0.00020	mg/L	05-JUL-17	05-JUL-17	R3766035
Iron (Fe)-Total	0.975		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Lead (Pb)-Total	0.000220		0.000090	mg/L	05-JUL-17	05-JUL-17	R3766035
Magnesium (Mg)-Total	8.51		0.010	mg/L	05-JUL-17	05-JUL-17	R3766035
Manganese (Mn)-Total	0.0697		0.00030	mg/L	05-JUL-17	05-JUL-17	R3766035
Nickel (Ni)-Total	0.0027		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Potassium (K)-Total	8.76		0.020	mg/L	05-JUL-17	05-JUL-17	R3766035
Sodium (Na)-Total	11.6		0.030	mg/L	05-JUL-17	05-JUL-17	R3766035
Zinc (Zn)-Total	0.0237		0.0020	mg/L	05-JUL-17	05-JUL-17	R3766035
Total Organic Carbon by Combustion							
Total Organic Carbon	16.4		0.50	mg/L		07-JUL-17	R3768090
Total Suspended Solids							
Total Suspended Solids	7.0		5.0	mg/L		07-JUL-17	R3768512
pH							
pH	7.64		0.10	pH units		30-JUN-17	R3760167

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
BODQ	BOD Qualification: Lab Control Sample outside standard 85-115% objective (see QC report). Sample(s) cannot be rerun due to hold time expiry.
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RRQC	Refer to report remarks for information regarding this QC result.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-CO3CO3-CALC-WP	Water	Alkalinity, Carbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by carbonate is calculated and reported as mg CO3 2-/L.

ALK-HCO3HCO3-CALC-WP	Water	Alkalinity, Bicarbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by bicarbonate is calculated and reported as mg HCO3-/L

ALK-OHOH-CALC-WP	Water	Alkalinity, Hydroxide	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by hydroxide is calculated and reported as mg OH-/L.

ALK-TITR-WP	Water	Alkalinity, Total (as CaCO3)	APHA 2320B

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

BOD-CBOD-WP	Water	Carbonaceous BOD	APHA 5210 B

Samples are diluted and seeded, have TCMP added to inhibit nitrogenous demands, and then are incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BOD-WP	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B

Samples are diluted and seeded and then incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BTEXS+F1-HSMS-WP	Water	BTX plus F1 by GCMS	EPA 8260C / EPA 5021A

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

C-TOC-HTC-WP	Water	Total Organic Carbon by Combustion	APHA 5310 B-WP

Sample is acidified and purged to remove inorganic carbon, then injected into a heated reaction chamber where organic carbon is oxidized to CO2 which is then transported in the carrier gas stream and measured via a non-dispersive infrared analyzer.

CL-IC-N-WP	Water	Chloride in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

EC-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.

F1-F4-CALC-WP	Water	CCME Total Hydrocarbons	CCME CWS-PHC, Pub #1310, Dec 2001-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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

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.
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-FID-WP	Water	CCME PHC F2-F4 in Water	EPA 3511

Petroleum hydrocarbons in water are determined by liquid-liquid micro-scale solvent extraction using a reciprocal shaker extraction apparatus prior to capillary column gas chromatography with flame ionization detection (GC-FID) analysis.

FC10-QT97-WP	Water	Fecal coliforms, 1:10 dilution by QT97	APHA 9223B QT97

Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Substrate Coliform Test". Fecal (thermotolerant) coliform bacteria are determined by mixing a 1:10 dilution of sample with a product containing hydrolyzable substrates and sealing in a 97-well packet. The packet is incubated at 44.5 – 0.2°C for 18 hours and then the number of wells exhibiting positive responses are counted. The final results are obtained by comparing the number of positive responses to a probability table.

HARDNESS-CALC-WP	Water	Hardness Calculated	APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-T-L-MS-WP	Water	Total Metals by ICP-MS	APHA 3030E/EPA 6020A-TL

This analysis involves preliminary sample treatment by hotblock acid digestion (APHA 3030E). Instrumental analysis is by inductively coupled plasma - mass spectrometry (EPA Method 6020A).

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-N-WP	Water	Nitrite in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-IC-N-WP	Water	Nitrate in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

OG-GRAV-WP	Water	Oil & Grease - Gravimetric	EPA 1664 (modified)

Water samples are acidified and extracted with hexane; the hexane extract is collected in a pre-weighed vial. The solvent is evaporated and Total Oil & Grease is determined from the weight of the residue in the vial.

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 Phosphorus 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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
SO4-IC-N-WP	Water	Sulfate in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
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.			
XYLENES-SUM-CALC-WP	Water	Sum of Xylene Isomer Concentrations	CALCULATED RESULT
Total xylenes represents the sum of o-xylene and m&p-xylene.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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:

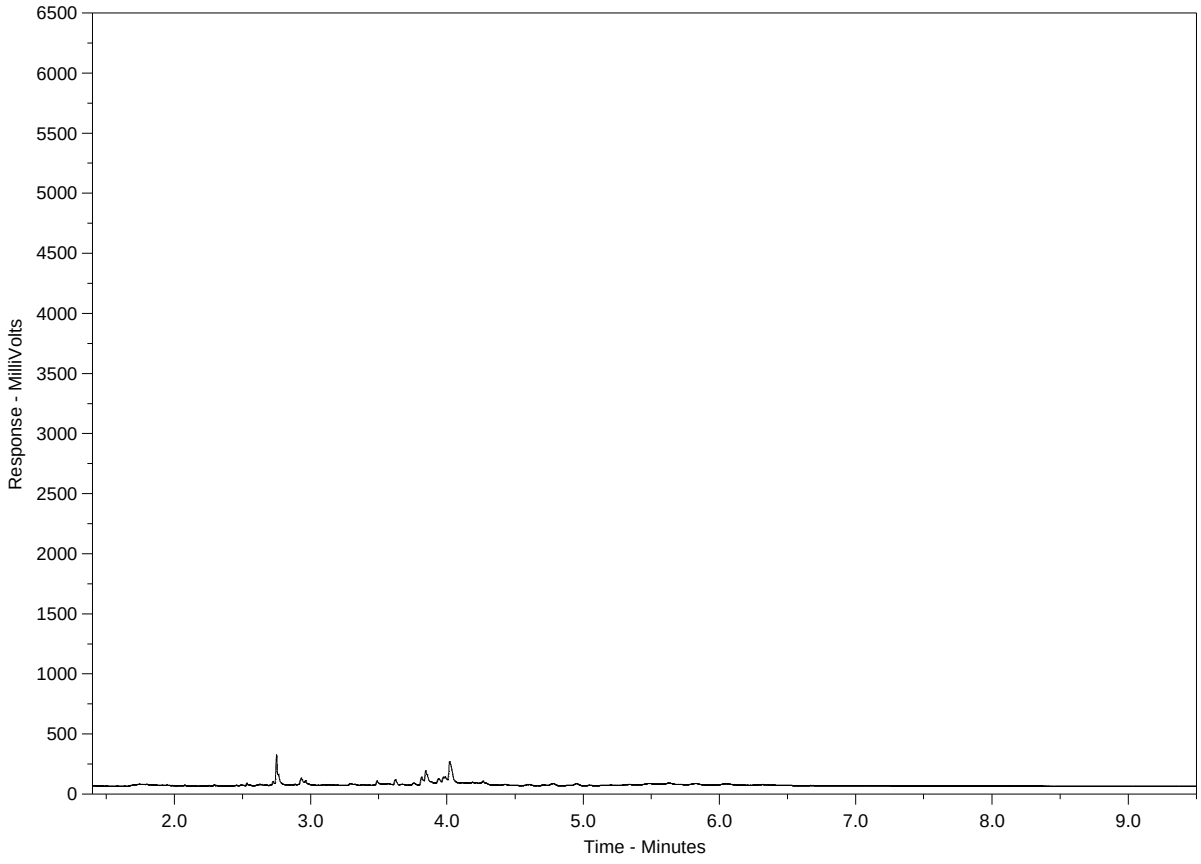
GLOSSARY OF REPORT TERMS

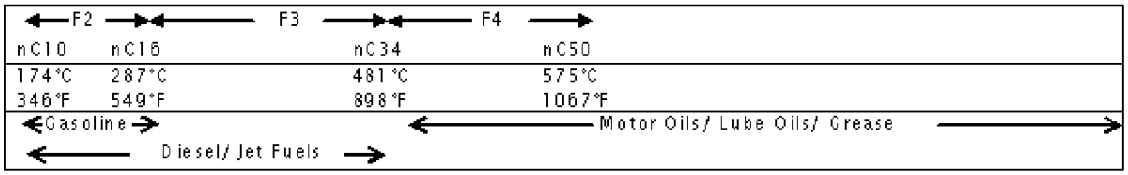
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates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

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1951645-4
Client Sample ID: COR-6





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

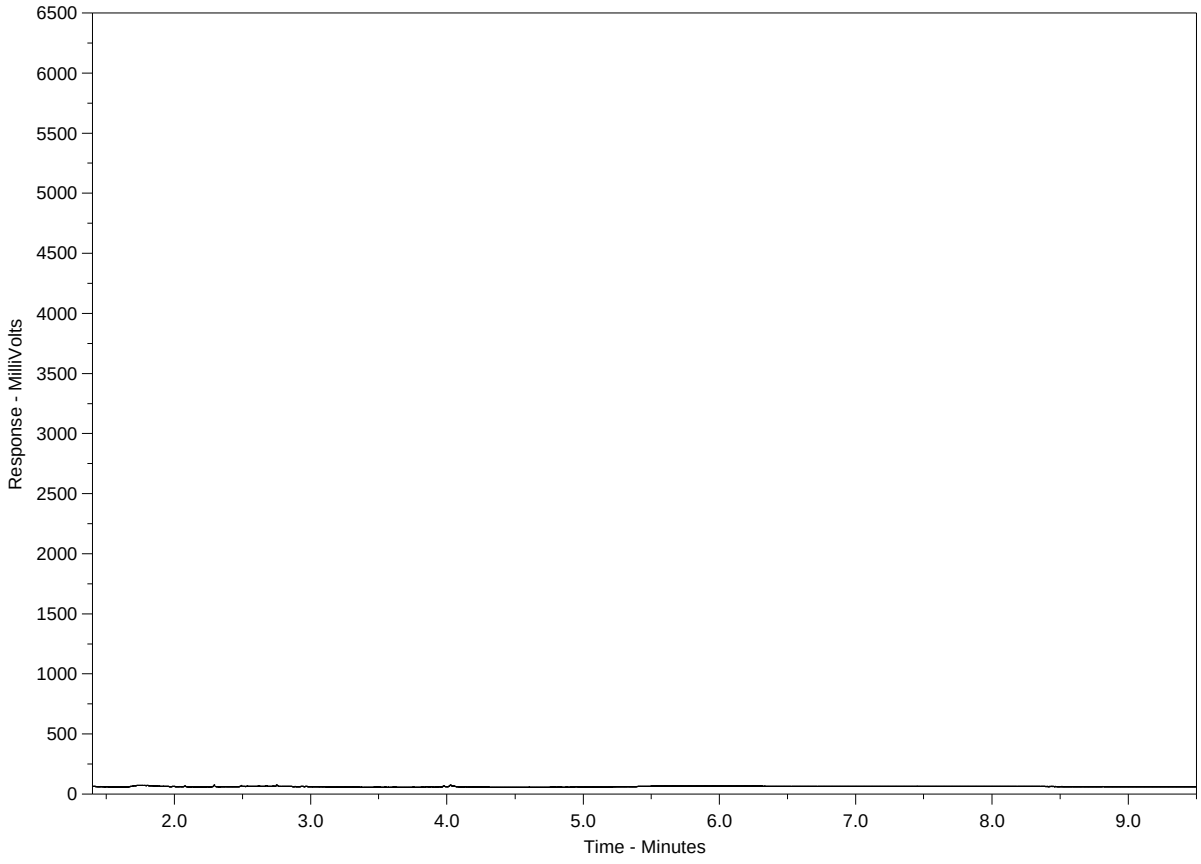
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

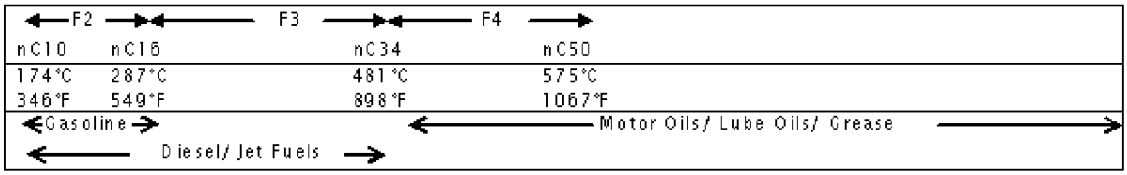
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1951645-5
Client Sample ID: COR-7





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) 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 and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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 using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L1951645-COFC

COC Number: 14 - 503468

Page 1 of 1

L1951645

Report To		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	Hamlet of Coral Harbour	Select Report Format:	☐ PDF ☑ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3pm)
Contact:	Leonie Pameolik	Quality Control (QC) Report with Report	☐ Yes ☐ No	P ☐ Priority (2-4 business days if received by 3pm)
Address:	P.O. Box 30 Coral Harbour NU X0C 0C0	☐ Criteria on Report - provide details below if box checked		E ☐ Emergency (1-2 business days if received by 3pm)
		Select Distribution:	☐ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Phone:	(867) 925 8867 Fax 867 925 8233	Email 1 or Fax		Specify Date Required for E2,E or P:
		Email 2	Munch@giniq.com	

Invoice To		Invoice Distribution	
	Same as Report To ☐ Yes ☐ No	Select Invoice Distribution:	☐ EMAIL ☐ MAIL ☐ FAX
	Copy of Invoice with Report ☐ Yes ☐ No	Email 1 or Fax	
Company:	Coral Harbour Monitoring Program	Email 2	
Contact:	Same as above		

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	3BM-Cor-0813	Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact: Graig	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	BOD-WP	ROU/W+MET-T-L WP	TSS	NH3-COL-WP	FC-Q797-WP	OG-GRAV-WP		HG-TCVAF-WP	C-TOC-HTC-WP	BTX, F1-F4-WP PAH's	PAH, PAN			Number of Containers
	COR-3				✓	✓												8
	COR-4				✓	✓												8
	COR-5				✓	✓												8
	COR-6				✓	✓									✓			14
	COR-7				✓	✓									✓			14

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☑ Yes ☐ No	
Are samples for human drinking water use? ☐ Yes ☐ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐	SIF Observations	Yes ☐	No ☐	
Ice packs	Yes ☑	No ☐	Custody seal intact	Yes ☐	No ☐
Cooling Initiated	☐				

INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
George Hogue	27/06/17	1014	AG	30-6-17	11:45			

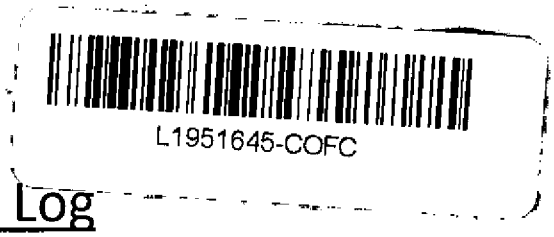
REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

17.6°C



Field Log

Name of Sampler(s): George Hogart

Date of Sampling: June 27, 2017

Time of Sampling: 10 AM

Monitoring Station Number: Cor-7

GPS Coordinates: N 64 ° 09 ' 631 " W 083 ° 11 ' 528 "

Weather Conditions: Sunny Windy

Samples:

- [x] 500 mL or 1 L BOD
- [x] 1 L Routine
- [x] 250 mL Metals + Pres
- [x] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [x] **2 x** 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] **3 x** 40 mL BTEX, F1 Vials + Pres
- [ ] **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

Field Log

Name of Sampler(s): Geoff Abgrall

Date of Sampling: June 27, 2017

Time of Sampling: 10:30 AM

Monitoring Station Number: Cor-6

GPS Coordinates: N 64 ° 09 ' 722 " W 83 ° 11 ' 650 "

Weather Conditions: _____

Samples:

- [x] 500 mL or 1 L BOD
- [x] 1 L Routine
- [x] 250 mL Metals + Pres
- [x] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] 3 x 40 mL BTEX, F1 Vials + Pres
- [ ] 2 x 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

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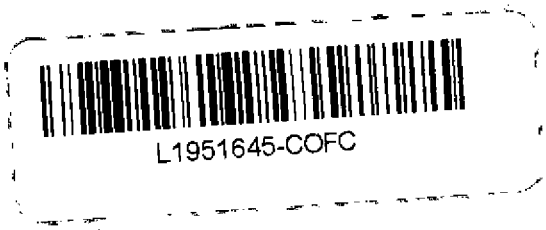


Field Log

Name of Sampler(s): George Abgott

Date of Sampling: June 17, 2017

Time of Sampling: 11 AM

Monitoring Station Number: Cor-5

GPS Coordinates: N 64° 09' 710" W 083° 11' 272"

Weather Conditions: Sunny Windy

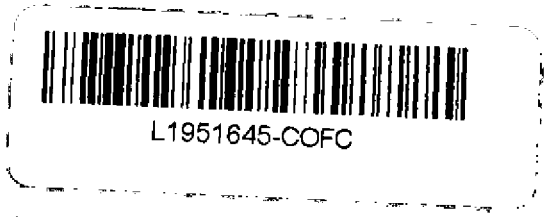
Samples:

- [x] 500 mL or 1 L BOD
- [x] 1 L Routine
- [x] 250 mL Metals + Pres
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [x] **2 x** 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] **3 x** 40 mL BTEX, F1 Vials + Pres
- [ ] **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)



Field Log

Name of Sampler(s): George Alagut

Date of Sampling: June 27, 2017

Time of Sampling: 11 AM

Monitoring Station Number: Cor-4

GPS Coordinates: N 64 ° 09 '807" W 083 ° 11 '321"

Weather Conditions: sunny windy

Samples:

- ☐ 500 mL or 1 L BOD
- ☐ 1 L Routine
- ☐ 250 mL Metals + Pres
- ☐ 40 mL Glass Mercury Vial + Pres
- ☐ 250 mL Amber Nutrients + Pres
- ☐ 250 mL Amber Phenols + Pres
- ☐ 125 mL Sterile Bacteria Bottle
- ☐ **2 x** 250 mL Amber Oil & Grease + Pres
- ☐ 1 L Amber PAH + Pres
- ☐ **3 x** 40 mL BTEX, F1 Vials + Pres
- ☐ **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- ☐ _____
- ☐ _____
- ☐ _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

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Field Log

Name of Sampler(s): George Alosert

Date of Sampling: June 27, 2017

Time of Sampling: 10:30 AM

Monitoring Station Number: Cor-3

GPS Coordinates: N 64 ° 09 ' 791 " W 083 ° 11 ' 471 "

Weather Conditions: _____

Samples:

- ☐ 500 mL or 1 L BOD
- ☐ 1 L Routine
- ☐ 250 mL Metals + Pres
- ☐ 40 mL Glass Mercury Vial + Pres
- ☐ 250 mL Amber Nutrients + Pres
- ☐ 250 mL Amber Phenols + Pres
- ☐ 125 mL Sterile Bacteria Bottle
- ☐ **2 x** 250 mL Amber Oil & Grease + Pres
- ☐ 1 L Amber PAH + Pres
- ☐ **3 x** 40 mL BTEX, F1 Vials + Pres
- ☐ **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- ☐ _____
- ☐ _____
- ☐ _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

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Hamlet of Coral Harbour
ATTN: LEONIE PAMEOLIK
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 01-AUG-17
Report Date: 10-AUG-17 13:31 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L1968154

Project P.O. #: NOT SUBMITTED
Job Reference: CORAL HARBOUR MONITORING PROGRAM
C of C Numbers:
Legal Site Desc:

Hua Wo
Chemistry Laboratory Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-1 COR-7							
Sampled By: CASEY on 25-JUL-17 @ 10:44							
Matrix: Waste Water							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
Toluene	<0.0010		0.0010	mg/L		03-AUG-17	R3791367
Ethyl benzene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
o-Xylene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
m+p-Xylenes	<0.00040		0.00040	mg/L		03-AUG-17	R3791367
F1 (C6-C10)	<0.10		0.10	mg/L		03-AUG-17	R3791367
Surrogate: 4-Bromofluorobenzene (SS)	91.8		70-130	%		03-AUG-17	R3791367
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	03-AUG-17	04-AUG-17	R3792062
F3 (C16-C34)	<0.25		0.25	mg/L	03-AUG-17	04-AUG-17	R3792062
F4 (C34-C50)	<0.25		0.25	mg/L	03-AUG-17	04-AUG-17	R3792062
Surrogate: 2-Bromobenzotrifluoride	89.4		60-140	%	03-AUG-17	04-AUG-17	R3792062
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-AUG-17	
F2-Naphth	<0.10		0.10	mg/L		10-AUG-17	
F3-PAH	<0.25		0.25	mg/L		10-AUG-17	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		10-AUG-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		04-AUG-17	
Miscellaneous Parameters							
Biochemical Oxygen Demand	<2.0		2.0	mg/L	02-AUG-17	07-AUG-17	R3792544
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Acenaphthene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Acenaphthylene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Anthracene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Acridine	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(a)anthracene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Chrysene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Fluoranthene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Fluorene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Naphthalene	<0.000050		0.000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Phenanthrene	<0.000050		0.000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Pyrene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Quinoline	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	02-AUG-17	03-AUG-17	R3794059
Surrogate: Acenaphthene d10	93.8		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Acridine d9	103.7		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Chrysene d12	86.7		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Naphthalene d8	86.7		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Phenanthrene d10	88.6		40-130	%	02-AUG-17	03-AUG-17	R3794059
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	74.1		1.2	mg/L		03-AUG-17	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-1 COR-7							
Sampled By: CASEY on 25-JUL-17 @ 10:44							
Matrix: Waste Water							
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		03-AUG-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		03-AUG-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	60.7		1.0	mg/L		02-AUG-17	R3790113
Ammonia by colour							
Ammonia, Total (as N)	0.047		0.010	mg/L		09-AUG-17	R3794392
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		02-AUG-17	R3793433
Chloride in Water by IC							
Chloride (Cl)	5.34		0.50	mg/L		02-AUG-17	R3791243
Conductivity							
Conductivity	708		1.0	umhos/cm		02-AUG-17	R3790113
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		01-AUG-17	R3788443
Hardness Calculated							
Hardness (as CaCO3)	386	HTC	0.20	mg/L		08-AUG-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	04-AUG-17	08-AUG-17	R3793950
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		02-AUG-17	R3791243
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		04-AUG-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		02-AUG-17	R3791243
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-17	R3793951
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		03-AUG-17	R3791173
Phosphorus, Total							
Phosphorus (P)-Total	0.091		0.010	mg/L		03-AUG-17	R3790464
Sulfate in Water by IC							
Sulfate (SO4)	317		0.30	mg/L		03-AUG-17	R3792726
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0510		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Arsenic (As)-Total	0.00071		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cadmium (Cd)-Total	0.0000220		0.0000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Calcium (Ca)-Total	141		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Chromium (Cr)-Total	0.00041		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cobalt (Co)-Total	0.00038		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Copper (Cu)-Total	0.00702		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Iron (Fe)-Total	0.805		0.010	mg/L	04-AUG-17	04-AUG-17	R3792612
Lead (Pb)-Total	0.000505		0.000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Magnesium (Mg)-Total	8.44		0.0050	mg/L	04-AUG-17	04-AUG-17	R3792612
Manganese (Mn)-Total	0.0285		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Nickel (Ni)-Total	0.00310		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Potassium (K)-Total	7.63		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Sodium (Na)-Total	12.3		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Zinc (Zn)-Total	0.0261		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Total Organic Carbon by Combustion							
Total Organic Carbon	28.5		0.50	mg/L		03-AUG-17	R3792636
Total Suspended Solids							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-1 COR-7							
Sampled By: CASEY on 25-JUL-17 @ 10:44							
Matrix: Waste Water							
Total Suspended Solids							
Total Suspended Solids	7.0		5.0	mg/L		08-AUG-17	R3793625
pH							
pH	8.08		0.10	pH units		02-AUG-17	R3790113
L1968154-2 COR-6							
Sampled By: CASEY on 25-JUL-17 @ 11:07							
Matrix: Waste Water							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
Toluene	<0.0010		0.0010	mg/L		03-AUG-17	R3791367
Ethyl benzene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
o-Xylene	<0.00050		0.00050	mg/L		03-AUG-17	R3791367
m+p-Xylenes	<0.00040		0.00040	mg/L		03-AUG-17	R3791367
F1 (C6-C10)	<0.10		0.10	mg/L		03-AUG-17	R3791367
Surrogate: 4-Bromofluorobenzene (SS)	90.5		70-130	%		03-AUG-17	R3791367
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	03-AUG-17	04-AUG-17	R3792062
F3 (C16-C34)	<0.25		0.25	mg/L	03-AUG-17	04-AUG-17	R3792062
F4 (C34-C50)	<0.25		0.25	mg/L	03-AUG-17	04-AUG-17	R3792062
Surrogate: 2-Bromobenzotrifluoride	89.9		60-140	%	03-AUG-17	04-AUG-17	R3792062
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-AUG-17	
F2-Naphth	<0.10		0.10	mg/L		10-AUG-17	
F3-PAH	<0.25		0.25	mg/L		10-AUG-17	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		10-AUG-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		04-AUG-17	
Miscellaneous Parameters							
Biochemical Oxygen Demand	7.7		2.0	mg/L	02-AUG-17	07-AUG-17	R3792544
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Acenaphthene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Acenaphthylene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Anthracene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Acridine	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(a)anthracene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Chrysene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Fluoranthene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Fluorene	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Naphthalene	<0.000050		0.000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Phenanthrene	<0.000050		0.000050	mg/L	02-AUG-17	03-AUG-17	R3794059
Pyrene	<0.000010		0.000010	mg/L	02-AUG-17	03-AUG-17	R3794059
Quinoline	<0.000020		0.000020	mg/L	02-AUG-17	03-AUG-17	R3794059
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	02-AUG-17	03-AUG-17	R3794059

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-2 COR-6							
Sampled By: CASEY on 25-JUL-17 @ 11:07							
Matrix: Waste Water							
Polyaromatic Hydrocarbons (PAHs)							
Surrogate: Acenaphthene d10	96.0		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Acridine d9	110.0		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Chrysene d12	72.4		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Naphthalene d8	87.7		40-130	%	02-AUG-17	03-AUG-17	R3794059
Surrogate: Phenanthrene d10	89.2		40-130	%	02-AUG-17	03-AUG-17	R3794059
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	260		1.2	mg/L		03-AUG-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		03-AUG-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		03-AUG-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	213		1.0	mg/L		02-AUG-17	R3790113
Ammonia by colour							
Ammonia, Total (as N)	0.065		0.010	mg/L		09-AUG-17	R3794392
Carbonaceous BOD							
BOD Carbonaceous	5.4		2.0	mg/L		02-AUG-17	R3793433
Chloride in Water by IC							
Chloride (Cl)	79.3		1.0	mg/L		02-AUG-17	R3791243
Conductivity							
Conductivity	935		1.0	umhos/cm		02-AUG-17	R3790113
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		01-AUG-17	R3788443
Hardness Calculated							
Hardness (as CaCO3)	325	HTC	0.20	mg/L		08-AUG-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	04-AUG-17	08-AUG-17	R3793950
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		02-AUG-17	R3791243
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		04-AUG-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		02-AUG-17	R3791243
Oil & Grease - Gravimetric							
Oil and Grease	7.0		5.0	mg/L		09-AUG-17	R3793951
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		03-AUG-17	R3791173
Phosphorus, Total							
Phosphorus (P)-Total	0.295		0.010	mg/L		03-AUG-17	R3790464
Sulfate in Water by IC							
Sulfate (SO4)	183		0.60	mg/L		02-AUG-17	R3791243
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.138		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Arsenic (As)-Total	0.00177		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cadmium (Cd)-Total	0.0000054		0.0000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Calcium (Ca)-Total	94.4		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Chromium (Cr)-Total	0.00062		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cobalt (Co)-Total	0.00031		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Copper (Cu)-Total	0.00266		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Iron (Fe)-Total	0.806		0.010	mg/L	04-AUG-17	04-AUG-17	R3792612
Lead (Pb)-Total	0.000578		0.000050	mg/L	04-AUG-17	04-AUG-17	R3792612

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-2 COR-6							
Sampled By: CASEY on 25-JUL-17 @ 11:07							
Matrix: Waste Water							
Total Metals in Water by CRC ICPMS							
Magnesium (Mg)-Total	21.7		0.0050	mg/L	04-AUG-17	04-AUG-17	R3792612
Manganese (Mn)-Total	0.0796		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Nickel (Ni)-Total	0.00245		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Potassium (K)-Total	25.6		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Sodium (Na)-Total	73.2		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Zinc (Zn)-Total	0.0039		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Total Organic Carbon by Combustion							
Total Organic Carbon	40.5		0.50	mg/L		03-AUG-17	R3792636
Total Suspended Solids							
Total Suspended Solids	17.0		5.0	mg/L		08-AUG-17	R3793625
pH							
pH	7.50		0.10	pH units		02-AUG-17	R3790113
L1968154-3 COR-3							
Sampled By: CASEY on 25-JUL-17 @ 11:16							
Matrix: Waste Water							
Miscellaneous Parameters							
Biochemical Oxygen Demand	62		20	mg/L	02-AUG-17	07-AUG-17	R3792544
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	417		1.2	mg/L		03-AUG-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		03-AUG-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		03-AUG-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	342		1.0	mg/L		02-AUG-17	R3790113
Ammonia by colour							
Ammonia, Total (as N)	27.0		1.0	mg/L		09-AUG-17	R3794392
Carbonaceous BOD							
BOD Carbonaceous	<20		20	mg/L		02-AUG-17	R3793433
Chloride in Water by IC							
Chloride (Cl)	69.1		1.0	mg/L		02-AUG-17	R3791243
Conductivity							
Conductivity	917		1.0	umhos/cm		02-AUG-17	R3790113
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	50	PEHR	10	MPN/100mL		01-AUG-17	R3788443
Hardness Calculated							
Hardness (as CaCO3)	173	HTC	0.20	mg/L		08-AUG-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	04-AUG-17	08-AUG-17	R3793950
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		02-AUG-17	R3791243
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		04-AUG-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		02-AUG-17	R3791243
Oil & Grease - Gravimetric							
Oil and Grease	5.5		5.0	mg/L		09-AUG-17	R3793951
Phenol (4AAP)							
Phenols (4AAP)	0.0192		0.0010	mg/L		03-AUG-17	R3791173
Phosphorus, Total							
Phosphorus (P)-Total	6.43		0.25	mg/L		03-AUG-17	R3790464

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-3 COR-3							
Sampled By: CASEY on 25-JUL-17 @ 11:16							
Matrix: Waste Water							
Sulfate in Water by IC							
Sulfate (SO4)	13.5		0.60	mg/L		02-AUG-17	R3791243
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0657		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Arsenic (As)-Total	0.00104		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cadmium (Cd)-Total	0.0000074		0.0000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Calcium (Ca)-Total	58.9		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Chromium (Cr)-Total	0.00037		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cobalt (Co)-Total	0.00058		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Copper (Cu)-Total	0.00695		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Iron (Fe)-Total	0.300		0.010	mg/L	04-AUG-17	04-AUG-17	R3792612
Lead (Pb)-Total	0.000156		0.000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Magnesium (Mg)-Total	6.19		0.0050	mg/L	04-AUG-17	04-AUG-17	R3792612
Manganese (Mn)-Total	0.0711		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Nickel (Ni)-Total	0.00357		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Potassium (K)-Total	29.4		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Sodium (Na)-Total	63.2		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Zinc (Zn)-Total	0.0049		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Total Organic Carbon by Combustion							
Total Organic Carbon	51.8		5.0	mg/L		03-AUG-17	R3792636
Total Suspended Solids							
Total Suspended Solids	31.0		5.0	mg/L		08-AUG-17	R3793625
pH							
pH	7.08		0.10	pH units		02-AUG-17	R3790113
L1968154-4 COR-4							
Sampled By: CASEY on 25-JUL-17 @ 11:40							
Matrix: Waste Water							
Miscellaneous Parameters							
Biochemical Oxygen Demand	40.5		2.0	mg/L	02-AUG-17	07-AUG-17	R3792544
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	378		1.2	mg/L		09-AUG-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		09-AUG-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		09-AUG-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	310		1.0	mg/L		04-AUG-17	R3793824
Ammonia by colour							
Ammonia, Total (as N)	3.57		0.10	mg/L		09-AUG-17	R3794392
Carbonaceous BOD							
BOD Carbonaceous	2.2		2.0	mg/L		02-AUG-17	R3793433
Chloride in Water by IC							
Chloride (Cl)	42.6		0.50	mg/L		02-AUG-17	R3791243
Conductivity							
Conductivity	688		1.0	umhos/cm		04-AUG-17	R3793824
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		01-AUG-17	R3788443
Hardness Calculated							
Hardness (as CaCO3)	253	HTC	0.20	mg/L		08-AUG-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	04-AUG-17	08-AUG-17	R3793950
Nitrate in Water by IC							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-4 COR-4							
Sampled By: CASEY on 25-JUL-17 @ 11:40							
Matrix: Waste Water							
Nitrate in Water by IC							
Nitrate (as N)	3.82		0.020	mg/L		02-AUG-17	R3791243
Nitrate+Nitrite							
Nitrate and Nitrite as N	5.10		0.070	mg/L		04-AUG-17	
Nitrite in Water by IC							
Nitrite (as N)	1.28		0.010	mg/L		02-AUG-17	R3791243
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-17	R3793951
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		03-AUG-17	R3791173
Phosphorus, Total							
Phosphorus (P)-Total	0.325		0.010	mg/L		03-AUG-17	R3790464
Sulfate in Water by IC							
Sulfate (SO4)	8.11		0.30	mg/L		02-AUG-17	R3791243
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0339		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Arsenic (As)-Total	0.00173		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cadmium (Cd)-Total	0.0000592		0.0000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Calcium (Ca)-Total	89.7		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Chromium (Cr)-Total	0.00031		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cobalt (Co)-Total	0.00233		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Copper (Cu)-Total	0.00303		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Iron (Fe)-Total	0.665		0.010	mg/L	04-AUG-17	04-AUG-17	R3792612
Lead (Pb)-Total	0.000079		0.000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Magnesium (Mg)-Total	7.13		0.0050	mg/L	04-AUG-17	04-AUG-17	R3792612
Manganese (Mn)-Total	0.139		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Nickel (Ni)-Total	0.00723		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Potassium (K)-Total	14.4		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Sodium (Na)-Total	42.1		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Total Organic Carbon by Combustion							
Total Organic Carbon	14.8		0.50	mg/L		04-AUG-17	R3793537
Total Suspended Solids							
Total Suspended Solids	27.0		5.0	mg/L		08-AUG-17	R3793625
pH							
pH	7.47		0.10	pH units		04-AUG-17	R3793824
L1968154-5 COR-5							
Sampled By: CASEY on 25-JUL-17 @ 11:55							
Matrix: Waste Water							
Miscellaneous Parameters							
Biochemical Oxygen Demand	7.7		2.0	mg/L	02-AUG-17	07-AUG-17	R3792544
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	341		1.2	mg/L		03-AUG-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		03-AUG-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		03-AUG-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	280		1.0	mg/L		02-AUG-17	R3790113
Ammonia by colour							
Ammonia, Total (as N)	0.148		0.010	mg/L		09-AUG-17	R3794392
Carbonaceous BOD							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1968154-5 COR-5							
Sampled By: CASEY on 25-JUL-17 @ 11:55							
Matrix: Waste Water							
Carbonaceous BOD							
BOD Carbonaceous	4.6		2.0	mg/L		02-AUG-17	R3793433
Chloride in Water by IC							
Chloride (Cl)	38.8		0.50	mg/L		02-AUG-17	R3791243
Conductivity							
Conductivity	630		1.0	umhos/cm		02-AUG-17	R3790113
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		01-AUG-17	R3788443
Hardness Calculated							
Hardness (as CaCO3)	222	HTC	0.20	mg/L		08-AUG-17	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	04-AUG-17	08-AUG-17	R3793950
Nitrate in Water by IC							
Nitrate (as N)	0.020		0.020	mg/L		02-AUG-17	R3791243
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		04-AUG-17	
Nitrite in Water by IC							
Nitrite (as N)	0.041		0.010	mg/L		02-AUG-17	R3791243
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-17	R3793951
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		03-AUG-17	R3791173
Phosphorus, Total							
Phosphorus (P)-Total	0.793		0.010	mg/L		03-AUG-17	R3790464
Sulfate in Water by IC							
Sulfate (SO4)	8.44		0.30	mg/L		02-AUG-17	R3791243
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0269		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Arsenic (As)-Total	0.00088		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cadmium (Cd)-Total	0.0000588		0.0000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Calcium (Ca)-Total	77.3		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Chromium (Cr)-Total	0.00030		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Cobalt (Co)-Total	0.00146		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Copper (Cu)-Total	0.00412		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Iron (Fe)-Total	0.071		0.010	mg/L	04-AUG-17	04-AUG-17	R3792612
Lead (Pb)-Total	0.000095		0.000050	mg/L	04-AUG-17	04-AUG-17	R3792612
Magnesium (Mg)-Total	7.08		0.0050	mg/L	04-AUG-17	04-AUG-17	R3792612
Manganese (Mn)-Total	0.121		0.00010	mg/L	04-AUG-17	04-AUG-17	R3792612
Nickel (Ni)-Total	0.00658		0.00050	mg/L	04-AUG-17	04-AUG-17	R3792612
Potassium (K)-Total	8.96		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Sodium (Na)-Total	50.9		0.050	mg/L	04-AUG-17	04-AUG-17	R3792612
Zinc (Zn)-Total	0.0084		0.0030	mg/L	04-AUG-17	04-AUG-17	R3792612
Total Organic Carbon by Combustion							
Total Organic Carbon	17.0		0.50	mg/L		04-AUG-17	R3793537
Total Suspended Solids							
Total Suspended Solids	29.0		5.0	mg/L		08-AUG-17	R3793625
pH							
pH	7.86		0.10	pH units		02-AUG-17	R3790113

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
PEHR	Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-CO3CO3-CALC-WP	Water	Alkalinity, Carbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by carbonate is calculated and reported as mg CO3 2-/L.

ALK-HCO3HCO3-CALC-WP	Water	Alkalinity, Bicarbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by bicarbonate is calculated and reported as mg HCO3-/L

ALK-OHOH-CALC-WP	Water	Alkalinity, Hydroxide	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by hydroxide is calculated and reported as mg OH-/L.

ALK-TITR-WP	Water	Alkalinity, Total (as CaCO3)	APHA 2320B

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

BOD-CBOD-WP	Water	Carbonaceous BOD	APHA 5210 B

Samples are diluted and seeded, have TCMP added to inhibit nitrogenous demands, and then are incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BOD-MAN-WP	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B

Samples are diluted and seeded and then incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BTEXS+F1-HSMS-WP	Water	BTX plus F1 by GCMS	EPA 8260C / EPA 5021A

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

C-TOC-HTC-WP	Water	Total Organic Carbon by Combustion	APHA 5310 B-WP

Sample is acidified and purged to remove inorganic carbon, then injected into a heated reaction chamber where organic carbon is oxidized to CO2 which is then transported in the carrier gas stream and measured via a non-dispersive infrared analyzer.

CL-IC-N-WP	Water	Chloride in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

EC-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.

F1-F4-CALC-WP	Water	CCME Total Hydrocarbons	CCME CWS-PHC, Pub #1310, Dec 2001-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(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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.
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-FID-WP	Water	CCME PHC F2-F4 in Water	EPA 3511

Petroleum hydrocarbons in water are determined by liquid-liquid micro-scale solvent extraction using a reciprocal shaker extraction apparatus prior to capillary column gas chromatography with flame ionization detection (GC-FID) analysis.

FC10-QT97-WP	Water	Fecal coliforms, 1:10 dilution by QT97	APHA 9223B QT97

Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Substrate Coliform Test". Fecal (thermotolerant) coliform bacteria are determined by mixing a 1:10 dilution of sample with a product containing hydrolyzable substrates and sealing in a 97-well packet. The packet is incubated at 44.5 – 0.2°C for 18 hours and then the number of wells exhibiting positive responses are counted. The final results are obtained by comparing the number of positive responses to a probability table.

HARDNESS-CALC-WP	Water	Hardness Calculated	APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020A (mod.)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

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-N-WP	Water	Nitrite in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-IC-N-WP	Water	Nitrate in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

OG-GRAV-WP	Water	Oil & Grease - Gravimetric	EPA 1664 (modified)

Water samples are acidified and extracted with hexane; the hexane extract is collected in a pre-weighed vial. The solvent is evaporated and Total Oil & Grease is determined from the weight of the residue in the vial.

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 Phosphorus 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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
SO4-IC-N-WP	Water	Sulfate in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
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.			
XYLENES-SUM-CALC-WP	Water	Sum of Xylene Isomer Concentrations	CALCULATED RESULT
Total xylenes represents the sum of o-xylene and m&p-xylene.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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:

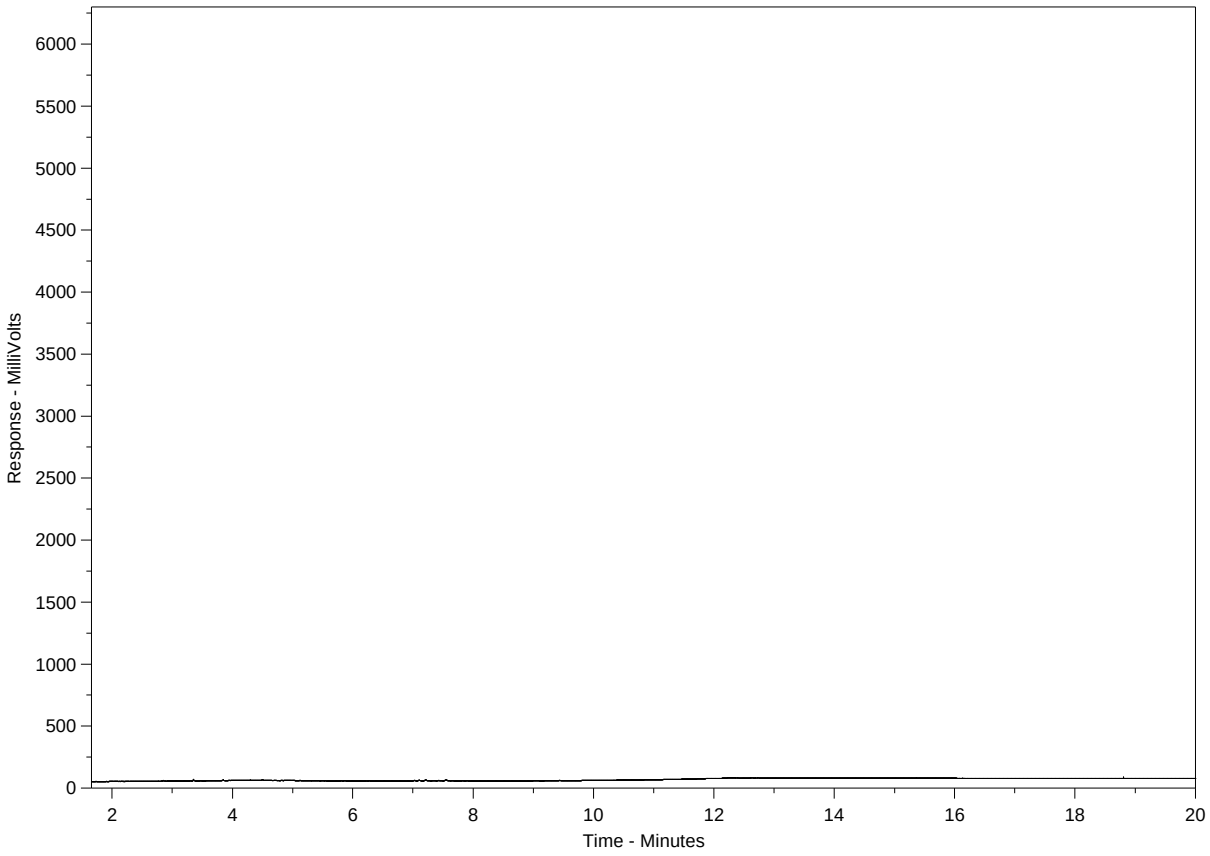
GLOSSARY OF REPORT TERMS

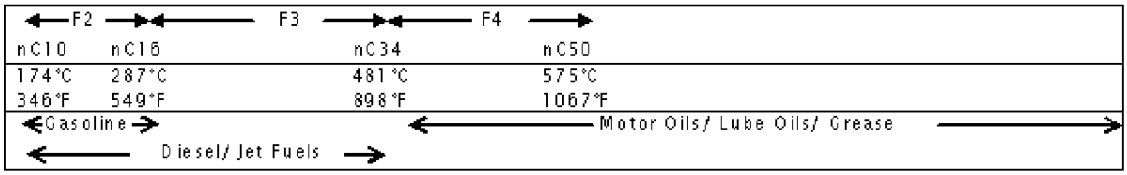
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates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

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1968154-1
Client Sample ID: COR-7





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

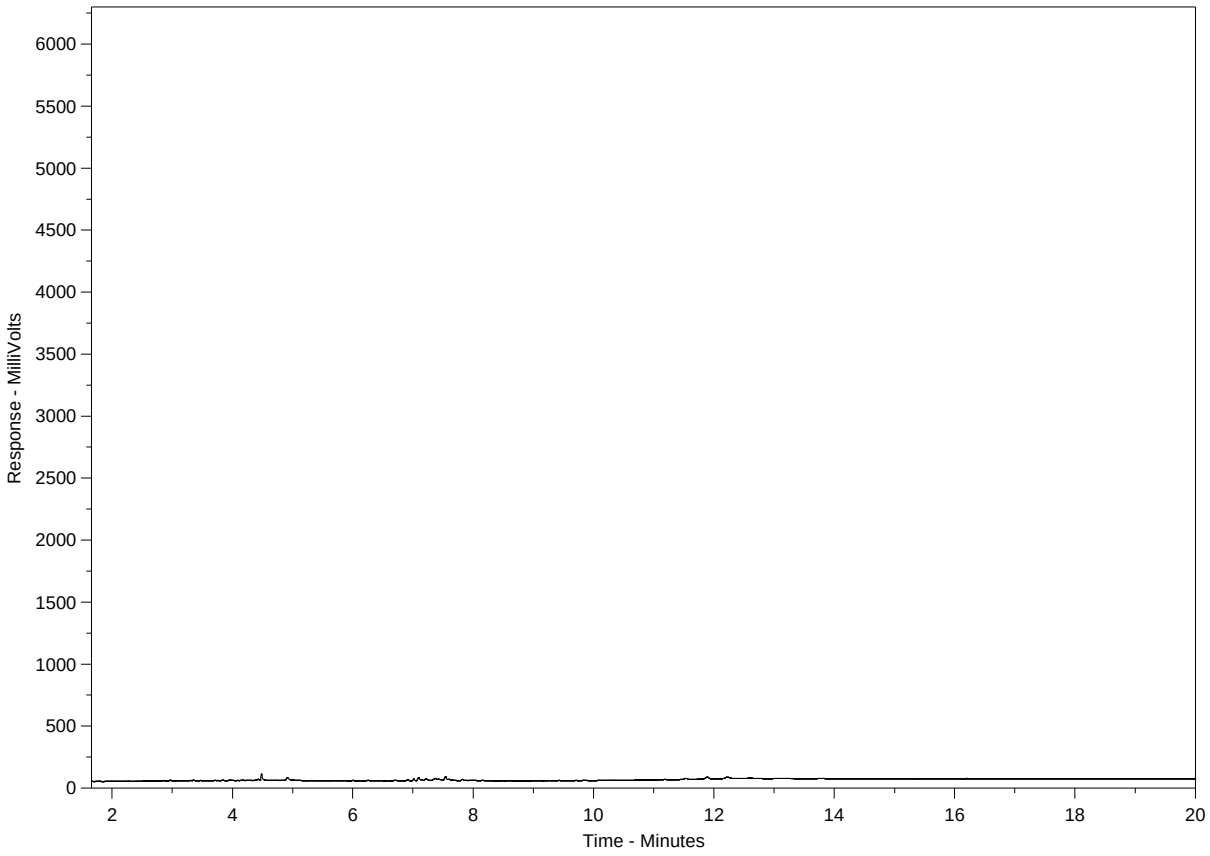
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

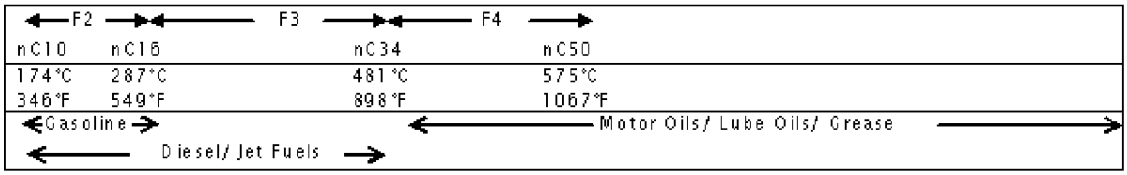
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1968154-2
Client Sample ID: COR-6





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) 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 and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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 using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

L1968154-COFC

Field Log

Name of Sampler(s): Cor 3

Date of Sampling: July 25/17

Time of Sampling: 11:16

Monitoring Station Number: Cor 3

GPS Coordinates: N 64 ° 09 ' 38.6" W 83 ° 11 ' 33.6"

Weather Conditions: Sunny Windy for South.

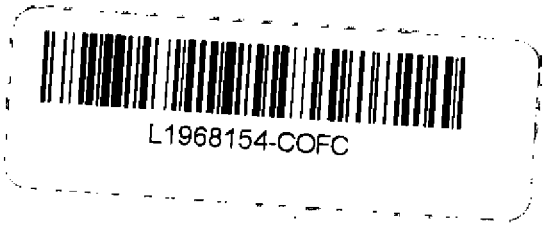
Samples:

- [ ] 500 mL or 1 L BOD
- [ ] 1 L Routine
- [ ] 250 mL Metals + Pres
- [ ] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [ ] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] 3 x 40 mL BTEX, F1 Vials + Pres
- [ ] 2 x 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)



Field Log

Name of Sampler(s): _____

Date of Sampling: July 25/17

Time of Sampling: 11:55

Monitoring Station Number: Cor 5

GPS Coordinates: N ____ ° ____ ' ____ " W ____ ° ____ ' ____ "

Weather Conditions: _____

Samples:

- [ ] 500 mL or 1 L BOD
- [ ] 1 L Routine
- [ ] 250 mL Metals + Pres
- [ ] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [ ] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] 3 x 40 mL BTEX, F1 Vials + Pres
- [ ] 2 x 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

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L1968154-COFC

Field Log

Name of Sampler(s): Cor 7

Date of Sampling: July 25/17

Time of Sampling: 10:44 am

Monitoring Station Number: Cor 7

GPS Coordinates: N ____ ° ____ ' ____ " W ____ ° ____ ' ____ "

Weather Conditions: Sunny · Windy

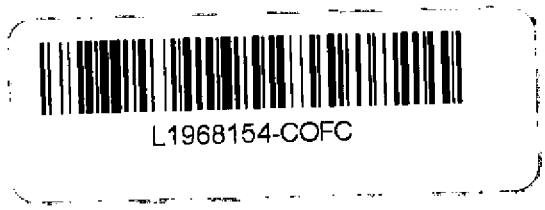
Samples:

- [ ] 500 mL or 1 L BOD
- [ ] 1 L Routine
- [ ] 250 mL Metals + Pres
- [ ] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [ ] **2 x** 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] **3 x** 40 mL BTEX, F1 Vials + Pres
- [ ] **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)



Field Log

Name of Sampler(s): Cor 4

Date of Sampling: July 25/17

Time of Sampling: 11:40

Monitoring Station Number: Cor 4

GPS Coordinates: N 64 ° 09 ' 49" W 83 ° 011 ' 13"

Weather Conditions: Sunday Windy & South

Samples:

- ☐ 500 mL or 1 L BOD
- ☐ 1 L Routine
- ☐ 250 mL Metals + Pres
- ☐ 40 mL Glass Mercury Vial + Pres
- ☐ 250 mL Amber Nutrients + Pres
- ☐ 250 mL Amber Phenols + Pres
- ☐ 125 mL Sterile Bacteria Bottle
- ☐ **2 x** 250 mL Amber Oil & Grease + Pres
- ☐ 1 L Amber PAH + Pres
- ☐ **3 x** 40 mL BTEX, F1 Vials + Pres
- ☐ **2 x** 60 mL Amber F2-F4 Vials + Pres

Other:

- ☐ _____
- ☐ _____
- ☐ _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

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L1968154-COFC

Field Log

Name of Sampler(s): Cor 6 C

Date of Sampling: July 25/17

Time of Sampling: 1107

Monitoring Station Number: Cor 6

GPS Coordinates: N 64 . 9 . 40" W 83 . 11 . 38"

Weather Conditions: Sunny Windy

Samples:

- [ ] 500 mL or 1 L BOD
- [ ] 1 L Routine
- [ ] 250 mL Metals + Pres
- [ ] 40 mL Glass Mercury Vial + Pres
- [ ] 250 mL Amber Nutrients + Pres
- [ ] 250 mL Amber Phenols + Pres
- [ ] 125 mL Sterile Bacteria Bottle
- [ ] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] 3 x 40 mL BTEX, F1 Vials + Pres
- [ ] 2 x 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L1968154-COFC

COC Number: 14 - 503465

Page ____ of ____

L1968154

Report To		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)	
Company:	HAMLET of Coral Harbour	Select Report Format:	☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)	R	☑ Regular (Standard TAT if received by 3pm)
Contact:	Leonie Pamealick	Quality Control (QC) Report with Report	☑ Yes ☐ No	P	☐ Priority (2-4 business days if received by 3pm)
Address:	PO Box 30 Coral Harbour Nu.X0C0C0	☐ Criteria on Report - provide details below if box checked		E	☐ Emergency (1-2 business days if received by 3pm)
Phone:	(867) 9258867	Select Distribution:	☐ EMAIL ☐ MAIL ☐ FAX	E2	☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
		Email 1 or Fax		Specify Date Required for E2,E or P:	
		Email 2			

Invoice To		Invoice Distribution	
	Same as Report To ☑ Yes ☐ No	Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
	Copy of Invoice with Report ☑ Yes ☐ No	Email 1 or Fax	Munch@qiniq.com
Company:	Coral Harbour Monitoring Program	Email 2	
Contact:			

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact: Craig Riddell	Sampler: Casey

Analysis Request — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Bod-wp	Routine	TSS	NH3-cal-wp	FC-QT97-wp	OG-GRAV-wp	PHE/NOLS-HABAUT	HG-T-CVAF-wp	C-TOC-HTC-wp	BTX, F1-F4-wpPHC	PAH-PANH-wp	Number of Containers
Cor 7					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
Cor 6					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
Cor 3					✓	✓	✓	✓	–	✓	✓	✓				8
Cor 4					✓	✓	✓	✓	✓	✓	✓	✓				8
Cor 35					✓	✓	✓	✓	✓	✓	✓	✓				8

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☐ Yes ☐ No	
Are samples for human drinking water use? ☐ Yes ☐ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐	SIF Observations	Yes ☐	No ☐	
Ice packs	Yes ☐	No ☐	Custody seal intact	Yes ☐	No ☐
Cooling Initiated	☐				

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Casey	Date: July 25/17	Time: 130	Received by: AG	Date: AUG 1/17	Time: 1:15	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

16.9°C

Hamlet of Coral Harbour
ATTN: LEONIE PAMEOLIK
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 31-AUG-17
Report Date: 12-SEP-17 13:56 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L1984280

Project P.O. #: NOT SUBMITTED
Job Reference: WASTEWATER SAMPLING
C of C Numbers:
Legal Site Desc:

Hua Wo
Chemistry Laboratory Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-1 COR 7							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		06-SEP-17	R3818931
Toluene	<0.0010		0.0010	mg/L		06-SEP-17	R3818931
Ethyl benzene	<0.00050		0.00050	mg/L		06-SEP-17	R3818931
o-Xylene	<0.00050		0.00050	mg/L		06-SEP-17	R3818931
m+p-Xylenes	<0.00040		0.00040	mg/L		06-SEP-17	R3818931
F1 (C6-C10)	<0.10		0.10	mg/L		06-SEP-17	R3818931
Surrogate: 4-Bromofluorobenzene (SS)	92.6		70-130	%		06-SEP-17	R3818931
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	07-SEP-17	07-SEP-17	R3822936
F3 (C16-C34)	0.33		0.25	mg/L	07-SEP-17	07-SEP-17	R3822936
F4 (C34-C50)	<0.25		0.25	mg/L	07-SEP-17	07-SEP-17	R3822936
Surrogate: 2-Bromobenzotrifluoride	96.3		60-140	%	07-SEP-17	07-SEP-17	R3822936
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		12-SEP-17	
F2-Naphth	<0.10		0.10	mg/L		12-SEP-17	
F3-PAH	0.33		0.25	mg/L		12-SEP-17	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		12-SEP-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		07-SEP-17	
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	0.000033		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
2-Methyl Naphthalene	0.000022		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Acenaphthene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Acenaphthylene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Anthracene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Acridine	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(a)anthracene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Chrysene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Fluoranthene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Fluorene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Naphthalene	<0.000050		0.000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Phenanthrene	<0.000050		0.000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Pyrene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Quinoline	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	08-SEP-17	11-SEP-17	R3824212
Surrogate: Acenaphthene d10	86.0		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Acridine d9	114.7		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Chrysene d12	71.5		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Naphthalene d8	82.6		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Phenanthrene d10	91.4		40-130	%	08-SEP-17	11-SEP-17	R3824212
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	372		1.2	mg/L		01-SEP-17	
Alkalinity, Carbonate							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-1 COR 7							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	305		1.0	mg/L		31-AUG-17	R3816718
Ammonia by colour							
Ammonia, Total (as N)	0.128		0.010	mg/L		08-SEP-17	R3822830
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<20	BODQ	20	mg/L		31-AUG-17	R3820502
Carbonaceous BOD							
BOD Carbonaceous	<20	BODQ	20	mg/L		31-AUG-17	R3820502
Chloride in Water by IC							
Chloride (Cl)	10.1		1.0	mg/L		31-AUG-17	R3818525
Conductivity							
Conductivity	1200		1.0	umhos/cm		31-AUG-17	R3816718
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	90	PEHR	10	MPN/100mL		31-AUG-17	R3816611
Hardness Calculated							
Hardness (as CaCO3)	900	HTC	0.20	mg/L		06-SEP-17	
Mercury Total							
Mercury (Hg)-Total	0.0000186		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820950
Nitrate in Water by IC							
Nitrate (as N)	0.056		0.040	mg/L		31-AUG-17	R3818525
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		05-SEP-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		31-AUG-17	R3818525
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		11-SEP-17	R3823430
Phenol (4AAP)							
Phenols (4AAP)	0.0014		0.0010	mg/L		05-SEP-17	R3820191
Phosphorus, Total							
Phosphorus (P)-Total	0.660		0.050	mg/L		01-SEP-17	R3816753
Sulfate in Water by IC							
Sulfate (SO4)	526		0.60	mg/L		31-AUG-17	R3818525
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.288		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Arsenic (As)-Total	0.00107		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cadmium (Cd)-Total	0.0000915		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Calcium (Ca)-Total	330		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Chromium (Cr)-Total	0.00136		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cobalt (Co)-Total	0.00058		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Copper (Cu)-Total	0.00594		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Iron (Fe)-Total	6.01		0.010	mg/L	01-SEP-17	05-SEP-17	R3820268
Lead (Pb)-Total	0.00145		0.000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Magnesium (Mg)-Total	18.5		0.0050	mg/L	01-SEP-17	05-SEP-17	R3820268
Manganese (Mn)-Total	0.418		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Nickel (Ni)-Total	0.00390		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Potassium (K)-Total	13.0		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Sodium (Na)-Total	22.8		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Zinc (Zn)-Total	0.0591		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Total Organic Carbon by Combustion							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-1 COR 7							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Total Organic Carbon by Combustion							
Total Organic Carbon	21.0		0.50	mg/L		05-SEP-17	R3820396
Total Suspended Solids							
Total Suspended Solids	76		10	mg/L		05-SEP-17	R3820572
pH							
pH	7.37		0.10	pH units		31-AUG-17	R3816718
L1984280-2 COR 6							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		02-SEP-17	R3818931
Toluene	<0.0010		0.0010	mg/L		02-SEP-17	R3818931
Ethyl benzene	<0.00050		0.00050	mg/L		02-SEP-17	R3818931
o-Xylene	<0.00050		0.00050	mg/L		02-SEP-17	R3818931
m+p-Xylenes	<0.00040		0.00040	mg/L		02-SEP-17	R3818931
F1 (C6-C10)	<0.10		0.10	mg/L		02-SEP-17	R3818931
Surrogate: 4-Bromofluorobenzene (SS)	90.6		70-130	%		02-SEP-17	R3818931
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	07-SEP-17	07-SEP-17	R3822936
F3 (C16-C34)	0.45		0.25	mg/L	07-SEP-17	07-SEP-17	R3822936
F4 (C34-C50)	<0.25		0.25	mg/L	07-SEP-17	07-SEP-17	R3822936
Surrogate: 2-Bromobenzotrifluoride	101.7		60-140	%	07-SEP-17	07-SEP-17	R3822936
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		12-SEP-17	
F2-Naphth	<0.10		0.10	mg/L		12-SEP-17	
F3-PAH	0.45		0.25	mg/L		12-SEP-17	
Total Hydrocarbons (C6-C50)	0.45		0.38	mg/L		12-SEP-17	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		05-SEP-17	
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Acenaphthene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Acenaphthylene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Anthracene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Acridine	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(a)anthracene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Chrysene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Fluoranthene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Fluorene	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Naphthalene	<0.000050		0.000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Phenanthrene	<0.000050		0.000050	mg/L	08-SEP-17	11-SEP-17	R3824212
Pyrene	<0.000010		0.000010	mg/L	08-SEP-17	11-SEP-17	R3824212
Quinoline	<0.000020		0.000020	mg/L	08-SEP-17	11-SEP-17	R3824212

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-2 COR 6							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Polyaromatic Hydrocarbons (PAHs)							
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	08-SEP-17	11-SEP-17	R3824212
Surrogate: Acenaphthene d10	103.5		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Acridine d9	109.4		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Chrysene d12	73.8		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Naphthalene d8	80.9		40-130	%	08-SEP-17	11-SEP-17	R3824212
Surrogate: Phenanthrene d10	89.3		40-130	%	08-SEP-17	11-SEP-17	R3824212
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	332		1.2	mg/L		01-SEP-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	272		1.0	mg/L		31-AUG-17	R3816718
Ammonia by colour							
Ammonia, Total (as N)	0.156		0.010	mg/L		08-SEP-17	R3822830
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	13.3	BODQ	2.0	mg/L		31-AUG-17	R3820502
Carbonaceous BOD							
BOD Carbonaceous	8.1	BODQ	2.0	mg/L		31-AUG-17	R3820502
Chloride in Water by IC							
Chloride (Cl)	88.2		1.0	mg/L		31-AUG-17	R3818525
Conductivity							
Conductivity	1010		1.0	umhos/cm		31-AUG-17	R3816718
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	1520	PEHR	10	MPN/100mL		31-AUG-17	R3816611
Hardness Calculated							
Hardness (as CaCO3)	428	HTC	0.20	mg/L		06-SEP-17	
Mercury Total							
Mercury (Hg)-Total	0.0000118		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820950
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		31-AUG-17	R3818525
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		05-SEP-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		31-AUG-17	R3818525
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		11-SEP-17	R3823430
Phenol (4AAP)							
Phenols (4AAP)	0.0012		0.0010	mg/L		05-SEP-17	R3820191
Phosphorus, Total							
Phosphorus (P)-Total	0.381		0.050	mg/L		01-SEP-17	R3816753
Sulfate in Water by IC							
Sulfate (SO4)	213		0.60	mg/L		31-AUG-17	R3818525
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0727		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Arsenic (As)-Total	0.00192		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cadmium (Cd)-Total	0.0000070		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Calcium (Ca)-Total	126		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Chromium (Cr)-Total	0.00072		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cobalt (Co)-Total	0.00027		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-2 COR 6							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Total Metals in Water by CRC ICPMS							
Copper (Cu)-Total	0.00190		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Iron (Fe)-Total	1.19		0.010	mg/L	01-SEP-17	05-SEP-17	R3820268
Lead (Pb)-Total	0.000518		0.000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Magnesium (Mg)-Total	27.4		0.0050	mg/L	01-SEP-17	05-SEP-17	R3820268
Manganese (Mn)-Total	0.131		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Nickel (Ni)-Total	0.00271		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Potassium (K)-Total	31.6		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Sodium (Na)-Total	84.1		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Zinc (Zn)-Total	0.0033		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Total Organic Carbon by Combustion							
Total Organic Carbon	41.2		0.50	mg/L		05-SEP-17	R3820396
Total Suspended Solids							
Total Suspended Solids	26		10	mg/L		05-SEP-17	R3820572
pH							
pH	7.96		0.10	pH units		31-AUG-17	R3816718
L1984280-3 COR 3							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	317		1.2	mg/L		01-SEP-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	260		1.0	mg/L		31-AUG-17	R3816718
Ammonia by colour							
Ammonia, Total (as N)	10.0		1.0	mg/L		08-SEP-17	R3822830
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	67	BODQ	20	mg/L		31-AUG-17	R3820502
Carbonaceous BOD							
BOD Carbonaceous	44	BODQ	20	mg/L		31-AUG-17	R3820502
Chloride in Water by IC							
Chloride (Cl)	71.3		0.50	mg/L		31-AUG-17	R3818525
Conductivity							
Conductivity	689		1.0	umhos/cm		31-AUG-17	R3816718
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	1720	PEHR	10	MPN/100mL		31-AUG-17	R3816611
Hardness Calculated							
Hardness (as CaCO3)	172	HTC	0.20	mg/L		06-SEP-17	
Mercury Total							
Mercury (Hg)-Total	<0.000025		0.000025	mg/L	01-SEP-17	05-SEP-17	R3820950
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		31-AUG-17	R3818525
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		05-SEP-17	
Nitrite in Water by IC							
Nitrite (as N)	0.060		0.010	mg/L		31-AUG-17	R3818525
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		11-SEP-17	R3823430

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-3 COR 3							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Phenol (4AAP)							
Phenols (4AAP)	0.0032		0.0010	mg/L		05-SEP-17	R3820191
Phosphorus, Total							
Phosphorus (P)-Total	7.10		0.25	mg/L		01-SEP-17	R3816753
Sulfate in Water by IC							
Sulfate (SO4)	15.4		0.30	mg/L		31-AUG-17	R3818525
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.122		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Arsenic (As)-Total	0.00094		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cadmium (Cd)-Total	0.0000154		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Calcium (Ca)-Total	58.3		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Chromium (Cr)-Total	0.00043		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cobalt (Co)-Total	0.00060		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Copper (Cu)-Total	0.0110		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Iron (Fe)-Total	0.544		0.010	mg/L	01-SEP-17	05-SEP-17	R3820268
Lead (Pb)-Total	0.000404		0.000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Magnesium (Mg)-Total	6.47		0.0050	mg/L	01-SEP-17	05-SEP-17	R3820268
Manganese (Mn)-Total	0.0700		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Nickel (Ni)-Total	0.00376		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Potassium (K)-Total	29.0		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Sodium (Na)-Total	72.8		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Zinc (Zn)-Total	0.0132		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Total Organic Carbon by Combustion							
Total Organic Carbon	82.8		5.0	mg/L		05-SEP-17	R3820396
Total Suspended Solids							
Total Suspended Solids	208		20	mg/L		05-SEP-17	R3820572
pH							
pH	7.56		0.10	pH units		31-AUG-17	R3816718
L1984280-4 COR 4							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	364		1.2	mg/L		01-SEP-17	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-17	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-17	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	298		1.0	mg/L		31-AUG-17	R3816718
Ammonia by colour							
Ammonia, Total (as N)	0.85		0.10	mg/L		08-SEP-17	R3822830
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	2.5	BODQ	2.0	mg/L		31-AUG-17	R3820502
Carbonaceous BOD							
BOD Carbonaceous	<2.0	BODQ	2.0	mg/L		31-AUG-17	R3820502
Chloride in Water by IC							
Chloride (Cl)	74.5		0.50	mg/L		31-AUG-17	R3818525
Conductivity							
Conductivity	707		1.0	umhos/cm		31-AUG-17	R3816718
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	200	PEHR	10	MPN/100mL		31-AUG-17	R3816611

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1984280-4 COR 4							
Sampled By: CODEY on 29-AUG-17 @ 12:30							
Matrix:							
Hardness Calculated							
Hardness (as CaCO3)	265	HTC	0.20	mg/L		06-SEP-17	
Mercury Total							
Mercury (Hg)-Total	0.0000050		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820950
Nitrate in Water by IC							
Nitrate (as N)	0.106		0.020	mg/L		31-AUG-17	R3818525
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.106		0.070	mg/L		05-SEP-17	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		31-AUG-17	R3818525
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		11-SEP-17	R3823430
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		05-SEP-17	R3820191
Phosphorus, Total							
Phosphorus (P)-Total	0.969		0.010	mg/L		01-SEP-17	R3816753
Sulfate in Water by IC							
Sulfate (SO4)	6.36		0.30	mg/L		31-AUG-17	R3818525
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0094		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Arsenic (As)-Total	0.00115		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cadmium (Cd)-Total	0.0000158		0.0000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Calcium (Ca)-Total	93.0		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Chromium (Cr)-Total	0.00025		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Cobalt (Co)-Total	0.00096		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Copper (Cu)-Total	0.00176		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Iron (Fe)-Total	0.533		0.010	mg/L	01-SEP-17	05-SEP-17	R3820268
Lead (Pb)-Total	<0.000050		0.000050	mg/L	01-SEP-17	05-SEP-17	R3820268
Magnesium (Mg)-Total	7.88		0.0050	mg/L	01-SEP-17	05-SEP-17	R3820268
Manganese (Mn)-Total	0.0587		0.00010	mg/L	01-SEP-17	05-SEP-17	R3820268
Nickel (Ni)-Total	0.00477		0.00050	mg/L	01-SEP-17	05-SEP-17	R3820268
Potassium (K)-Total	22.5		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Sodium (Na)-Total	68.7		0.050	mg/L	01-SEP-17	05-SEP-17	R3820268
Zinc (Zn)-Total	0.0037		0.0030	mg/L	01-SEP-17	05-SEP-17	R3820268
Total Organic Carbon by Combustion							
Total Organic Carbon	22.6		0.50	mg/L		05-SEP-17	R3820396
Total Suspended Solids							
Total Suspended Solids	<10		10	mg/L		05-SEP-17	R3820572
pH							
pH	7.68		0.10	pH units		31-AUG-17	R3816718

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
BODQ	BOD Qualification: Lab Control Sample outside standard 85-115% objective (see QC report). Sample(s) cannot be rerun due to hold time expiry.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
PEHR	Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.
RRQC	Refer to report remarks for information regarding this QC result.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-CO3CO3-CALC-WP	Water	Alkalinity, Carbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by carbonate is calculated and reported as mg CO3 2-/L.

ALK-HCO3HCO3-CALC-WP	Water	Alkalinity, Bicarbonate	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by bicarbonate is calculated and reported as mg HCO3-/L

ALK-OHOH-CALC-WP	Water	Alkalinity, Hydroxide	CALCULATION

The Alkalinity of water is a measure of its acid neutralizing capacity.Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. The fraction of alkalinity contributed by hydroxide is calculated and reported as mg OH-/L.

ALK-TITR-WP	Water	Alkalinity, Total (as CaCO3)	APHA 2320B

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

BOD-CBOD-WP	Water	Carbonaceous BOD	APHA 5210 B

Samples are diluted and seeded, have TCMP added to inhibit nitrogenous demands, and then are incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BOD-WP	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B

Samples are diluted and seeded and then incubated in airtight bottles at 20°C for 5 days. Dissolved oxygen is measured initially and after incubation, and results are computed from the difference between initial and final DO.

BTEXS+F1-HSMS-WP	Water	BTX plus F1 by GCMS	EPA 8260C / EPA 5021A

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

C-TOC-HTC-WP	Water	Total Organic Carbon by Combustion	APHA 5310 B-WP

Sample is acidified and purged to remove inorganic carbon, then injected into a heated reaction chamber where organic carbon is oxidized to CO2 which is then transported in the carrier gas stream and measured via a non-dispersive infrared analyzer.

CL-IC-N-WP	Water	Chloride in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

EC-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.

F1-F4-CALC-WP	Water	CCME Total Hydrocarbons	CCME CWS-PHC, Pub #1310, Dec 2001-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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

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.
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-FID-WP	Water	CCME PHC F2-F4 in Water	EPA 3511

Petroleum hydrocarbons in water are determined by liquid-liquid micro-scale solvent extraction using a reciprocal shaker extraction apparatus prior to capillary column gas chromatography with flame ionization detection (GC-FID) analysis.

FC10-QT97-WP	Water	Fecal coliforms, 1:10 dilution by QT97	APHA 9223B QT97

Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Substrate Coliform Test". Fecal (thermotolerant) coliform bacteria are determined by mixing a 1:10 dilution of sample with a product containing hydrolyzable substrates and sealing in a 97-well packet. The packet is incubated at 44.5 – 0.2°C for 18 hours and then the number of wells exhibiting positive responses are counted. The final results are obtained by comparing the number of positive responses to a probability table.

HARDNESS-CALC-WP	Water	Hardness Calculated	APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020A (mod.)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

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-N-WP	Water	Nitrite in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-IC-N-WP	Water	Nitrate in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

OG-GRAV-WP	Water	Oil & Grease - Gravimetric	EPA 1664 (modified)

Water samples are acidified and extracted with hexane; the hexane extract is collected in a pre-weighed vial. The solvent is evaporated and Total Oil & Grease is determined from the weight of the residue in the vial.

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 Phosphorus 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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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-N-WP	Water	Sulfate in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
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.			
XYLENES-SUM-CALC-WP	Water	Sum of Xylene Isomer Concentrations	CALCULATED RESULT
Total xylenes represents the sum of o-xylene and m&p-xylene.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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:

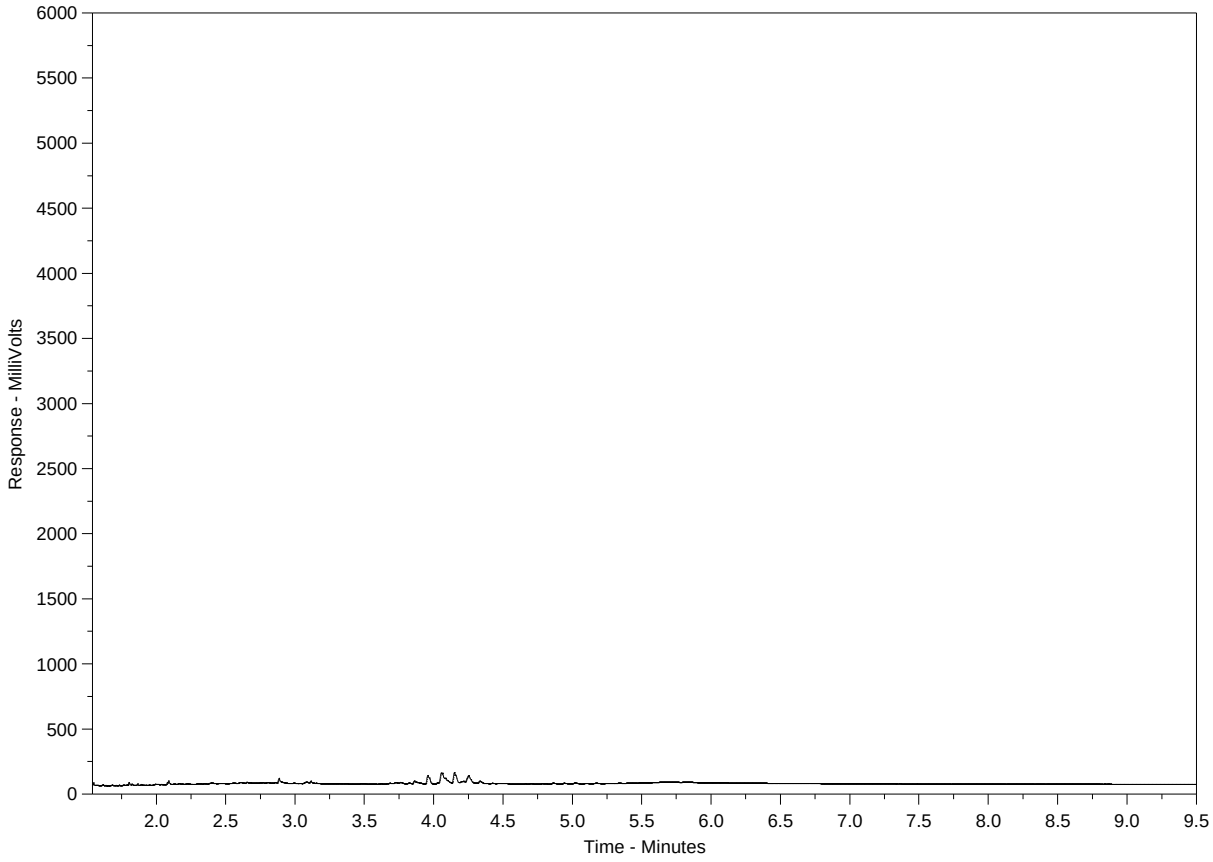
GLOSSARY OF REPORT TERMS

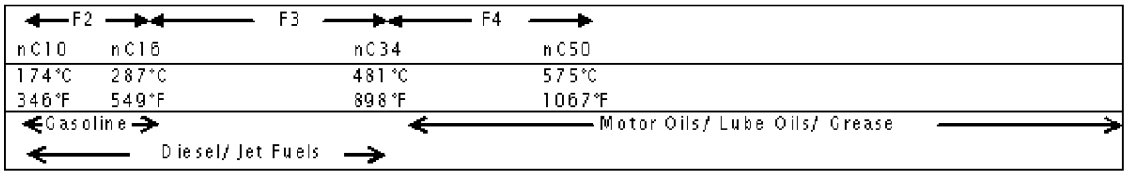
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates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

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1984280-1
Client Sample ID: COR 7





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

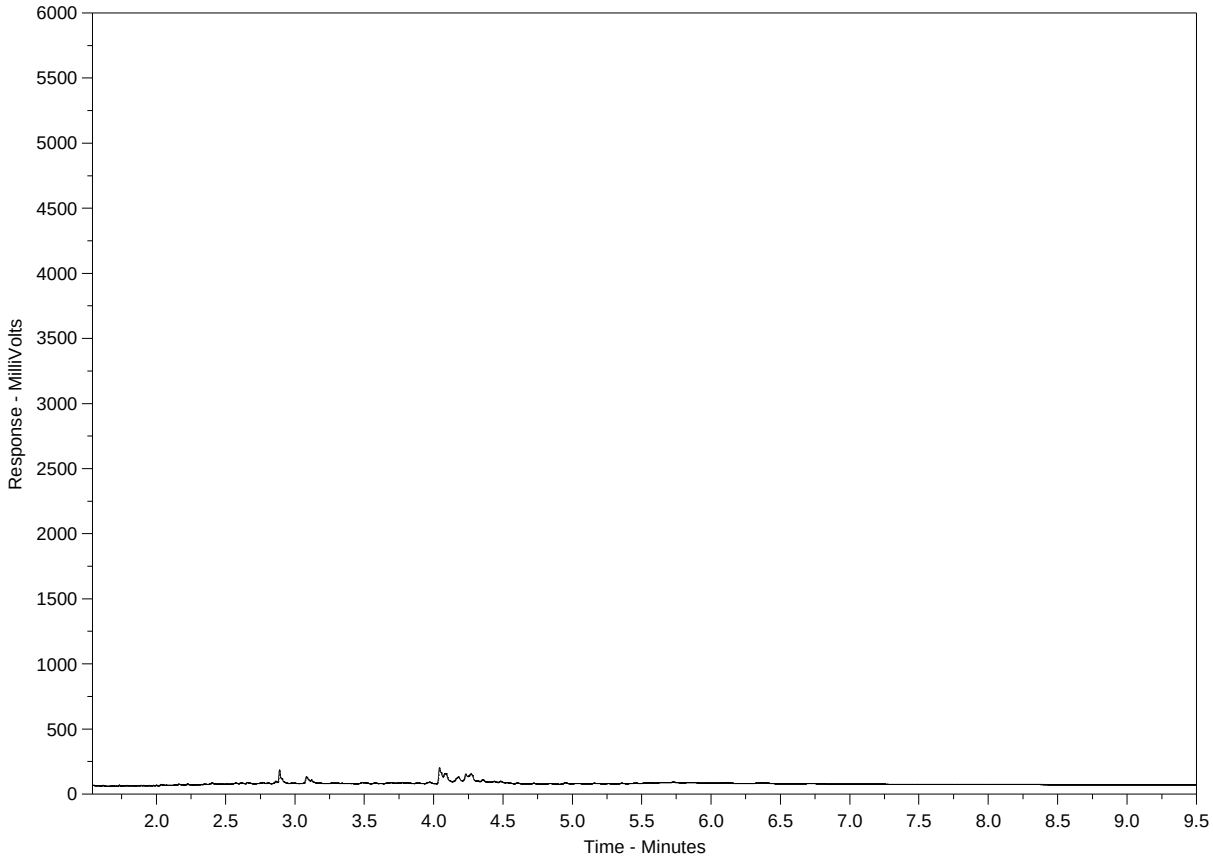
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

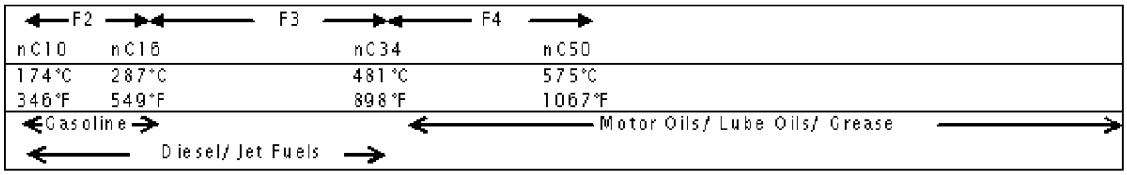
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L1984280-2
Client Sample ID: COR 6





The CCME F2-F4 Hydrocarbon Distribution Report (HDR) 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 and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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 using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

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L1984280-COFC

COC Number: 14 - 454537

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L1984280

Report To		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	HAMLET of Coral Harbour	Select Report Format:	☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3pm)
Contact:	Leonie PAMEOLIK	Quality Control (QC) Report with Report	☑ Yes ☐ No	P ☐ Priority (2-4 business days if received by 3pm)
Address:	PO Box 30 Coral Harbour, Nu X0C-0C0	☐ Criteria on Report - provide details below if box checked		E ☐ Emergency (1-2 business days if received by 3pm)
		Select Distribution:	☐ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Phone:	867 925 8867 Fax 867 925 8233	Email 1 or Fax	Munch@qiniq.com	Specify Date Required for E2,E or P:
		Email 2	mLusty@gov.nu.ca	

Invoice To		Invoice Distribution	
	Same as Report To ☑ Yes ☐ No	Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
	Copy of Invoice with Report ☑ Yes ☐ No	Email 1 or Fax	Munch@qiniq.com
Company:		Email 2	mLusty@gov.nu.ca
Contact:	Same as above		

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	Waste Water Sampling	Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	

ALS Lab Work Order # (lab use only)		ALS Contact:	Sampler: Casey

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	BOD	Routines	Metals	Nutrients	Phenols	Bacteria	Oil + Grease	PAH	BTEX, F1	F2-F4	Number of Containers
	Cor 7				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
	Cor 6				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
					—	—	—	—	—	—	—	—	—	—	
	Cor 3				✓	✓	✓	✓	✓	✓	✓	✓			8
	Cor 4				✓	✓	✓	✓	✓	✓	✓	✓			8
	Cor 5				✓	✓	✓	✓	✓	✓	✓	✓			8

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☑ Yes ☐ No	
Are samples for human drinking water use? ☐ Yes ☑ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐	SIF Observations	Yes ☐	No ☐
Ice packs	Yes ☐	No ☐	Custody seal intact	Yes ☐ No ☐
Cooling Initiated	☐			

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
				4.3	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Casey	Aug 29	930	CM	31-8-17	8:13			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

L1984280-COFC

Field Log

Name of Sampler(s): George

Date of Sampling: Aug 29 2017

Time of Sampling: 11:15

Monitoring Station Number: _____

GPS Coordinates: N ___ ° ___ ' ___ " W ___ ° ___ ' ___ "

Weather Conditions: Cloudy

Samples:

- [x] 500 mL or 1 L BOD
- [x] 1 L Routine
- [x] 250 mL Metals + Pres
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 250 mL Amber Nutrients + Pres
- [x] 250 mL Amber Phenols + Pres
- [x] 125 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 1 L Amber PAH + Pres
- [ ] 3 x 40 mL BTEX, F1 Vials + Pres
- [ ] 2 x 60 mL Amber F2-F4 Vials + Pres

Other:

- [ ] _____
- [ ] _____
- [ ] _____

Other Notes: (any unusual conditions, any deviation from standard procedures, reason sample was not taken, etc.)

Cor-5

Can't monitor because All
Ory in the Area.

Hazardous Materials Spill Database

Environment Division of ENR
Scotia 6, 5102-50th Avenue; Yellowknife, NT X1A 3S8
Phone: (867) 873-7654 Fax: (867) 873-0221

Sorted By: SpillNo for the year(s): 2017

Spill No.	Date	Ter	Region	Location	Site Description	Commodity	Quantity	Source	Agency
2017073	2017-03-06	NU	KEE	Coral Harbour	Coral Harbour Carpenter shop located north of the community	Heating Fuel P-50	205 L	PL	GN

Total Spills on this Report: 1

This report contains information regarding spills that were reported to the NWT 24-Hour Spill Line. The absence of information on any particular location in no way guarantees that contamination has not occurred at that location.

LEGEND

Region:
BAF - Baffin
DEH - Deh Cho
INU - Inuvik
KEE - Keewatin
KIT - Kitikmeot
NSL - North Slave
SAH - Sahtu
SSL - South Slave

Source:
AIR - Aircraft
DRUM - Drum or Barrel
MV - Marine Vessel
NS - Natural Seepage
OTH - Other Transportation
PL - Pipe or Line
RT - Rail Train
SL - Sewage Lagoon
ST< - Storage Tank <4000 litres
ST> - Storage Tank >4000 litres
TP - Tailings Pond
TRU - Truck
UK - Unkown
WELL - Wet Wells, Flaring
Boom

Agency:
CCG - Canadian Coast Guard
EP - Environment Canada
GN - Government of Nunavut
GNWT - Government of Northwest Territories
ILA - Inuvialiut Land Administration
INAC - Indian and Northern Affairs Canada
NEB - National Energy Board