April 30, 2021

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1L0

Attention: Richard Dwyer, Manager of Licensing

Dear Richard,

The Hamlet of Coral Harbour is pleased to submit the 2020 Annual Report for water use and disposal of waste as required under the 3BMCOR-1521 water license from January 1-December 31, 2020.

The volume of water withdrawn from Post River to fill the reservoir was 39,973 m^3 over the period of 24 days which is below the 45,000 m^3 allowable annual limit. The water consumption was 35,750 m^3 which is a 11.5% increase from 2019 (32,074 m^3).

Sampling of sewage effluent was tested at the ALS Laboratory in Winnipeg. The effluent sampled at the wetland discharge point COR-5 was above the allowable limits for BOD and TSS for the August sample.

Thank you for your consideration. Please do not hesitate to contact me with any questions or concerns.

Regards,

S. Collins

Sarah Collins, P. Eng.
Municipal Planning Engineer
Government of Nunavut
Community and Government Services
Phone: 867-975-5478
Email: scollins@gov.nu.ca

ANNUAL REPORT
FOR THE HAMLET OF CORAL HARBOUR

YEAR BEING REPORTED: 2020

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

a)- d) Tabular summaries of all data generated under the "Monitoring Program"; summary of modifications to the "Monitoring Program" in accordance with Part H, Item 11; the daily, monthly and annual quantities in cubic metres of freshwater obtained from all sources; the daily, monthly and annual quantities in cubic metres of each and all Waste discharged; including the hazardous and non-hazardous Waste accepted at the Solid Waste Facilities;

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	3,590.726	3,590.726
February	2,954.371	2,954.371
March	3,381.682	3,381.682
April	2,726.398	2,726.398
May	2,860.441	2,860.441
June	2,886.809	2,886.809
July	3,345.544	3,345.544
August	3,681.369	3,681.369
September	3,332.268	3,332.268
October	3,638.991	3,638.991
November	3,242.015	3,242.015
December	89.608	89.608
ANNUAL TOTAL	**35,730**	**35,730**

Note: No meter exists to measure the sewage discharge volume, therefore water consumption volume is considered as equal volume to the Sewage discharge volume. The solid waste volumes were not provided to CGS for this submission.

e) 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 where structures and facilities are subject to the Act and regulations;

- A higher fence was installed at the Solid Waste site, and fill was dumped and spread to cover the waste within the bermed area.

- Reservoir refill was completed between August 24th and September 16th. A volume of 39,973 m^3 was pumped into the reservoirs during this time.

f) a list of unauthorized discharges and summary of follow-up action taken;

Spill No.	Date	Site Description	Commodity	Quantity
2020145	05/21/20	Coral Harbour	Petroleum-fuel oil (jet A, diesel, turbo A, heat)	**2200.00 L**

g) Subject to the Act and Regulations, the proponent is required to provide a summary of abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

- None

h) Any updates or revisions for manuals and plans *(Including Water Supply, Sewage Waste, Solid Waste, Spill Contingency, Abandonment and Restoration, QA/QC*) as required by changes in operation and/or technology;

- Updates to the documents will be submitted to NWB by June 30, 2021.

i) a summary of any studies, reports and plans requested by the Board that relate to Waste disposal, Water use or reclamation, and a brief description of any future studies planned;

- CGS is seeking funding to develop a business case for upgrades to the current wastewater treatment facility. This business case would evaluate design option to develop an impermeable lagoon to hold 10-12 month of sewage. It would also include a comprehensive study of the wetland treatment area and the receiving environment to recommend effluent treatment parameters that are appropriate for this type of wastewater treatment system.

j) any other details on Water use or Waste disposal requested by the Board by November 1st of the year being reported.

- None

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

- CGS, on behalf of the Licensee is in the process of preparing the renewal application. The letter of conformity from the Nunavut Planning Commission was received on April 16, 2021. The application package will be submitted to NWB by May 31, 2021.

- The Licensee is interested in moving the resupply location approximately 100 m upstream to a deeper location within the River where rocks will not impact the resupply pump operations. This will involve extending the road and moving the removable intake hose and sea can equipment upstream. This project has not yet received funding and a letter will be submitted to the NWB with details of the work when it is planned to be undertaken.

- The Licensee plans to submit an application for an amendment to the current 30/30 mg/L BOD/TSS effluent parameter limits for the COR-5 sampling point. The effluent results do not consistently meet these treatment objectives. The current lagoon is a bermed natural pond with passive exfiltration. After spring thaw, since there is minimal effluent retention or water run-off diversion, the most concentrated effluent is diluted and washed-out during freshet. In the instances that samples are meeting these objectives, by the time samples are taken, a significant proportion of contaminants have left the wetland treatment area and entered the receiving lake. The effluent is likely relying on dilution and quick passage through the wetland to meet its treatment objectives. CGS is seeking funding to develop a business case for upgrades to the current wastewater treatment system, it will include a study of the lagoon, wetland and receiving body to determine recommended effluent parameters.

- The August 26, 2020 effluent sample exceeded the effluent parameters but had been meeting the objective in all other samples except in August 2015. Based on historic data these results may be outliers. Monitoring will continue during the 2021 sampling program.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- A copy of the 2020 inspection report has not been received at the time of this submission.

LIST OF APPENDICES

Appendix A: COR-5 Effluent Quality Limits

3BM-COR1521 Coral Harbour Monitoring Program Results 2020 for Effluent Quality

Parameter	Limit	COR-5			
		08-Jul-20	26-Aug-20	10-Sep-20	11-Sep-20
BOD_5	30 mg/L	12.1	47	<2.0	<2.0
Total Suspended Solids	30 mg/L	11.8	152	<3.0	<3.0
Fecal Coliforms	$1x10^4$ CFU/100mL	N/A	3080	10	10
Oil + Grease	no visible sheen	5.0	<5.0	<5.0	<5.0
pH	between 6 and 9	8.44	7.79	8.28	8.24

Appendix B: Laboratory Certificate of Analysis

Hamlet of Coral Harbour
ATTN: DARRYL NAKOOLAK (Waste Water)
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 09-JUL-20
Report Date: 27-JUL-20 14:05 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L2472151

Project P.O. #: NOT SUBMITTED
Job Reference: CORAL HARBOUR WASTE WATER
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
L2472151-1 COR-3							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
Toluene	0.0075		0.0010	mg/L		13-JUL-20	R5152396
Ethyl benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
o-Xylene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
m+p-Xylenes	<0.00040		0.00040	mg/L		13-JUL-20	R5152396
F1 (C6-C10)	<0.10		0.10	mg/L		13-JUL-20	R5152396
Surrogate: 4-Bromofluorobenzene (SS)	81.3		70-130	%		13-JUL-20	R5152396
CCME PHC F2-F4 in Water							
F2 (C10-C16)	0.52		0.10	mg/L	11-JUL-20	11-JUL-20	R5151499
F3 (C16-C34)	5.81		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
F4 (C34-C50)	1.73		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
Surrogate: 2-Bromobenzotrifluoride	114.0		60-140	%	11-JUL-20	11-JUL-20	R5151499
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		16-JUL-20	
F2-Naphth	0.52		0.10	mg/L		16-JUL-20	
F3-PAH	5.81		0.25	mg/L		16-JUL-20	
Total Hydrocarbons (C6-C50)	8.05		0.38	mg/L		16-JUL-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		15-JUL-20	
Miscellaneous Parameters							
Fecal Coliforms	>24200	PEHT	10	MPN/100mL		10-JUL-20	R5149841
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	>24200	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Escherichia Coli	>24200	PEHT	10	MPN/100mL		10-JUL-20	R5149876
CCME PAHs in mg/L							
1-Methyl Naphthalene	0.000023		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
2-Methyl Naphthalene	0.000031		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Acenaphthene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Acenaphthylene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Anthracene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Acridine	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Benzo(a)anthracene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	14-JUL-20	16-JUL-20	R5153564
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Chrysene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	14-JUL-20	16-JUL-20	R5153564
Fluoranthene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Fluorene	<0.000020		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Naphthalene	<0.000050		0.000050	mg/L	14-JUL-20	16-JUL-20	R5153564
Phenanthrene	<0.000050		0.000050	mg/L	14-JUL-20	16-JUL-20	R5153564
Pyrene	<0.000010		0.000010	mg/L	14-JUL-20	16-JUL-20	R5153564
Quinoline	0.000103		0.000020	mg/L	14-JUL-20	16-JUL-20	R5153564
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	14-JUL-20	16-JUL-20	R5153564
Surrogate: d8-Naphthalene	149.0		50-150	%	14-JUL-20	16-JUL-20	R5153564
Surrogate: d10-Phenanthrene	95.7		50-150	%	14-JUL-20	16-JUL-20	R5153564
Surrogate: d12-Chrysene	89.7		50-150	%	14-JUL-20	16-JUL-20	R5153564
Surrogate: d10-Acenaphthene	94.5		50-150	%	14-JUL-20	16-JUL-20	R5153564
Surrogate: d9-Acridine (SS)	94.9		50-150	%	14-JUL-20	16-JUL-20	R5153564

* 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
L2472151-1 COR-3							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	404		1.2	mg/L		14-JUL-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		14-JUL-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		14-JUL-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	331		1.0	mg/L		13-JUL-20	R5152186
Ammonia by colour							
Ammonia, Total (as N)	62.5		5.0	mg/L		15-JUL-20	R5154364
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	141		50	mg/L		10-JUL-20	R5154400
Carbonaceous BOD							
BOD Carbonaceous	135		50	mg/L		10-JUL-20	R5154400
Chloride in Water by IC							
Chloride (Cl)	38.3		1.0	mg/L		10-JUL-20	R5154959
Conductivity							
Conductivity	745		1.0	umhos/cm		13-JUL-20	R5152186
Hardness Calculated							
Hardness (as CaCO3)	108	HTC	0.20	mg/L		17-JUL-20	
Mercury Total							
Mercury (Hg)-Total	0.0000250		0.0000050	mg/L	16-JUL-20	16-JUL-20	R5156978
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		10-JUL-20	R5154959
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		16-JUL-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		10-JUL-20	R5154959
Oil & Grease - Gravimetric							
Oil and Grease	10.8		5.0	mg/L		15-JUL-20	R5154644
Phenol (4AAP)							
Phenols (4AAP)	0.424	DLHC	0.0050	mg/L		15-JUL-20	R5154547
Phosphorus, Total							
Phosphorus (P)-Total	8.16		0.030	mg/L		15-JUL-20	R5153892
Sulfate in Water by IC							
Sulfate (SO4)	<0.60	DLM	0.60	mg/L		10-JUL-20	R5154959
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0484		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Arsenic (As)-Total	0.00397		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cadmium (Cd)-Total	0.0000823		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Calcium (Ca)-Total	36.1		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Chromium (Cr)-Total	0.00055		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cobalt (Co)-Total	0.00097		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Copper (Cu)-Total	0.0245		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Iron (Fe)-Total	0.496		0.010	mg/L	14-JUL-20	15-JUL-20	R5154985
Lead (Pb)-Total	0.000755		0.000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Magnesium (Mg)-Total	4.27		0.0050	mg/L	14-JUL-20	15-JUL-20	R5154985
Manganese (Mn)-Total	0.0618		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Nickel (Ni)-Total	0.00335		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Potassium (K)-Total	18.8		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Sodium (Na)-Total	35.1		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Zinc (Zn)-Total	0.0254		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985

* 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
L2472151-1 COR-3							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Total Organic Carbon by Combustion							
Total Organic Carbon	122		5.0	mg/L		16-JUL-20	R5156950
Total Suspended Solids							
Total Suspended Solids	34.4		7.5	mg/L		15-JUL-20	R5157074
pH							
pH	7.88		0.10	pH units		13-JUL-20	R5152186
L2472151-2 COR-4							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
Toluene	<0.0010	VOCHS	0.0010	mg/L		13-JUL-20	R5152396
Ethyl benzene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
o-Xylene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
m+p-Xylenes	<0.00040	VOCHS	0.00040	mg/L		13-JUL-20	R5152396
F1 (C6-C10)	<0.10	VOCHS	0.10	mg/L		13-JUL-20	R5152396
Surrogate: 4-Bromofluorobenzene (SS)	81.6		70-130	%		13-JUL-20	R5152396
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	11-JUL-20	11-JUL-20	R5151499
F3 (C16-C34)	0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
F4 (C34-C50)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
Surrogate: 2-Bromobenzotrifluoride	113.9		60-140	%	11-JUL-20	11-JUL-20	R5151499
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		15-JUL-20	
F2-Naphth	<0.10		0.10	mg/L		15-JUL-20	
F3-PAH	0.25		0.25	mg/L		15-JUL-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		15-JUL-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		15-JUL-20	
Miscellaneous Parameters							
Fecal Coliforms	200	PEHT	10	MPN/100mL		10-JUL-20	R5149841
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	12000	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Escherichia Coli	160	PEHT	10	MPN/100mL		10-JUL-20	R5149876
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Acridine	0.000025		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Chrysene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluoranthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluorene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564

* 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
L2472151-2 COR-4							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
CCME PAHs in mg/L							
Naphthalene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Phenanthrene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Quinoline	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	14-JUL-20	15-JUL-20	R5153564
Surrogate: d8-Naphthalene	83.5		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Phenanthrene	100.0		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d12-Chrysene	95.7		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Acenaphthene	88.3		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d9-Acridine (SS)	106.7		50-150	%	14-JUL-20	15-JUL-20	R5153564
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	338		1.2	mg/L		14-JUL-20	
Alkalinity, Carbonate							
Carbonate (CO3)	9.96		0.60	mg/L		14-JUL-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		14-JUL-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	294		1.0	mg/L		13-JUL-20	R5152186
Ammonia by colour							
Ammonia, Total (as N)	1.57		0.10	mg/L		15-JUL-20	R5154364
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	26		20	mg/L		10-JUL-20	R5154400
Carbonaceous BOD							
BOD Carbonaceous	25		20	mg/L		10-JUL-20	R5154400
Chloride in Water by IC							
Chloride (Cl)	79.0		0.50	mg/L		10-JUL-20	R5154959
Conductivity							
Conductivity	749		1.0	umhos/cm		13-JUL-20	R5152186
Hardness Calculated							
Hardness (as CaCO3)	277	HTC	0.20	mg/L		27-JUL-20	
Mercury Total							
Mercury (Hg)-Total	0.0000050		0.0000050	mg/L	16-JUL-20	16-JUL-20	R5156978
Nitrate in Water by IC							
Nitrate (as N)	0.162		0.020	mg/L		10-JUL-20	R5154959
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.204		0.070	mg/L		16-JUL-20	
Nitrite in Water by IC							
Nitrite (as N)	0.041		0.010	mg/L		10-JUL-20	R5154959
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		15-JUL-20	R5154644
Phenol (4AAP)							
Phenols (4AAP)	0.0017		0.0010	mg/L		15-JUL-20	R5154547
Phosphorus, Total							
Phosphorus (P)-Total	2.08		0.030	mg/L		15-JUL-20	R5153892
Sulfate in Water by IC							
Sulfate (SO4)	19.2		0.30	mg/L		10-JUL-20	R5154959
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.140		0.0030	mg/L	14-JUL-20	24-JUL-20	R5167579
Arsenic (As)-Total	0.00205		0.00010	mg/L	14-JUL-20	24-JUL-20	R5167579
Cadmium (Cd)-Total	0.000170		0.0000050	mg/L	14-JUL-20	24-JUL-20	R5167579
Calcium (Ca)-Total	98.9		0.050	mg/L	14-JUL-20	24-JUL-20	R5167579

* 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
L2472151-2 COR-4							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Total Metals in Water by CRC ICPMS							
Chromium (Cr)-Total	0.00109		0.00010	mg/L	14-JUL-20	24-JUL-20	R5167579
Cobalt (Co)-Total	0.00175		0.00010	mg/L	14-JUL-20	24-JUL-20	R5167579
Copper (Cu)-Total	0.00863		0.00050	mg/L	14-JUL-20	24-JUL-20	R5167579
Iron (Fe)-Total	1.35		0.010	mg/L	14-JUL-20	24-JUL-20	R5167579
Lead (Pb)-Total	0.000496		0.000050	mg/L	14-JUL-20	24-JUL-20	R5167579
Magnesium (Mg)-Total	7.30		0.0050	mg/L	14-JUL-20	24-JUL-20	R5167579
Manganese (Mn)-Total	0.169		0.00010	mg/L	14-JUL-20	24-JUL-20	R5167579
Nickel (Ni)-Total	0.00595		0.00050	mg/L	14-JUL-20	24-JUL-20	R5167579
Potassium (K)-Total	15.7		0.050	mg/L	14-JUL-20	24-JUL-20	R5167579
Sodium (Na)-Total	68.9		0.050	mg/L	14-JUL-20	24-JUL-20	R5167579
Zinc (Zn)-Total	0.0413		0.0030	mg/L	14-JUL-20	24-JUL-20	R5167579
Total Organic Carbon by Combustion							
Total Organic Carbon	29.9		0.50	mg/L		15-JUL-20	R5154334
Total Suspended Solids							
Total Suspended Solids	86.4		3.0	mg/L		15-JUL-20	R5157074
pH							
pH	8.42		0.10	pH units		13-JUL-20	R5152186
L2472151-3 COR-5							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
Toluene	<0.0010	VOCHS	0.0010	mg/L		13-JUL-20	R5152396
Ethyl benzene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
o-Xylene	<0.00050	VOCHS	0.00050	mg/L		13-JUL-20	R5152396
m+p-Xylenes	<0.00040	VOCHS	0.00040	mg/L		13-JUL-20	R5152396
F1 (C6-C10)	<0.10	VOCHS	0.10	mg/L		13-JUL-20	R5152396
Surrogate: 4-Bromofluorobenzene (SS)	83.4		70-130	%		13-JUL-20	R5152396
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	11-JUL-20	11-JUL-20	R5151499
F3 (C16-C34)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
F4 (C34-C50)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
Surrogate: 2-Bromobenzotrifluoride	128.3		60-140	%	11-JUL-20	11-JUL-20	R5151499
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		15-JUL-20	
F2-Naphth	<0.10		0.10	mg/L		15-JUL-20	
F3-PAH	<0.25		0.25	mg/L		15-JUL-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		15-JUL-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		15-JUL-20	
Miscellaneous Parameters							
Fecal Coliforms	10	PEHT	10	MPN/100mL		10-JUL-20	R5149841
Note: MBEF: Microbiology test results for E. coli > Fecall Coliforms due to sample heterogeneity. Both results are within normal variability for MPN tests							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	1450	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Escherichia Coli	30	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Note: MBEF: Microbiology test results for E. coli > Fecall Coliforms due to sample heterogeneity.							

* 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
L2472151-3 COR-5							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Both results are within normal variability for MPN tests							
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Acridine	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Chrysene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluoranthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluorene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Naphthalene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Phenanthrene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Quinoline	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	14-JUL-20	15-JUL-20	R5153564
Surrogate: d8-Naphthalene	85.2		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Phenanthrene	102.7		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d12-Chrysene	99.5		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Acenaphthene	89.4		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d9-Acridine (SS)	106.3		50-150	%	14-JUL-20	15-JUL-20	R5153564
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	112		1.2	mg/L		14-JUL-20	
Alkalinity, Carbonate							
Carbonate (CO3)	4.20		0.60	mg/L		14-JUL-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		14-JUL-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	98.5		1.0	mg/L		13-JUL-20	R5152186
Ammonia by colour							
Ammonia, Total (as N)	0.034		0.010	mg/L		15-JUL-20	R5154364
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	12.1		2.0	mg/L		10-JUL-20	R5154400
Carbonaceous BOD							
BOD Carbonaceous	7.7		2.0	mg/L		10-JUL-20	R5154400
Chloride in Water by IC							
Chloride (Cl)	35.5		0.50	mg/L		10-JUL-20	R5154959
Conductivity							
Conductivity	359		1.0	umhos/cm		13-JUL-20	R5152186
Hardness Calculated							
Hardness (as CaCO3)	95.6	HTC	0.20	mg/L		17-JUL-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	16-JUL-20	16-JUL-20	R5156978
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
L2472151-3 COR-5							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		10-JUL-20	R5154959
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		16-JUL-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		10-JUL-20	R5154959
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		15-JUL-20	R5154644
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		15-JUL-20	R5154547
Phosphorus, Total							
Phosphorus (P)-Total	0.166		0.0030	mg/L		15-JUL-20	R5153892
Sulfate in Water by IC							
Sulfate (SO4)	41.7		0.30	mg/L		10-JUL-20	R5154959
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0137		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Arsenic (As)-Total	0.00146		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cadmium (Cd)-Total	0.0000646		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Calcium (Ca)-Total	28.7		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Chromium (Cr)-Total	0.00046		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cobalt (Co)-Total	0.00058		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Copper (Cu)-Total	0.00213		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Iron (Fe)-Total	0.280		0.010	mg/L	14-JUL-20	15-JUL-20	R5154985
Lead (Pb)-Total	0.000111		0.000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Magnesium (Mg)-Total	5.83		0.0050	mg/L	14-JUL-20	15-JUL-20	R5154985
Manganese (Mn)-Total	0.0523		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Nickel (Ni)-Total	0.00235		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Potassium (K)-Total	11.6		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Sodium (Na)-Total	31.5		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Zinc (Zn)-Total	0.0141		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Total Organic Carbon by Combustion							
Total Organic Carbon	26.4		0.50	mg/L		15-JUL-20	R5154334
Total Suspended Solids							
Total Suspended Solids	11.8		3.0	mg/L		15-JUL-20	R5157074
pH							
pH	8.44		0.10	pH units		13-JUL-20	R5152186
L2472151-4 COR-6							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
Toluene	<0.0010		0.0010	mg/L		13-JUL-20	R5152396
Ethyl benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
o-Xylene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
m+p-Xylenes	<0.00040		0.00040	mg/L		13-JUL-20	R5152396
F1 (C6-C10)	<0.10		0.10	mg/L		13-JUL-20	R5152396
Surrogate: 4-Bromofluorobenzene (SS)	81.9		70-130	%		13-JUL-20	R5152396
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	11-JUL-20	11-JUL-20	R5151499
F3 (C16-C34)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
F4 (C34-C50)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499

* 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
L2472151-4 COR-6							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
CCME PHC F2-F4 in Water							
Surrogate: 2-Bromobenzotrifluoride	120.1		60-140	%	11-JUL-20	11-JUL-20	R5151499
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		15-JUL-20	
F2-Naphth	<0.10		0.10	mg/L		15-JUL-20	
F3-PAH	<0.25		0.25	mg/L		15-JUL-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		15-JUL-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		15-JUL-20	
Miscellaneous Parameters							
Fecal Coliforms	90	PEHT	10	MPN/100mL		10-JUL-20	R5149841
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	>24200	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Escherichia Coli	60	PEHT	10	MPN/100mL		10-JUL-20	R5149876
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Acridine	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Chrysene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluoranthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluorene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Naphthalene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Phenanthrene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Quinoline	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	14-JUL-20	15-JUL-20	R5153564
Surrogate: d8-Naphthalene	85.6		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Phenanthrene	103.6		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d12-Chrysene	101.7		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Acenaphthene	90.0		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d9-Acridine (SS)	107.9		50-150	%	14-JUL-20	15-JUL-20	R5153564
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	163		1.2	mg/L		14-JUL-20	
Alkalinity, Carbonate							
Carbonate (CO3)	4.44		0.60	mg/L		14-JUL-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		14-JUL-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	141		1.0	mg/L		13-JUL-20	R5152186
Ammonia by colour							
Ammonia, Total (as N)	0.051		0.010	mg/L		15-JUL-20	R5154364
Biochemical Oxygen Demand (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
L2472151-4 COR-6							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	16.4		6.0	mg/L		10-JUL-20	R5154400
Carbonaceous BOD							
BOD Carbonaceous	10.3		2.0	mg/L		10-JUL-20	R5154400
Chloride in Water by IC							
Chloride (Cl)	28.1		0.50	mg/L		10-JUL-20	R5154959
Conductivity							
Conductivity	365		1.0	umhos/cm		13-JUL-20	R5152186
Hardness Calculated							
Hardness (as CaCO3)	134	HTC	0.20	mg/L		17-JUL-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	16-JUL-20	16-JUL-20	R5156978
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		10-JUL-20	R5154959
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		16-JUL-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		10-JUL-20	R5154959
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		15-JUL-20	R5154644
Phenol (4AAP)							
Phenols (4AAP)	0.0016		0.0010	mg/L		15-JUL-20	R5154547
Phosphorus, Total							
Phosphorus (P)-Total	0.427		0.0030	mg/L		15-JUL-20	R5153892
Sulfate in Water by IC							
Sulfate (SO4)	20.5		0.30	mg/L		10-JUL-20	R5154959
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.116		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Arsenic (As)-Total	0.00136		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cadmium (Cd)-Total	0.0000458		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Calcium (Ca)-Total	41.0		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Chromium (Cr)-Total	0.00051		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cobalt (Co)-Total	0.00022		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Copper (Cu)-Total	0.00378		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Iron (Fe)-Total	0.592		0.010	mg/L	14-JUL-20	15-JUL-20	R5154985
Lead (Pb)-Total	0.000341		0.000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Magnesium (Mg)-Total	7.57		0.0050	mg/L	14-JUL-20	15-JUL-20	R5154985
Manganese (Mn)-Total	0.0653		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Nickel (Ni)-Total	0.00116		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Potassium (K)-Total	11.2		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Sodium (Na)-Total	20.7		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Zinc (Zn)-Total	0.0102		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Total Organic Carbon by Combustion							
Total Organic Carbon	27.3		0.50	mg/L		15-JUL-20	R5154334
Total Suspended Solids							
Total Suspended Solids	10.4		3.0	mg/L		15-JUL-20	R5157074
pH							
pH	8.34		0.10	pH units		13-JUL-20	R5152186
L2472151-5 COR-7							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							

* 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
L2472151-5 COR-7							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
Toluene	<0.0010		0.0010	mg/L		13-JUL-20	R5152396
Ethyl benzene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
o-Xylene	<0.00050		0.00050	mg/L		13-JUL-20	R5152396
m+p-Xylenes	<0.00040		0.00040	mg/L		13-JUL-20	R5152396
F1 (C6-C10)	<0.10		0.10	mg/L		13-JUL-20	R5152396
Surrogate: 4-Bromofluorobenzene (SS)	83.8		70-130	%		13-JUL-20	R5152396
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	11-JUL-20	11-JUL-20	R5151499
F3 (C16-C34)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
F4 (C34-C50)	<0.25		0.25	mg/L	11-JUL-20	11-JUL-20	R5151499
Surrogate: 2-Bromobenzotrifluoride	114.9		60-140	%	11-JUL-20	11-JUL-20	R5151499
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		15-JUL-20	
F2-Naphth	<0.10		0.10	mg/L		15-JUL-20	
F3-PAH	<0.25		0.25	mg/L		15-JUL-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		15-JUL-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		15-JUL-20	
Miscellaneous Parameters							
Fecal Coliforms	10	PEHT	10	MPN/100mL		10-JUL-20	R5149841
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	180	PEHT	10	MPN/100mL		10-JUL-20	R5149876
Escherichia Coli	10	PEHT	10	MPN/100mL		10-JUL-20	R5149876
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Acenaphthylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Acridine	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)anthracene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Chrysene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluoranthene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Fluorene	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Naphthalene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Phenanthrene	<0.000050		0.000050	mg/L	14-JUL-20	15-JUL-20	R5153564
Pyrene	<0.000010		0.000010	mg/L	14-JUL-20	15-JUL-20	R5153564
Quinoline	<0.000020		0.000020	mg/L	14-JUL-20	15-JUL-20	R5153564
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	14-JUL-20	15-JUL-20	R5153564
Surrogate: d8-Naphthalene	83.0		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Phenanthrene	101.4		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d12-Chrysene	99.4		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d10-Acenaphthene	88.2		50-150	%	14-JUL-20	15-JUL-20	R5153564
Surrogate: d9-Acridine (SS)	103.5		50-150	%	14-JUL-20	15-JUL-20	R5153564
Nunavut WW Group 1							

* 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
L2472151-5 COR-7							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	130		1.2	mg/L		14-JUL-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		14-JUL-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		14-JUL-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	107		1.0	mg/L		13-JUL-20	R5152186
Ammonia by colour							
Ammonia, Total (as N)	0.049		0.010	mg/L		15-JUL-20	R5154364
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		10-JUL-20	R5154400
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		10-JUL-20	R5154400
Chloride in Water by IC							
Chloride (Cl)	4.18		0.50	mg/L		10-JUL-20	R5154959
Conductivity							
Conductivity	526		1.0	umhos/cm		13-JUL-20	R5152186
Hardness Calculated							
Hardness (as CaCO3)	264	HTC	0.20	mg/L		17-JUL-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	16-JUL-20	16-JUL-20	R5156978
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		10-JUL-20	R5154959
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		16-JUL-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		10-JUL-20	R5154959
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		15-JUL-20	R5154644
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		15-JUL-20	R5154547
Phosphorus, Total							
Phosphorus (P)-Total	0.0856		0.0030	mg/L		15-JUL-20	R5153892
Sulfate in Water by IC							
Sulfate (SO4)	178		0.30	mg/L		10-JUL-20	R5154959
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0081		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
Arsenic (As)-Total	0.00062		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cadmium (Cd)-Total	0.0000636		0.0000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Calcium (Ca)-Total	98.0		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Chromium (Cr)-Total	0.00028		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Cobalt (Co)-Total	0.00019		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Copper (Cu)-Total	0.00311		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Iron (Fe)-Total	0.454		0.010	mg/L	14-JUL-20	15-JUL-20	R5154985
Lead (Pb)-Total	0.000186		0.000050	mg/L	14-JUL-20	15-JUL-20	R5154985
Magnesium (Mg)-Total	4.59		0.0050	mg/L	14-JUL-20	15-JUL-20	R5154985
Manganese (Mn)-Total	0.0313		0.00010	mg/L	14-JUL-20	15-JUL-20	R5154985
Nickel (Ni)-Total	0.00195		0.00050	mg/L	14-JUL-20	15-JUL-20	R5154985
Potassium (K)-Total	3.82		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Sodium (Na)-Total	5.30		0.050	mg/L	14-JUL-20	15-JUL-20	R5154985
Zinc (Zn)-Total	0.0499		0.0030	mg/L	14-JUL-20	15-JUL-20	R5154985
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
L2472151-5 COR-7							
Sampled By: CLIENT on 08-JUL-20							
Matrix: WATER							
Total Organic Carbon by Combustion							
Total Organic Carbon	11.9		0.50	mg/L		15-JUL-20	R5154334
Total Suspended Solids							
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-20	R5157074
pH							
pH	7.98		0.10	pH units		13-JUL-20	R5152186

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

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
DLHC	Detection Limit Raised: Dilution required due to high concentration of test analyte(s).
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.
PEHT	Parameter Exceeded Recommended Holding Time Prior to Analysis
VOCHS	VOC analysis was conducted for a water sample that contained > 5% headspace. Results may be biased low.

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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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.

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 degrees 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-CVAA-WP	Water	Mercury Total	EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020B (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-L

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

PAH-CCME-PPM-WT	Water	CCME PAHs in mg/L	EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

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.			
TC,EC10-QT97-WP	Water	Total and E. coli, 1:10 dilution by QT97	APHA 9223B QT97
Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Susbtrate Coliform Test". Total coliforms and Eschericia coli bacteria are simultaneously 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 35.0 +/- 0.5 degrees C for 18 or 24 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.			
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:

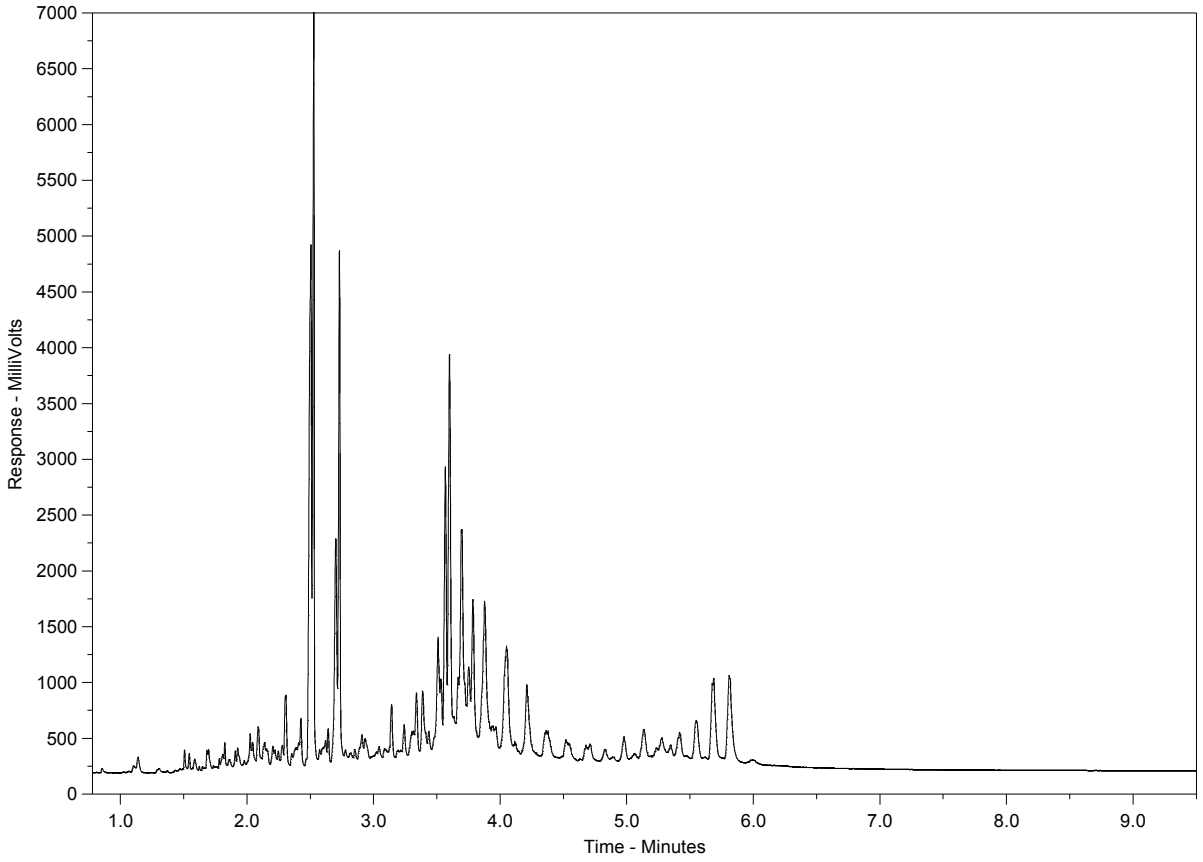
GLOSSARY OF REPORT TERMS

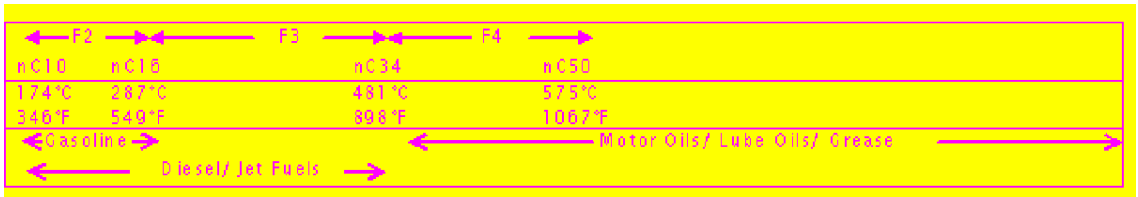
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates 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: L2472151-1
Client Sample ID: COR-3





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

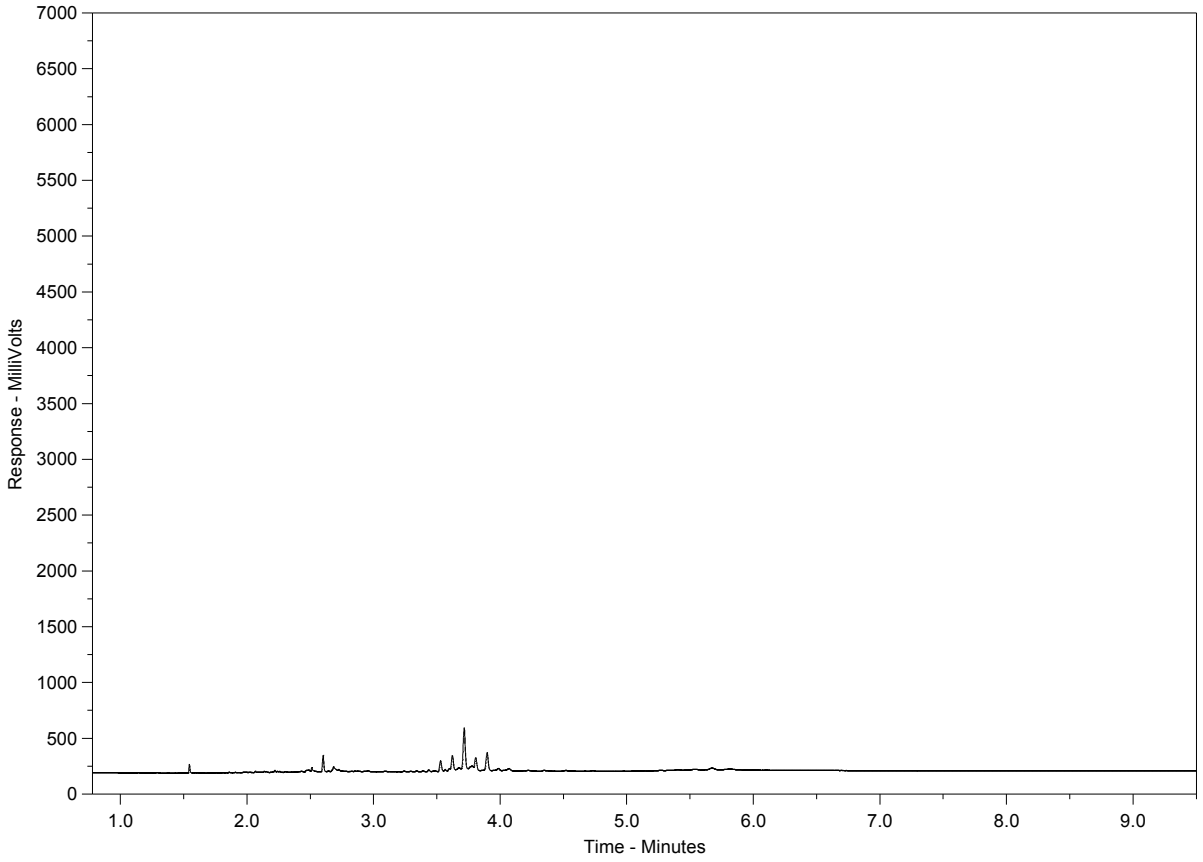
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

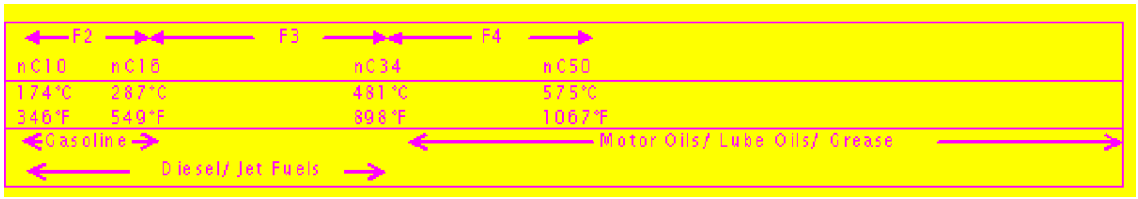
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2472151-2
Client Sample ID: COR-4





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

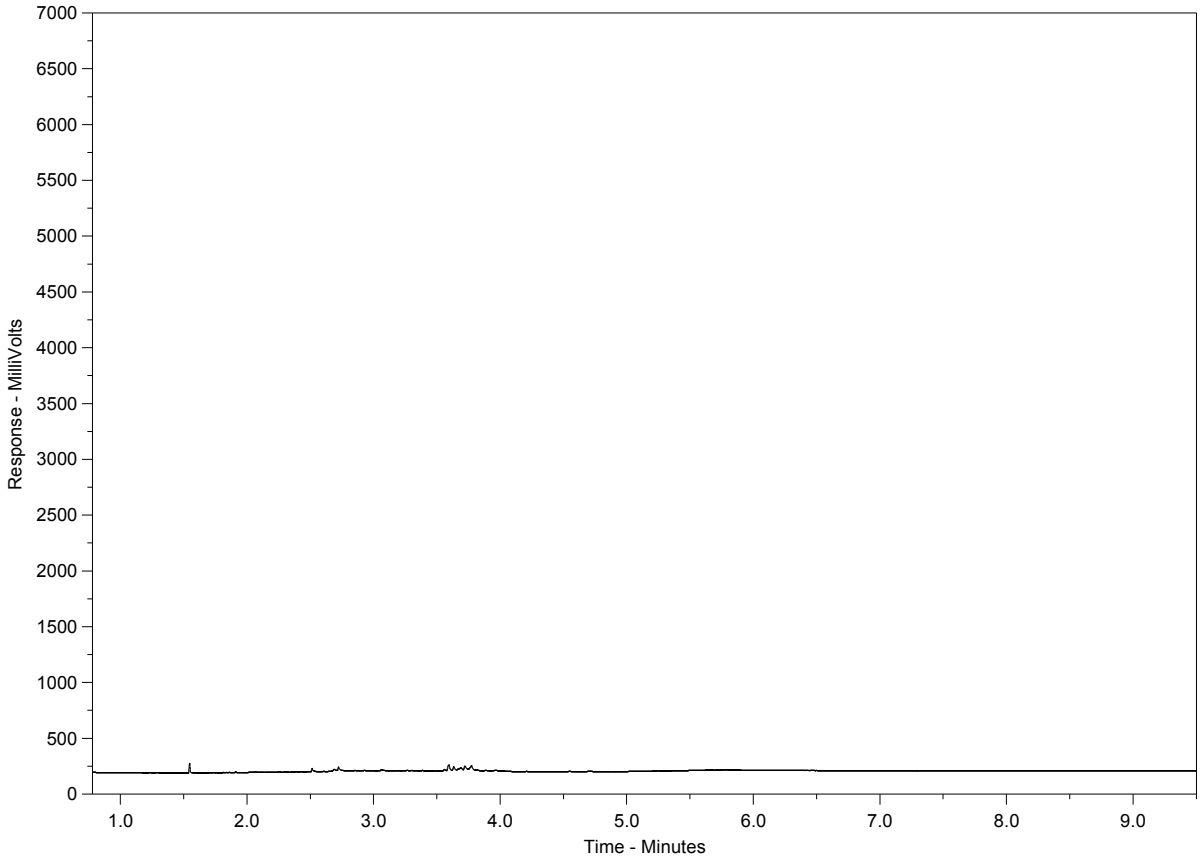
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

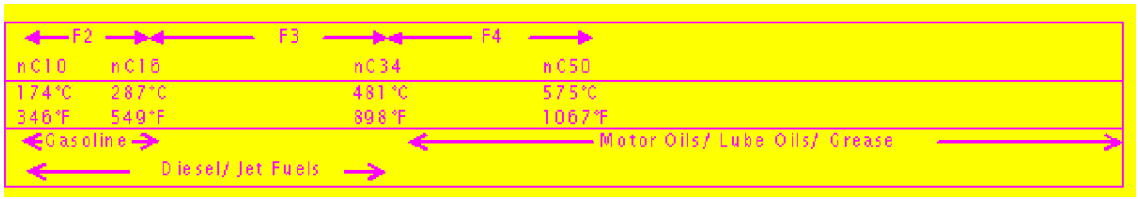
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2472151-3
Client Sample ID: COR-5





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

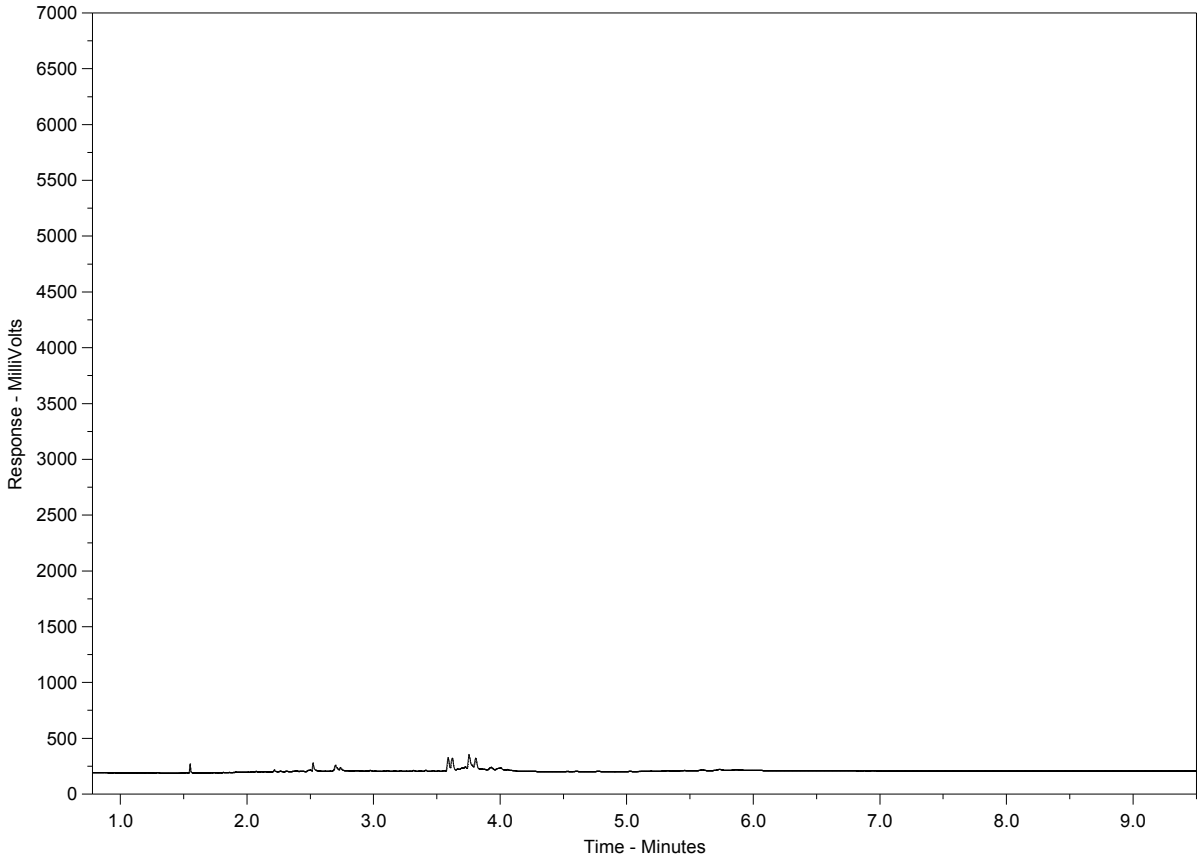
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

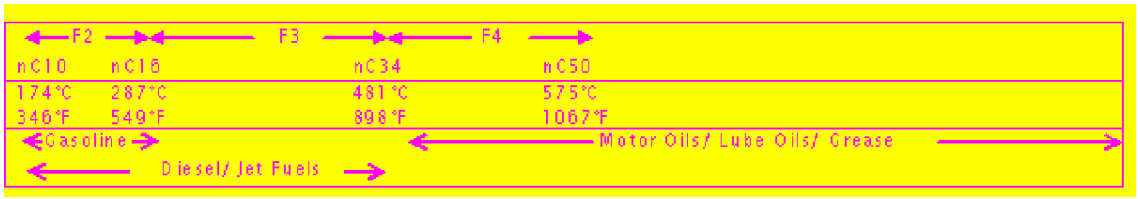
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2472151-4
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.

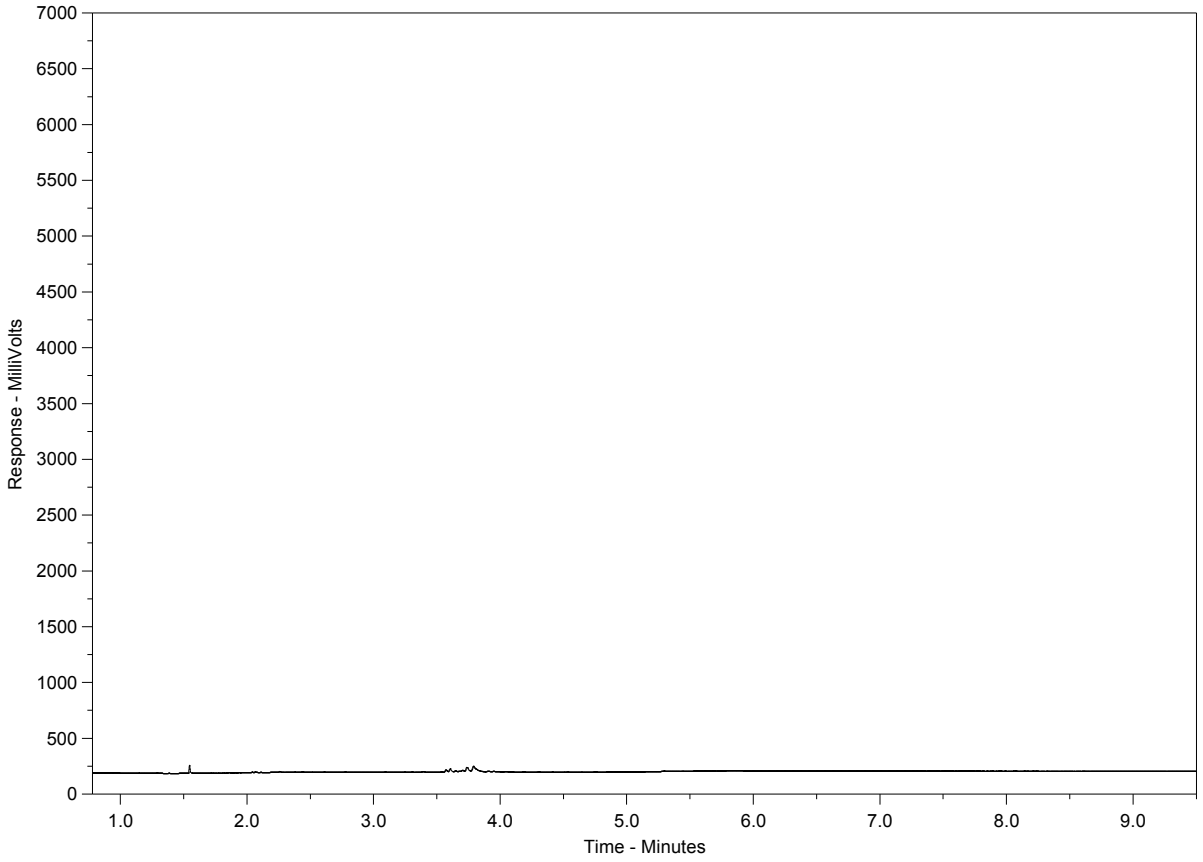
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

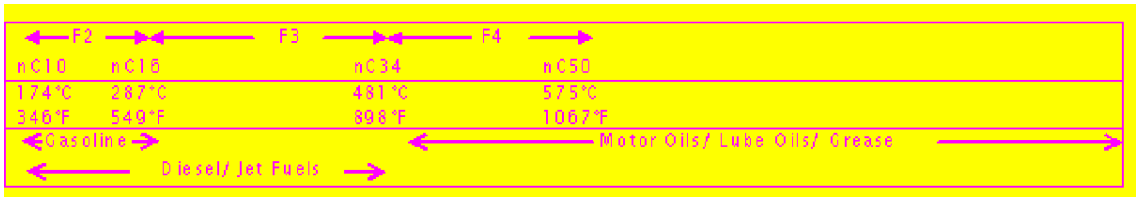
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2472151-5
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.

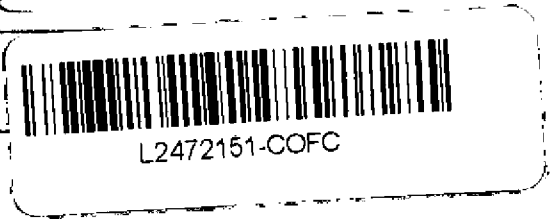
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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.

Field Log

Name of Sampler(s): Daray Nakoolak

Date of Sampling: 8/07/20



Time of Sampling: 10:20

Monitoring Station Number: Cor-6

GPS Coordinates: N 64 ° 09 '767 " W 83 ° 11 '628 "

Weather Conditions: Sunny / Cloudy

Samples:

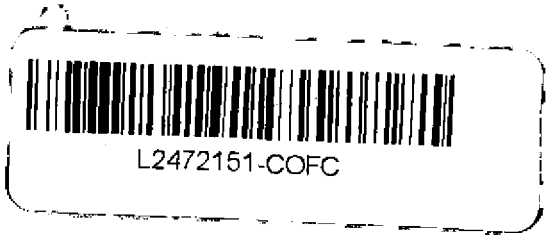
- [x] 500 mL BOD x2
- [x] 500 mL Routine
- [x] 500 mL CBOD
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 100 mL Amber Nutrients + Pres
- [x] 100 mL Amber Phenols + Pres
- [x] 250 mL Sterile Bacteria Bottle
- [x] **2 x** 250 mL Amber Oil & Grease + Pres
- [ ] 60 mL Metals + Pres
- [x] **3 x** 40 mL BTEX, F1 Vials + Pres
- [x] **2 x** 100 mL Amber F2-F4 Vials + Pres
- [ ] **2 x** 250 mL Amber PAH + Pres

Other:

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

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

Done



Field Log

Name of Sampler(s): Darcy Nakoolak

Date of Sampling: 8/07/20

Time of Sampling: ~~Cor-~~ 7 Corolltabou Waste Water 1000 Am

Monitoring Station Number: Cor-7

GPS Coordinates: N 64 ° 09 ' 611 " W 83 ° 11 ' 538 "

Weather Conditions: Sunny / Cloudy

Samples:

- [x] 500 mL BOD x 2
- [x] 500 mL Routine
- [x] 500 mL CBOD
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 100 mL Amber Nutrients + Pres
- [x] 100 mL Amber Phenols + Pres
- [x] 250 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 60 mL Metals + Pres
- [x] 3 x 40 mL BTEX, F1 Vials + Pres
- [x] 2 x 100 mL Amber F2-F4 Vials + Pres
- [ ] 2 x 250 mL Amber PAH + Pres

Other:

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

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

Done

Field Log

Name of Sampler(s): Daray Nakoolak

Date of Sampling: 8/07/20

Time of Sampling: 10:30

Monitoring Station Number: Cor-3

GPS Coordinates: N 64 ° 09 ' 870 " W 83 ° 11 ' 540 "

Weather Conditions: Sunny/Cloudy

Samples:

- [x] 500 mL BOD
- [x] 500 mL Routine
- [x] 500 mL CBOD
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 100 mL Amber Nutrients + Pres
- [x] 100 mL Amber Phenols + Pres
- [x] 250 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 60 mL Metals + Pres
- [x] 3 x 40 mL BTEX, F1 Vials + Pres
- [x] 2 x 100 mL Amber F2-F4 Vials + Pres
- [ ] 2 x 250 mL Amber PAH + Pres

Other:

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

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

_____

_____

_____

_____

_____

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JUL 09 2020

1240

L2472151-COFC

Field Log

Name of Sampler(s): Dany Nikoolak

Date of Sampling: 8/07/20

Time of Sampling: 10:40

Monitoring Station Number: Cor-4

GPS Coordinates: N 64 ° 09 ' 826 " W 83 ° 11 ' 405 "

Weather Conditions: Sunny Cloudy

Samples:

- [x] 500 mL BOD
- [x] 500 mL Routine
- [x] 500 mL CBOD
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 100 mL Amber Nutrients + Pres
- [x] 100 mL Amber Phenols + Pres
- [x] 250 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 60 mL Metals + Pres
- [x] 3 x 40 mL BTEX, F1 Vials + Pres
- [x] 2 x 100 mL Amber F2-F4 Vials + Pres
- [ ] 2 x 250 mL Amber PAH + Pres

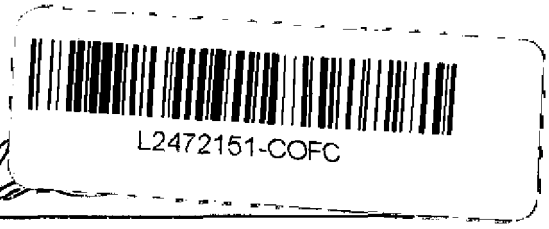
Other:

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

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

Done

Field Log



Name of Sampler(s): Doug Nikolaou

Date of Sampling: 8/07/20

Time of Sampling: 11:00

Monitoring Station Number: Cor-5

GPS Coordinates: N 64 ° 04' 589" W 83 ° 11 '047"

Weather Conditions: Sunny / Cloudy

Samples:

- [x] 500 mL BOD
- [x] 500 mL Routine
- [x] 500 mL CBOD
- [x] 40 mL Glass Mercury Vial + Pres
- [x] 100 mL Amber Nutrients + Pres
- [x] 100 mL Amber Phenols + Pres
- [x] 250 mL Sterile Bacteria Bottle
- [x] 2 x 250 mL Amber Oil & Grease + Pres
- [ ] 60 mL Metals + Pres
- [x] 3 x 40 mL BTEX, F1 Vials + Pres
- [x] 2 x 100 mL Amber F2-F4 Vials + Pres
- [ ] 2 x 250 mL Amber PAH + Pres

Other:

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

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

B60 JUL 09 2020

240

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

Date Received: 28-AUG-20
Report Date: 08-SEP-20 15:52 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L2495813

Project P.O. #: NOT SUBMITTED
Job Reference: HAMLET OF CORAL HARBOUR - WASTE WATERS
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
L2495813-1 COR 7							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
Toluene	<0.0010		0.0010	mg/L		31-AUG-20	R5207057
Ethyl benzene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
o-Xylene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
m+p-Xylenes	<0.00040		0.00040	mg/L		31-AUG-20	R5207057
F1 (C6-C10)	<0.10		0.10	mg/L		31-AUG-20	R5207057
Surrogate: 4-Bromofluorobenzene (SS)	85.1		70-130	%		31-AUG-20	R5207057
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	02-SEP-20	02-SEP-20	R5209346
F3 (C16-C34)	<0.25		0.25	mg/L	02-SEP-20	02-SEP-20	R5209346
F4 (C34-C50)	<0.25		0.25	mg/L	02-SEP-20	02-SEP-20	R5209346
Surrogate: 2-Bromobenzotrifluoride	94.9		60-140	%	02-SEP-20	02-SEP-20	R5209346
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		03-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		03-SEP-20	
F3-PAH	<0.25		0.25	mg/L		03-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		03-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		01-SEP-20	
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Acenaphthene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Acenaphthylene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Anthracene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Acridine	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(a)anthracene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Chrysene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Fluoranthene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Fluorene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Naphthalene	<0.000050		0.000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Phenanthrene	<0.000050		0.000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Pyrene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Quinoline	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	31-AUG-20	03-SEP-20	R5209421
Surrogate: d8-Naphthalene	81.1		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d10-Phenanthrene	95.9		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d12-Chrysene	86.4		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d10-Acenaphthene	86.6		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d9-Acridine (SS)	98.1		50-150	%	31-AUG-20	03-SEP-20	R5209421
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	120		1.2	mg/L		01-SEP-20	
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
L2495813-1 COR 7							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	98.5		1.0	mg/L		31-AUG-20	R5207259
Ammonia by colour							
Ammonia, Total (as N)	0.079		0.010	mg/L		01-SEP-20	R5208683
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	7.7		6.0	mg/L		28-AUG-20	R5209364
Carbonaceous BOD							
BOD Carbonaceous	<6.0		6.0	mg/L		28-AUG-20	R5209364
Chloride in Water by IC							
Chloride (Cl)	6.8		1.0	mg/L		28-AUG-20	R5208621
Conductivity							
Conductivity	901		1.0	umhos/cm		31-AUG-20	R5207259
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	30	PEHR	10	MPN/100mL		28-AUG-20	R5204025
Hardness Calculated							
Hardness (as CaCO3)	486	HTC	0.20	mg/L		02-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	08-SEP-20	08-SEP-20	R5215541
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		28-AUG-20	R5208621
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		02-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		28-AUG-20	R5208621
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		04-SEP-20	R5210446
Phenol (4AAP)							
Phenols (4AAP)	0.0010		0.0010	mg/L		31-AUG-20	R5207979
Phosphorus, Total							
Phosphorus (P)-Total	0.0794		0.0030	mg/L		02-SEP-20	R5208817
Sulfate in Water by IC							
Sulfate (SO4)	421		0.60	mg/L		28-AUG-20	R5208621
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0234		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Arsenic (As)-Total	0.00070		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cadmium (Cd)-Total	0.0000426		0.0000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Calcium (Ca)-Total	178		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Chromium (Cr)-Total	0.00037		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cobalt (Co)-Total	0.00029		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Copper (Cu)-Total	0.00395		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Iron (Fe)-Total	1.36		0.010	mg/L	01-SEP-20	01-SEP-20	R5208572
Lead (Pb)-Total	0.000544		0.000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Magnesium (Mg)-Total	9.99		0.0050	mg/L	01-SEP-20	01-SEP-20	R5208572
Manganese (Mn)-Total	0.0334		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Nickel (Ni)-Total	0.00354		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Potassium (K)-Total	6.61		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Sodium (Na)-Total	12.5		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Zinc (Zn)-Total	0.0559		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
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
L2495813-1 COR 7							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Total Organic Carbon by Combustion							
Total Organic Carbon	17.7		0.50	mg/L		02-SEP-20	R5209758
Total Suspended Solids							
Total Suspended Solids	15.7		3.0	mg/L		31-AUG-20	R5207964
pH							
pH	7.89		0.10	pH units		31-AUG-20	R5207259
L2495813-2 COR 6							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
Toluene	<0.0010		0.0010	mg/L		31-AUG-20	R5207057
Ethyl benzene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
o-Xylene	<0.00050		0.00050	mg/L		31-AUG-20	R5207057
m+p-Xylenes	<0.00040		0.00040	mg/L		31-AUG-20	R5207057
F1 (C6-C10)	<0.10		0.10	mg/L		31-AUG-20	R5207057
Surrogate: 4-Bromofluorobenzene (SS)	86.5		70-130	%		31-AUG-20	R5207057
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	02-SEP-20	02-SEP-20	R5209346
F3 (C16-C34)	0.28		0.25	mg/L	02-SEP-20	02-SEP-20	R5209346
F4 (C34-C50)	<0.25		0.25	mg/L	02-SEP-20	02-SEP-20	R5209346
Surrogate: 2-Bromobenzotrifluoride	105.5		60-140	%	02-SEP-20	02-SEP-20	R5209346
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		03-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		03-SEP-20	
F3-PAH	0.28		0.25	mg/L		03-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		03-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		01-SEP-20	
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Acenaphthene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Acenaphthylene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Anthracene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Acridine	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(a)anthracene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Chrysene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Fluoranthene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Fluorene	<0.000020		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Naphthalene	<0.000050		0.000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Phenanthrene	<0.000050		0.000050	mg/L	31-AUG-20	03-SEP-20	R5209421
Pyrene	<0.000010		0.000010	mg/L	31-AUG-20	03-SEP-20	R5209421
Quinoline	0.000028		0.000020	mg/L	31-AUG-20	03-SEP-20	R5209421

* 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
L2495813-2 COR 6							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
CCME PAHs in mg/L							
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	31-AUG-20	03-SEP-20	R5209421
Surrogate: d8-Naphthalene	85.7		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d10-Phenanthrene	99.2		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d12-Chrysene	89.4		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d10-Acenaphthene	90.2		50-150	%	31-AUG-20	03-SEP-20	R5209421
Surrogate: d9-Acridine (SS)	104.5		50-150	%	31-AUG-20	03-SEP-20	R5209421
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	297		1.2	mg/L		01-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	243		1.0	mg/L		31-AUG-20	R5207259
Ammonia by colour							
Ammonia, Total (as N)	0.091		0.010	mg/L		01-SEP-20	R5208683
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	27.9		6.0	mg/L		28-AUG-20	R5209364
Carbonaceous BOD							
BOD Carbonaceous	9.9		2.0	mg/L		28-AUG-20	R5209364
Chloride in Water by IC							
Chloride (Cl)	53.9		0.50	mg/L		28-AUG-20	R5208621
Conductivity							
Conductivity	655		1.0	umhos/cm		31-AUG-20	R5207259
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	40	PEHR	10	MPN/100mL		28-AUG-20	R5204025
Hardness Calculated							
Hardness (as CaCO3)	241	HTC	0.20	mg/L		02-SEP-20	
Mercury Total							
Mercury (Hg)-Total	0.0000050		0.0000050	mg/L	08-SEP-20	08-SEP-20	R5215541
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		28-AUG-20	R5208621
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		02-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		28-AUG-20	R5208621
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		04-SEP-20	R5210446
Phenol (4AAP)							
Phenols (4AAP)	0.0018		0.0010	mg/L		31-AUG-20	R5207979
Phosphorus, Total							
Phosphorus (P)-Total	0.308		0.0030	mg/L		02-SEP-20	R5208817
Sulfate in Water by IC							
Sulfate (SO4)	35.8		0.30	mg/L		28-AUG-20	R5208621
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.126		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Arsenic (As)-Total	0.00266		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cadmium (Cd)-Total	0.0000087		0.0000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Calcium (Ca)-Total	62.1		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Chromium (Cr)-Total	0.00076		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cobalt (Co)-Total	0.00030		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572

* 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
L2495813-2 COR 6							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Total Metals in Water by CRC ICPMS							
Copper (Cu)-Total	0.00270		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Iron (Fe)-Total	1.50		0.010	mg/L	01-SEP-20	01-SEP-20	R5208572
Lead (Pb)-Total	0.000524		0.000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Magnesium (Mg)-Total	20.8		0.0050	mg/L	01-SEP-20	01-SEP-20	R5208572
Manganese (Mn)-Total	0.0663		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Nickel (Ni)-Total	0.00218		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Potassium (K)-Total	24.4		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Sodium (Na)-Total	48.8		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Zinc (Zn)-Total	0.0082		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Total Organic Carbon by Combustion							
Total Organic Carbon	38.8		0.50	mg/L		02-SEP-20	R5209758
Total Suspended Solids							
Total Suspended Solids	34.9		3.0	mg/L		31-AUG-20	R5207964
pH							
pH	8.19		0.10	pH units		31-AUG-20	R5207259
L2495813-3 COR 5							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	422		1.2	mg/L		01-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	346		1.0	mg/L		31-AUG-20	R5207259
Ammonia by colour							
Ammonia, Total (as N)	45.2		1.0	mg/L		01-SEP-20	R5208683
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	47		20	mg/L		28-AUG-20	R5209364
Carbonaceous BOD							
BOD Carbonaceous	30.2		6.0	mg/L		28-AUG-20	R5209364
Chloride in Water by IC							
Chloride (Cl)	60.1		1.0	mg/L		28-AUG-20	R5208621
Conductivity							
Conductivity	879		1.0	umhos/cm		31-AUG-20	R5207259
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	3080	PEHR	10	MPN/100mL		28-AUG-20	R5204025
Hardness Calculated							
Hardness (as CaCO3)	151	HTC	0.20	mg/L		02-SEP-20	
Mercury Total							
Mercury (Hg)-Total	0.0000060		0.0000050	mg/L	08-SEP-20	08-SEP-20	R5215541
Nitrate in Water by IC							
Nitrate (as N)	0.070		0.040	mg/L		28-AUG-20	R5208621
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.100		0.070	mg/L		02-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.031		0.020	mg/L		28-AUG-20	R5208621
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		04-SEP-20	R5210446

* 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
L2495813-3 COR 5							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Phenol (4AAP)							
Phenols (4AAP)	<0.0050	DLM	0.0050	mg/L		31-AUG-20	R5207979
Phosphorus, Total							
Phosphorus (P)-Total	8.55		0.030	mg/L		02-SEP-20	R5208817
Sulfate in Water by IC							
Sulfate (SO4)	12.8		0.60	mg/L		28-AUG-20	R5208621
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0738		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Arsenic (As)-Total	0.00109		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cadmium (Cd)-Total	0.0000131		0.0000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Calcium (Ca)-Total	50.7		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Chromium (Cr)-Total	0.00037		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cobalt (Co)-Total	0.00056		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Copper (Cu)-Total	0.0100		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Iron (Fe)-Total	0.429		0.010	mg/L	01-SEP-20	01-SEP-20	R5208572
Lead (Pb)-Total	0.000288		0.000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Magnesium (Mg)-Total	6.04		0.0050	mg/L	01-SEP-20	01-SEP-20	R5208572
Manganese (Mn)-Total	0.0630		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Nickel (Ni)-Total	0.00245		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Potassium (K)-Total	24.7		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Sodium (Na)-Total	57.3		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Zinc (Zn)-Total	0.0184		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Total Organic Carbon by Combustion							
Total Organic Carbon	89.9		5.0	mg/L		02-SEP-20	R5209758
Total Suspended Solids							
Total Suspended Solids	152		3.0	mg/L		31-AUG-20	R5207964
pH							
pH	7.79		0.10	pH units		31-AUG-20	R5207259
L2495813-4 COR 4							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	329		1.2	mg/L		01-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	270		1.0	mg/L		31-AUG-20	R5207259
Ammonia by colour							
Ammonia, Total (as N)	1.08		0.10	mg/L		01-SEP-20	R5208683
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	6.1		2.0	mg/L		28-AUG-20	R5209364
Carbonaceous BOD							
BOD Carbonaceous	2.7		2.0	mg/L		28-AUG-20	R5209364
Chloride in Water by IC							
Chloride (Cl)	61.7		0.50	mg/L		28-AUG-20	R5208621
Conductivity							
Conductivity	710		1.0	umhos/cm		31-AUG-20	R5207259
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	30	PEHR	10	MPN/100mL		28-AUG-20	R5204025

* 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
L2495813-4 COR 4							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Hardness Calculated							
Hardness (as CaCO3)	257	HTC	0.20	mg/L		02-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	08-SEP-20	08-SEP-20	R5215541
Nitrate in Water by IC							
Nitrate (as N)	2.11		0.020	mg/L		28-AUG-20	R5208621
Nitrate+Nitrite							
Nitrate and Nitrite as N	2.21		0.070	mg/L		02-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.104		0.010	mg/L		28-AUG-20	R5208621
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		04-SEP-20	R5210465
Phenol (4AAP)							
Phenols (4AAP)	0.0023	SP	0.0010	mg/L		31-AUG-20	R5207979
Phosphorus, Total							
Phosphorus (P)-Total	0.146		0.0030	mg/L		02-SEP-20	R5208817
Sulfate in Water by IC							
Sulfate (SO4)	23.0		0.30	mg/L		28-AUG-20	R5208621
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0124		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Arsenic (As)-Total	0.00104		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cadmium (Cd)-Total	0.0000263		0.0000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Calcium (Ca)-Total	88.2		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Chromium (Cr)-Total	0.00019		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cobalt (Co)-Total	0.00154		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Copper (Cu)-Total	0.00221		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Iron (Fe)-Total	0.187		0.010	mg/L	01-SEP-20	01-SEP-20	R5208572
Lead (Pb)-Total	<0.000050		0.000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Magnesium (Mg)-Total	8.86		0.0050	mg/L	01-SEP-20	01-SEP-20	R5208572
Manganese (Mn)-Total	0.103		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Nickel (Ni)-Total	0.00544		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Potassium (K)-Total	10.3		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Sodium (Na)-Total	50.9		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Zinc (Zn)-Total	0.0030		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Total Organic Carbon by Combustion							
Total Organic Carbon	11.4		0.50	mg/L		04-SEP-20	R5215101
Total Suspended Solids							
Total Suspended Solids	127		3.0	mg/L		31-AUG-20	R5207964
pH							
pH	8.23		0.10	pH units		31-AUG-20	R5207259
L2495813-5 COR 3							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	187		1.2	mg/L		01-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		01-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	153		1.0	mg/L		31-AUG-20	R5207259

* 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
L2495813-5 COR 3							
Sampled By: CASEY on 26-AUG-20							
Matrix: Waste Water							
Ammonia by colour							
Ammonia, Total (as N)	0.049		0.010	mg/L		01-SEP-20	R5208683
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		28-AUG-20	R5209364
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		28-AUG-20	R5209364
Chloride in Water by IC							
Chloride (Cl)	50.4		0.50	mg/L		28-AUG-20	R5208621
Conductivity							
Conductivity	535		1.0	umhos/cm		31-AUG-20	R5207259
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		28-AUG-20	R5204025
Hardness Calculated							
Hardness (as CaCO3)	164	HTC	0.20	mg/L		02-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	08-SEP-20	08-SEP-20	R5215541
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		28-AUG-20	R5208621
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		02-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		28-AUG-20	R5208621
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		04-SEP-20	R5210465
Phenol (4AAP)							
Phenols (4AAP)	0.0020		0.0010	mg/L		31-AUG-20	R5207979
Phosphorus, Total							
Phosphorus (P)-Total	0.0431		0.0030	mg/L		02-SEP-20	R5208817
Sulfate in Water by IC							
Sulfate (SO4)	56.6		0.30	mg/L		28-AUG-20	R5208621
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0081		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Arsenic (As)-Total	0.00086		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Calcium (Ca)-Total	48.0		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Chromium (Cr)-Total	0.00028		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Cobalt (Co)-Total	0.00028		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Copper (Cu)-Total	0.00082		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Iron (Fe)-Total	0.168		0.010	mg/L	01-SEP-20	01-SEP-20	R5208572
Lead (Pb)-Total	<0.000050		0.000050	mg/L	01-SEP-20	01-SEP-20	R5208572
Magnesium (Mg)-Total	10.6		0.0050	mg/L	01-SEP-20	01-SEP-20	R5208572
Manganese (Mn)-Total	0.0215		0.00010	mg/L	01-SEP-20	01-SEP-20	R5208572
Nickel (Ni)-Total	0.00202		0.00050	mg/L	01-SEP-20	01-SEP-20	R5208572
Potassium (K)-Total	10.5		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Sodium (Na)-Total	49.3		0.050	mg/L	01-SEP-20	01-SEP-20	R5208572
Zinc (Zn)-Total	0.0057		0.0030	mg/L	01-SEP-20	01-SEP-20	R5208572
Total Organic Carbon by Combustion							
Total Organic Carbon	19.9		0.50	mg/L		02-SEP-20	R5209758
Total Suspended Solids							
Total Suspended Solids	<3.0		3.0	mg/L		31-AUG-20	R5207964
pH							
pH	8.22		0.10	pH units		31-AUG-20	R5207259

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

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
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.
SP	Sample was Preserved at the laboratory

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 degrees 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-CVAA-WP	Water	Mercury Total	EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020B (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-L

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

PAH-CCME-PPM-WT	Water	CCME PAHs in mg/L	EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
		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:

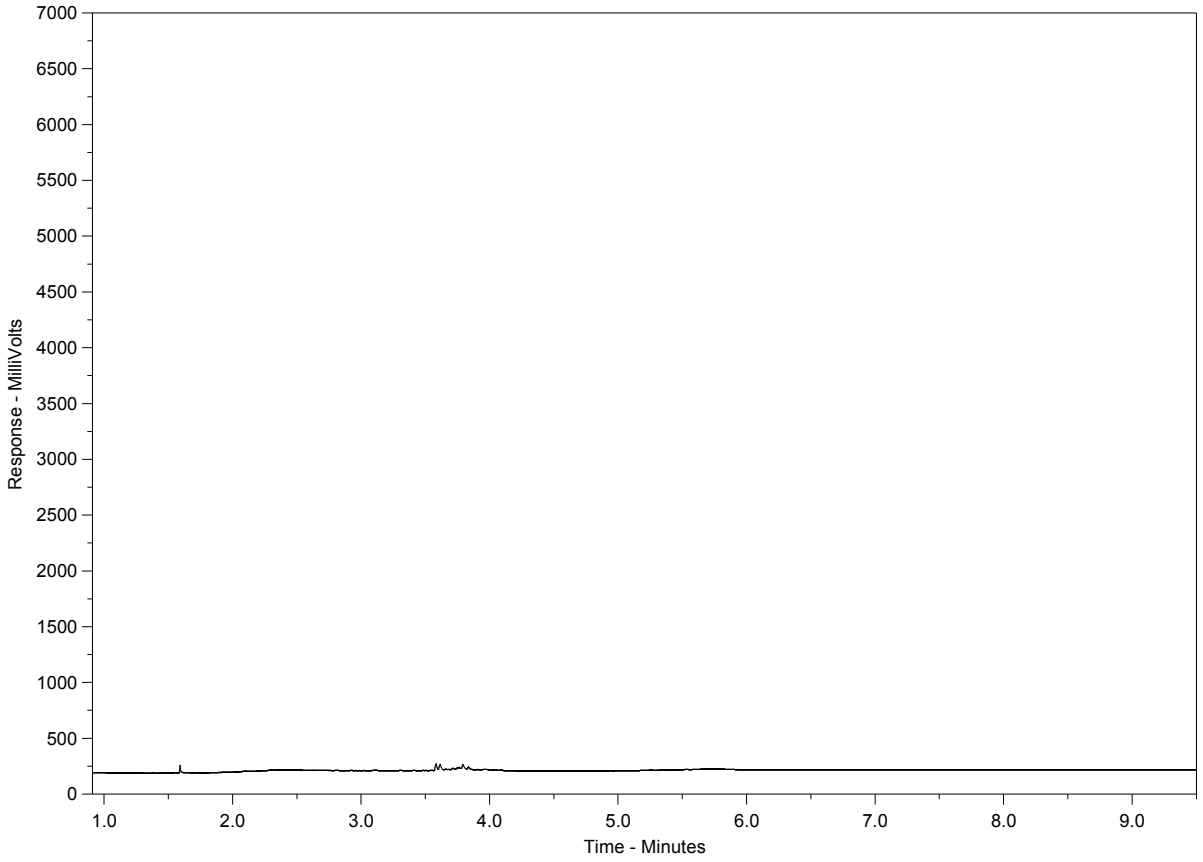
GLOSSARY OF REPORT TERMS

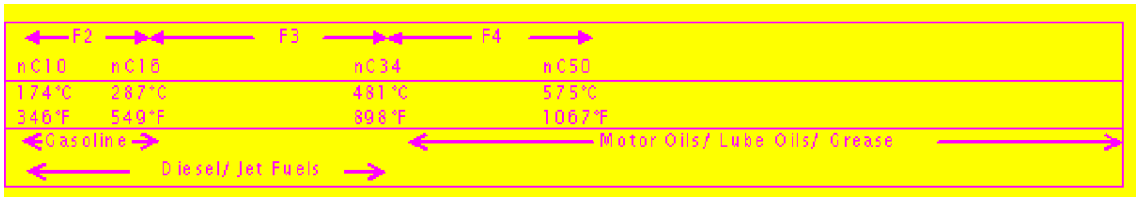
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates 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: L2495813-1
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.

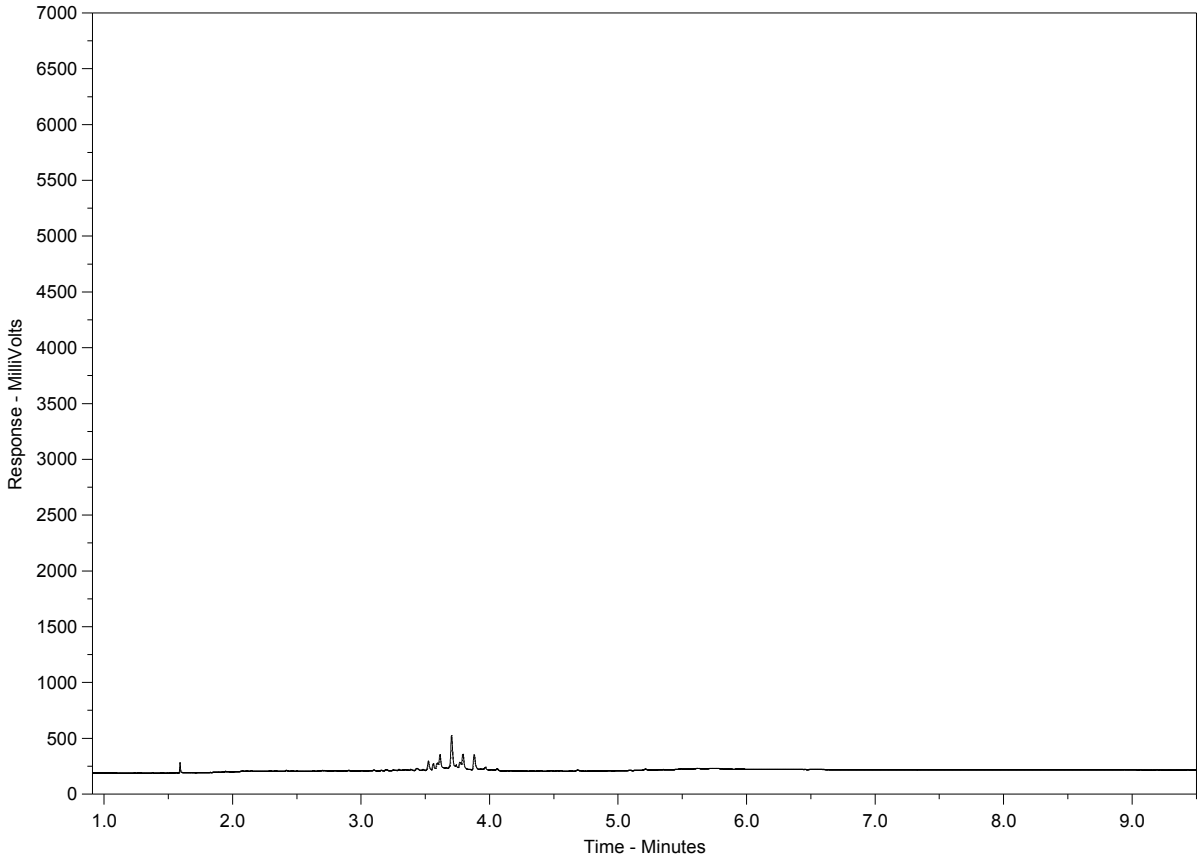
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

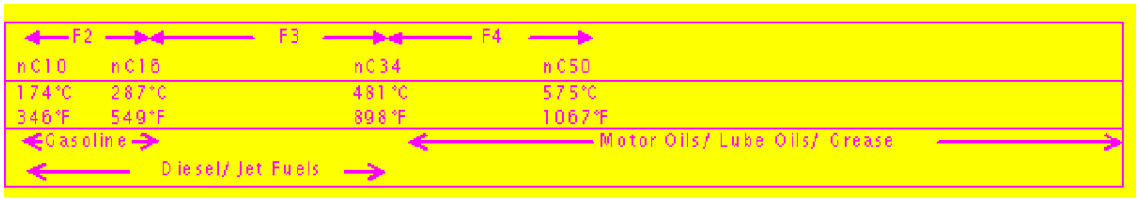
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2495813-2
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

Canada Toll Free: 1 800 668 9878

L2495813-COFC

COC Number: 17 - 673965

Page of

Report To	Contact and company name below will appear on the final report
Company:	HAMLET of Coral Harbour
Contact:	Leonie PAMEOLIK
Phone:	867 925 8870
	Company address below will appear on the final report
Street:	PO Box 30 Coral Harbour
City/Province:	Nunavut
Postal Code:	X0C - 0C0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	HAMLET of Coral Harbour
Contact:	Leonie PAMEOLIK

Report Format / Di[stribution]

- Select Report Format: ☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)
- Quality Control (QC) Report with Report ☑ YES ☐ NO
- ☐ Compare Results to Criteria on Report - provide details below if box checked
- Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
- Email 1 or Fax
- Email 2
- Email 3 ~~Foreman~~ Foreman@H2ging.Com

Invoice Distribution

- Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
- Email 1 or Fax
- Email 2

[Contact your AM to confirm all E&P TATs (surcharges may apply)

- Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply
- PRIORITY (Business Days): 4 day [P4-20%] ☐ 3 day [P3-25%] ☐ 2 day [P2-50%] ☐
- EMERGENCY: 1 Business day [E-100%] ☐; Same Day, Weekend or Statutory holiday [E2-200% (Laboratory opening fees may apply)] ☐
- [redacted] Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm
- For tests that can not be performed according to the service level selected, you will be contacted.

Project Information

- ALS Account # / Quote #:
- Job #:
- PO / AFE:
- LSD:
- ALS Lab Work Order # (lab use only):

[redacted] Oil and Gas Required Fields (client use) [redacted]

- AFE/Cost Center:
- PO#
- Major/Minor Code:
- Routing Code:
- Requisitioner:
- Location:
- 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	~~Routine~~	CBod	Metals	Nutrients	Phenols	Mercury	Oil + grease	BTEX - F1 - ~~F3~~	F2-F4 x	PAH	SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
Cor 7		26/08/20																
Cor 6		〃																
Cor 5		〃																
Cor 4		〃																
Cor 3		〃																

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☑ YES ☐ NO

Are samples for human consumption/ use? ☑ YES ☐ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

Nunavut - WW - GRP 7 - WP

SAMPLE CONDITION AS RECEIVED (lab use only)

- Frozen ☑ SIF Observations Yes ☐ No ☐
- Ice Packs ☑ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐
- Cooling Initiated ☐
- INITIAL COOLER TEMPERATURES °C: 14.8
- FINAL COOLER TEMPERATURES °C:

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Casey Panin	Date: Aug 26/20	Time: 11:40	Received by: AR	Date: 28 Aug	Time: 1:10	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JULY 2017 FRONT

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.

Hamlet of Coral Harbour
ATTN: LEONIE PAMEOLIK (Waste Water)
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 15-SEP-20
Report Date: 24-SEP-20 13:28 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L2503221

Project P.O. #: NOT SUBMITTED
Job Reference: CORAL HARBOUR - WASTE WATER (10-SEP-20)
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
L2503221-1 COR-3							
Sampled By: CLIENT on 10-SEP-20 @ 13:56							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	>24200	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	>24200	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	364		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	298		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	33.3		1.0	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	40		20	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	35.2		6.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	62.6		1.0	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	799		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	>24200	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	142	HTC	0.20	mg/L		21-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	0.436		0.040	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.535		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.099		0.020	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	<0.0050	DLM	0.0050	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	7.68		0.030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	16.0		0.60	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0713		0.0030	mg/L	18-SEP-20	18-SEP-20	R5231297
Arsenic (As)-Total	0.00105		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Cadmium (Cd)-Total	0.0000158		0.0000050	mg/L	18-SEP-20	18-SEP-20	R5231297
Calcium (Ca)-Total	47.5		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Chromium (Cr)-Total	0.00066		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Cobalt (Co)-Total	0.00054		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Copper (Cu)-Total	0.0144		0.00050	mg/L	18-SEP-20	18-SEP-20	R5231297
Iron (Fe)-Total	0.542		0.010	mg/L	18-SEP-20	18-SEP-20	R5231297
Lead (Pb)-Total	0.000411		0.000050	mg/L	18-SEP-20	18-SEP-20	R5231297

* 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
L2503221-1 COR-3							
Sampled By: CLIENT on 10-SEP-20 @ 13:56							
Matrix: EFFLUENT							
Total Metals in Water by CRC ICPMS							
Magnesium (Mg)-Total	5.83		0.0050	mg/L	18-SEP-20	18-SEP-20	R5231297
Manganese (Mn)-Total	0.0679		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Nickel (Ni)-Total	0.00242		0.00050	mg/L	18-SEP-20	18-SEP-20	R5231297
Potassium (K)-Total	23.9		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Sodium (Na)-Total	54.7		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Zinc (Zn)-Total	0.0218		0.0030	mg/L	18-SEP-20	18-SEP-20	R5231297
Total Organic Carbon by Combustion							
Total Organic Carbon	122		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	171		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	7.82		0.10	pH units		16-SEP-20	R5225679
L2503221-2 COR-4							
Sampled By: CLIENT on 10-SEP-20 @ 14:05							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	5170	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	130	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	321		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	263		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.67		0.10	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	14.4		6.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	18.4		6.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	90.7		1.0	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	822		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	150	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	292	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	3.72		0.040	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	3.81		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.093		0.020	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180

* 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
L2503221-2 COR-4							
Sampled By: CLIENT on 10-SEP-20 @ 14:05							
Matrix: EFFLUENT							
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	0.274		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	37.1		0.60	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0413		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00108		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	0.0000634		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	100		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00064		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00139		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00590		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.459		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	0.000089		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.0		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0725		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00556		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	11.6		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	64.2		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0069		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	14.6		0.50	mg/L		21-SEP-20	R5232337
Total Suspended Solids							
Total Suspended Solids	23.4		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	7.66		0.10	pH units		16-SEP-20	R5225679
L2503221-3 COR-5							
Sampled By: CLIENT on 10-SEP-20 @ 14:16							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	100	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	206		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	169		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.048		0.010	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	59.0		0.50	mg/L		16-SEP-20	R5230882
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
L2503221-3 COR-5							
Sampled By: CLIENT on 10-SEP-20 @ 14:16							
Matrix: EFFLUENT							
Conductivity							
Conductivity	591		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	10	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	195	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0	RRR	5.0	mg/L		24-SEP-20	R5234919
Note: RRR: OGG decanted from 500 mL bottle.							
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		18-SEP-20	R5231444
Phosphorus, Total							
Phosphorus (P)-Total	0.0294		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	67.3		0.30	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0039		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00061		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	59.9		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00023		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00024		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00075		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.107		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	<0.000050		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.9		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.00846		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00189		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	9.45		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	48.3		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	17.4		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	<3.0		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.28		0.10	pH units		16-SEP-20	R5225679
L2503221-4 COR-6							
Sampled By: CLIENT on 10-SEP-20 @ 13:46							
Matrix: EFFLUENT							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
Toluene	<0.0010		0.0010	mg/L		18-SEP-20	R5229336

* 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
L2503221-4 COR-6							
Sampled By: CLIENT on 10-SEP-20 @ 13:46							
Matrix: EFFLUENT							
BTX plus F1 by GCMS							
Ethyl benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
o-Xylene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
m+p-Xylenes	<0.00040		0.00040	mg/L		18-SEP-20	R5229336
F1 (C6-C10)	<0.10		0.10	mg/L		18-SEP-20	R5229336
Surrogate: 4-Bromofluorobenzene (SS)	86.4		70-130	%		18-SEP-20	R5229336
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	17-SEP-20	17-SEP-20	R5228457
F3 (C16-C34)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
F4 (C34-C50)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
Surrogate: 2-Bromobenzotrifluoride	97.8		60-140	%	17-SEP-20	17-SEP-20	R5228457
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		22-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		22-SEP-20	
F3-PAH	<0.25		0.25	mg/L		22-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		22-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		18-SEP-20	
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	800	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Acridine	0.000025		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Chrysene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluoranthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluorene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Naphthalene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Phenanthrene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Quinoline	0.000025		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	17-SEP-20	22-SEP-20	R5232400
Surrogate: d8-Naphthalene	110.5		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Phenanthrene	103.6		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d12-Chrysene	102.9		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Acenaphthene	95.8		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d9-Acridine (SS)	98.0		50-150	%	17-SEP-20	22-SEP-20	R5232400
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	394		1.2	mg/L		17-SEP-20	
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
L2503221-4 COR-6							
Sampled By: CLIENT on 10-SEP-20 @ 13:46							
Matrix: EFFLUENT							
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	323		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	1.40		0.10	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	9.1		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	6.4		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	60.9		0.50	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	753		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	20	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	299	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	0.151		0.020	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.151		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	620		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	0.0069		0.0010	mg/L		18-SEP-20	R5231444
Phosphorus, Total							
Phosphorus (P)-Total	0.304		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	26.1		0.30	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0465		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00220		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	84.8		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00084		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00023		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00108		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.670		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	0.000191		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	21.1		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0739		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00205		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	26.6		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	49.4		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0076		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
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
L2503221-4 COR-6							
Sampled By: CLIENT on 10-SEP-20 @ 13:46							
Matrix: EFFLUENT							
Total Organic Carbon by Combustion							
Total Organic Carbon	32.9		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	31.4		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.17		0.10	pH units		16-SEP-20	R5225679
L2503221-5 COR-7							
Sampled By: CLIENT on 10-SEP-20 @ 13:33							
Matrix: EFFLUENT							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
Toluene	<0.0010		0.0010	mg/L		18-SEP-20	R5229336
Ethyl benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
o-Xylene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
m+p-Xylenes	<0.00040		0.00040	mg/L		18-SEP-20	R5229336
F1 (C6-C10)	<0.10		0.10	mg/L		18-SEP-20	R5229336
Surrogate: 4-Bromofluorobenzene (SS)	86.0		70-130	%		18-SEP-20	R5229336
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	17-SEP-20	17-SEP-20	R5228457
F3 (C16-C34)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
F4 (C34-C50)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
Surrogate: 2-Bromobenzotrifluoride	99.4		60-140	%	17-SEP-20	17-SEP-20	R5228457
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		22-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		22-SEP-20	
F3-PAH	<0.25		0.25	mg/L		22-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		22-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		18-SEP-20	
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Acridine	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Chrysene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluoranthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluorene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Naphthalene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400

* 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
L2503221-5 COR-7							
Sampled By: CLIENT on 10-SEP-20 @ 13:33							
Matrix: EFFLUENT							
CCME PAHs in mg/L							
Phenanthrene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Quinoline	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	17-SEP-20	22-SEP-20	R5232400
Surrogate: d8-Naphthalene	92.7		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Phenanthrene	101.3		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d12-Chrysene	100.6		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Acenaphthene	93.8		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d9-Acridine (SS)	95.8		50-150	%	17-SEP-20	22-SEP-20	R5232400
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	189		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	155		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.029		0.010	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	2.7		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	10.0		1.0	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	1020		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	10	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	576	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	0.094		0.040	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.094		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		18-SEP-20	R5231444
Phosphorus, Total							
Phosphorus (P)-Total	0.0638		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	441		0.60	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0170		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00051		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	0.0000288		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537

* 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
L2503221-5 COR-7							
Sampled By: CLIENT on 10-SEP-20 @ 13:33							
Matrix: EFFLUENT							
Total Metals in Water by CRC ICPMS							
Calcium (Ca)-Total	213		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00065		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00034		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00230		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	1.33		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	0.000455		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.7		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0842		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00300		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	7.60		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	14.7		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0282		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	17.1		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	11.0		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.06		0.10	pH units		16-SEP-20	R5225679

* 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.
RRR	Refer to Report Remarks for issues regarding this analysis

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 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 degrees 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-CVAA-WP	Water	Mercury Total	EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020B (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-L

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

PAH-CCME-PPM-WT	Water	CCME PAHs in mg/L	EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

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.			
TC,EC10-QT97-WP	Water	Total and E. coli, 1:10 dilution by QT97	APHA 9223B QT97
Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Susbtrate Coliform Test". Total coliforms and Eschericia coli bacteria are simultaneously 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 35.0 +/- 0.5 degrees C for 18 or 24 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.			
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:

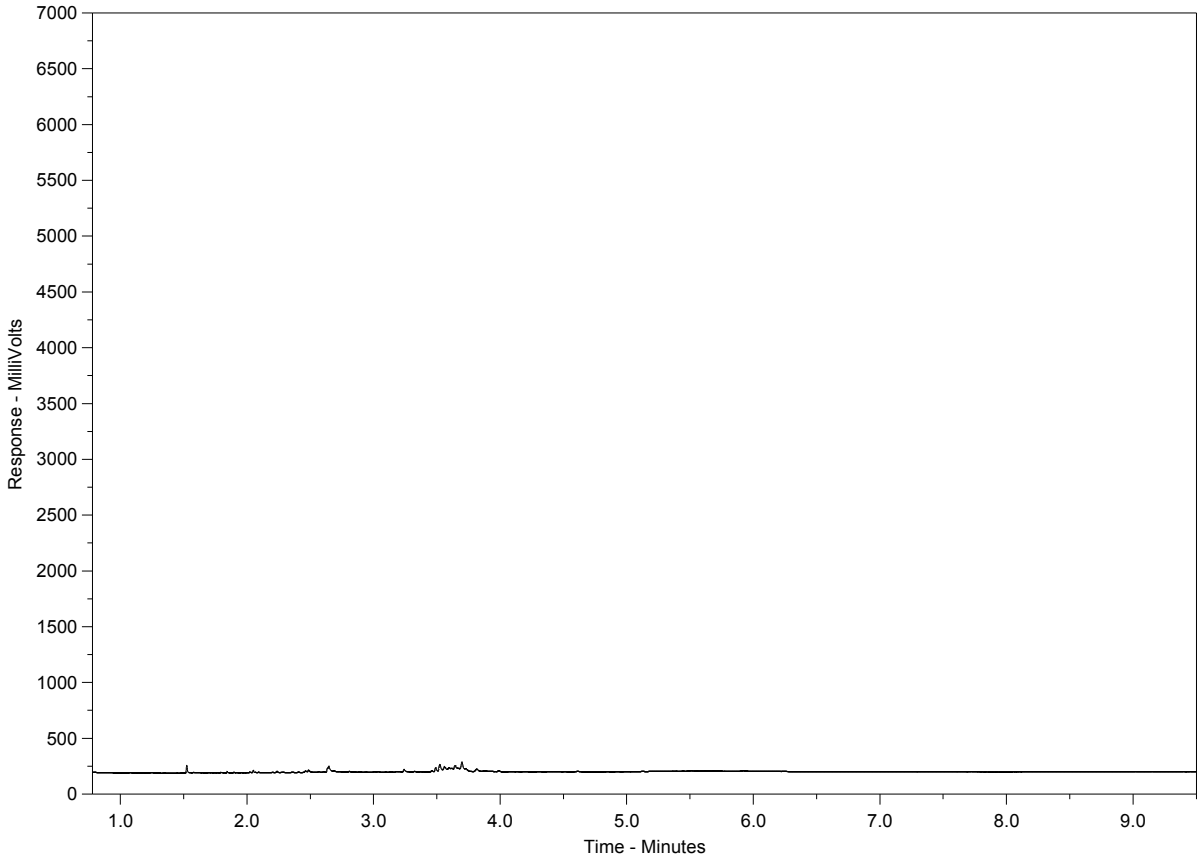
GLOSSARY OF REPORT TERMS

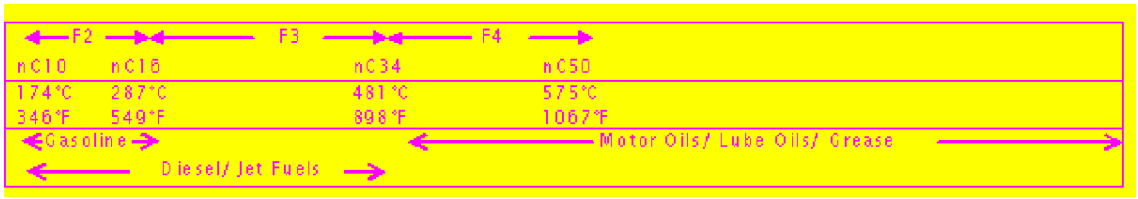
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates 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: L2503221-4
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.

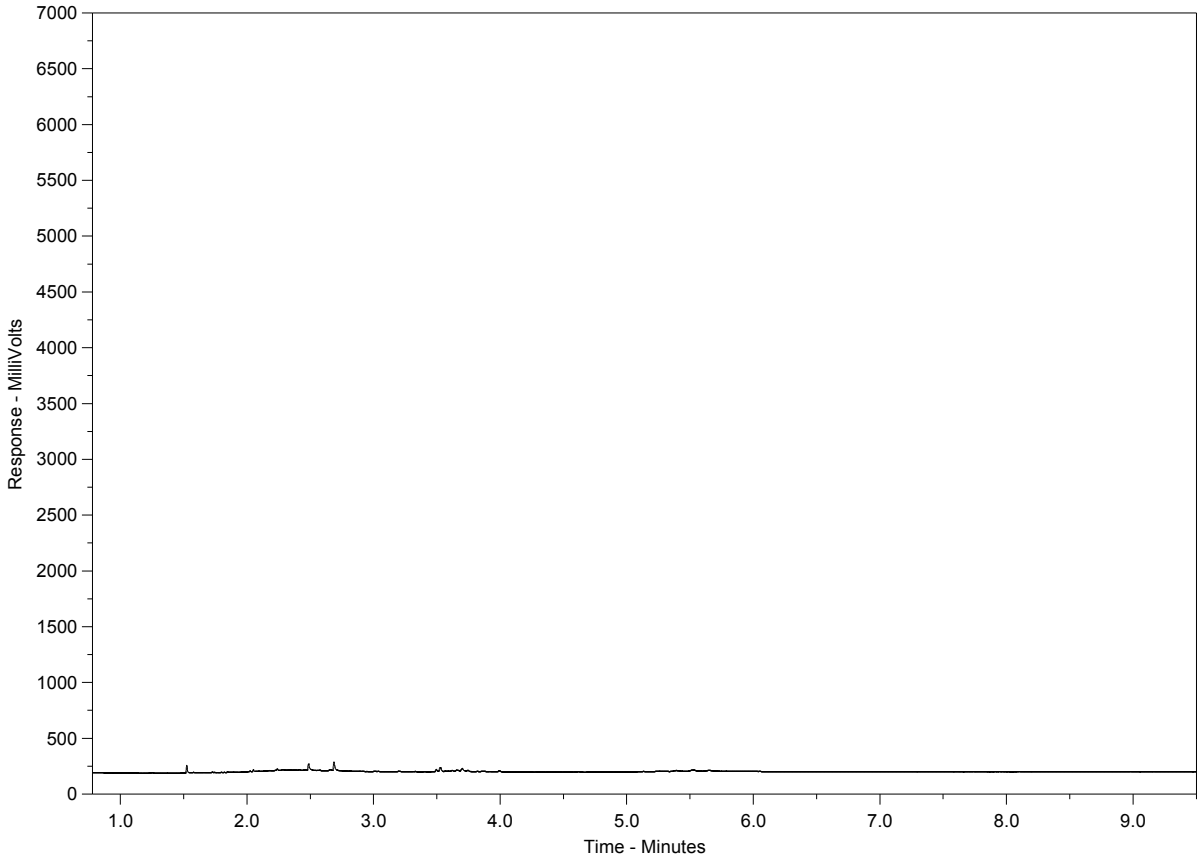
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

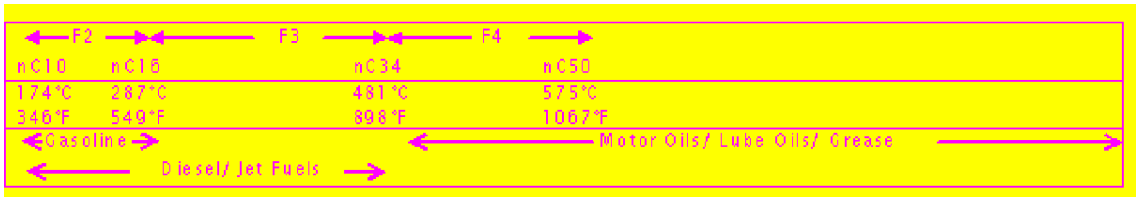
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2503221-5
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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2503221-COFC

COC Number: 15 -

Page 1 of 1

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply
Company:	Hamlet of Coral Harbour	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	Darryl Nakoolak	Quality Control (QC) Report with Report ☐ YES ☐ NO	PRIORITY (Business Days): 4 day [P4] ☐ / 3 day [P3] ☐ / 2 day [P2] ☐ — EMERGENCY: 1 Business day [E1] ☐ / Same Day, Weekend or Statutory holiday [E0] ☐
Phone:	867-925-8970	☐ Compare Results to Criteria on Report - provide details below if box checked	
	Company address below will appear on the final report	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	
Street:	PO Box 30	Email 1 or Fax: foremanch@qiniq.com	Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm
City/Province:	Coral Harbour, NU	Email 2: cfaulkner@gov.nu.ca	For tests that can not be performed according to the service level selected, you will be contacted.
Postal Code:	X0C 0C0	Email 3: scollins@gov.nu.ca	
Invoice To	Same as Report To ☑ YES ☐ NO	Invoice Distribution	Analysis Request
	Copy of Invoice with Report ☑ YES ☐ NO	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
Company:		Email 1 or Fax	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	W10622	AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact:	Sampler: Tony Connor, Darryl

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	Routine	CBOD	Total Metals	Total Mercury	Nutrients/Phenols (x2)	Bacteria	Oil & Grease (x2)	BTEX-F1 (x3)	F2-F4 (x2)	PAH (x2)			Number of Containers
1	COR-3	10-Sept-20	1:56 pm	Effluent	R	R	R	R	R	R	R	R						10
2	COR-4	"	2:05 pm	Effluent	R	R	R	R	R	R	R	R						10
3	COR-5	"	2:16 pm ~~1:56 PM~~	Effluent	R	R	R	R	R	R	R	R						10
4	COR-6	"	1:46 PM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17
5	COR-7	"	1:33 PM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	NUNAVUT-WW-GRP1-WP, BTEX, F1-F4, PAH
Are samples for human drinking water use? ☐ YES ☑ NO	

SAMPLE CONDITION AS RECEIVED (lab use only)					
Frozen ☐	SIF Observations	Yes ☐	No ☐		
Ice Packs ☐	Ice Cubes ☐	Custody seal intact	Yes ☐	No ☐	
Cooling Initiated ☐					
INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
17.6					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date: Sept 10/20	Time: 2:51	Received by:	Date: Sept 15	Time: 1350	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

OCTOBER 2015 FRONT

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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2503221-COFC

COC Number: 15 -

Page 1 of 1

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply
Company:	Hamlet of Coral Harbour	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	Darryl Nakoolak	Quality Control (QC) Report with Report ☐ YES ☐ NO	PRIORITY (Business Days): 4 day [P4] ☐ / 3 day [P3] ☐ / 2 day [P2] ☐ — EMERGENCY: 1 Business day [E1] ☐ / Same Day, Weekend or Statutory holiday [E0] ☐
Phone:	867-925-8970	☐ Compare Results to Criteria on Report - provide details below if box checked	
	Company address below will appear on the final report	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm
Street:	PO Box 30	Email 1 or Fax: foremanch@qiniq.com	For tests that can not be performed according to the service level selected, you will be contacted.
City/Province:	Coral Harbour, NU	Email 2: cfaulkner@gov.nu.ca	
Postal Code:	X0C 0C0	Email 3: scollins@gov.nu.ca	
Invoice To	Same as Report To ☑ YES ☐ NO	Invoice Distribution	Analysis Request
	Copy of Invoice with Report ☑ YES ☐ NO	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
Company:		Email 1 or Fax	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	W10622	AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact:	Sampler: Tony, Connor, Darryl

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	Routine	CBOD	Total Metals	Total Mercury	Nutrients/Phenols (x2)	Bacteria	Oil & Grease (x2)	BTEX-F1 (x3)	F2-F4 (x2)	PAH (x2)			Number of Containers
1	COR-3	10-Sept-26	1:56 pm	Effluent	R	R	R	R	R	R	R	R						10
2	COR-4	11	2:05 pm	Effluent	R	R	R	R	R	R	R	R						10
3	COR-5	11	2:16 pm	Effluent	R	R	R	R	R	R	R	R						10
4	COR-6	11	1:46 pm	Effluent	R	R	R	R	R	R	R	R	R	R	R			17
5	COR-7	11	1:33 pm	Effluent	R	R	R	R	R	R	R	R	R	R	R			17

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	NUNAVUT-WW-GRP1-WP, BTEX, F1-F4, PAH
Are samples for human drinking water use? ☐ YES ☑ NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☐ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
17.6					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date: Sept 10/26	Time: 2:51	Received by:	Date: Sept 15	Time: 1350	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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

Hamlet of Coral Harbour
ATTN: LEONIE PAMEOLIK (Waste Water)
PO Box 30
Coral Harbour MB X0C 0C0

Date Received: 15-SEP-20
Report Date: 24-SEP-20 10:55 (MT)
Version: FINAL

Client Phone: 867-925-8970

Certificate of Analysis

Lab Work Order #: L2503215

Project P.O. #: NOT SUBMITTED
Job Reference: HAMLET OF CORAL HARBOUR - WASTE WATER (11-SEP-20)
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
L2503215-1 COR-3							
Sampled By: CLIENT on 11-SEP-20 @ 11:13							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	>24200	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	8160	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	342		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	281		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	31.0		1.0	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	38		20	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	34.2		6.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	60.3		0.50	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	774		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	4610	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	153	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	0.385		0.020	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.483		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.099		0.010	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	<0.0050	DLM	0.0050	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	7.01		0.030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	23.7		0.30	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0530		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00092		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	0.0000121		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	51.5		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00046		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00051		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.0144		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.588		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	0.000335		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537

* 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
L2503215-1 COR-3							
Sampled By: CLIENT on 11-SEP-20 @ 11:13							
Matrix: EFFLUENT							
Total Metals in Water by CRC ICPMS							
Magnesium (Mg)-Total	5.83		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0622		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00257		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	23.5		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	54.0		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0331		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	150		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	183		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	7.86		0.10	pH units		16-SEP-20	R5225679
L2503215-2 COR-4							
Sampled By: CLIENT on 11-SEP-20 @ 11:22							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	3260	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	20	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	322		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	264		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.63		0.10	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	3.4		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	91.3		1.0	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	836		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	10	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	304	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	3.94		0.040	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	3.98		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	0.047		0.020	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180

* 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
L2503215-2 COR-4							
Sampled By: CLIENT on 11-SEP-20 @ 11:22							
Matrix: EFFLUENT							
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	0.119		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	37.3		0.60	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0090		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00091		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	0.0000371		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	105		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00043		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00135		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00399		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.094		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	<0.000050		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.3		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0744		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00548		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	11.8		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	66.2		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0116		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	14.3		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	8.8		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	7.91		0.10	pH units		16-SEP-20	R5225679
L2503215-3 COR-5							
Sampled By: CLIENT on 11-SEP-20 @ 11:32							
Matrix: EFFLUENT							
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	120	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	214		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	176		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.037		0.010	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	58.5		0.50	mg/L		16-SEP-20	R5230882
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
L2503215-3 COR-5							
Sampled By: CLIENT on 11-SEP-20 @ 11:32							
Matrix: EFFLUENT							
Conductivity							
Conductivity	603		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	10	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	205	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	0.026		0.020	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	0.0299		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	65.8		0.30	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0047		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00061		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	64.0		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00051		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cobalt (Co)-Total	0.00024		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00081		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	0.119		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	<0.000050		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.9		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0108		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00193		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	9.51		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	47.7		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0076		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	16.4		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	<3.0		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.24		0.10	pH units		16-SEP-20	R5225679
L2503215-4 COR-6							
Sampled By: CLIENT on 11-SEP-20 @ 11:06							
Matrix: EFFLUENT							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
Toluene	<0.0010		0.0010	mg/L		18-SEP-20	R5229336
Ethyl benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
o-Xylene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336

* 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
L2503215-4 COR-6							
Sampled By: CLIENT on 11-SEP-20 @ 11:06							
Matrix: EFFLUENT							
BTX plus F1 by GCMS							
m+p-Xylenes	<0.00040		0.00040	mg/L		18-SEP-20	R5229336
F1 (C6-C10)	<0.10		0.10	mg/L		18-SEP-20	R5229336
Surrogate: 4-Bromofluorobenzene (SS)	88.7		70-130	%		18-SEP-20	R5229336
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	17-SEP-20	17-SEP-20	R5228457
F3 (C16-C34)	0.27		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
F4 (C34-C50)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
Surrogate: 2-Bromobenzotrifluoride	99.4		60-140	%	17-SEP-20	17-SEP-20	R5228457
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		22-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		22-SEP-20	
F3-PAH	0.27		0.25	mg/L		22-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		22-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		18-SEP-20	
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	1020	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	20	PEHR	10	MPN/100mL		15-SEP-20	R5224776
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Acridine	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Chrysene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluoranthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluorene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Naphthalene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Phenanthrene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Quinoline	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	17-SEP-20	22-SEP-20	R5232400
Surrogate: d8-Naphthalene	96.2		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Phenanthrene	97.2		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d12-Chrysene	96.1		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Acenaphthene	91.8		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d9-Acridine (SS)	85.8		50-150	%	17-SEP-20	22-SEP-20	R5232400
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	418		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							

* 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
L2503215-4 COR-6							
Sampled By: CLIENT on 11-SEP-20 @ 11:06							
Matrix: EFFLUENT							
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	343		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	1.26		0.10	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	11.6		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	9.2		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	56.1		0.50	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	790		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	50	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	291	HTC	0.20	mg/L		21-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	0.0029		0.0010	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	0.302		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	23.5		0.30	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0456		0.0030	mg/L	18-SEP-20	18-SEP-20	R5231297
Arsenic (As)-Total	0.00211		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L	18-SEP-20	18-SEP-20	R5231297
Calcium (Ca)-Total	83.0		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Chromium (Cr)-Total	0.00107		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Cobalt (Co)-Total	0.00024		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Copper (Cu)-Total	0.00124		0.00050	mg/L	18-SEP-20	18-SEP-20	R5231297
Iron (Fe)-Total	0.685		0.010	mg/L	18-SEP-20	18-SEP-20	R5231297
Lead (Pb)-Total	0.000246		0.000050	mg/L	18-SEP-20	18-SEP-20	R5231297
Magnesium (Mg)-Total	20.4		0.0050	mg/L	18-SEP-20	18-SEP-20	R5231297
Manganese (Mn)-Total	0.0876		0.00010	mg/L	18-SEP-20	18-SEP-20	R5231297
Nickel (Ni)-Total	0.00192		0.00050	mg/L	18-SEP-20	18-SEP-20	R5231297
Potassium (K)-Total	25.0		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Sodium (Na)-Total	48.3		0.050	mg/L	18-SEP-20	18-SEP-20	R5231297
Zinc (Zn)-Total	0.0074		0.0030	mg/L	18-SEP-20	18-SEP-20	R5231297
Total Organic Carbon by Combustion							
Total Organic Carbon	32.4		0.50	mg/L		18-SEP-20	R5231578
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
L2503215-4 COR-6							
Sampled By: CLIENT on 11-SEP-20 @ 11:06							
Matrix: EFFLUENT							
Total Suspended Solids							
Total Suspended Solids	12.2		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.06		0.10	pH units		16-SEP-20	R5225679
L2503215-5 COR-7							
Sampled By: CLIENT on 11-SEP-20 @ 10:56							
Matrix: EFFLUENT							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
Toluene	<0.0010		0.0010	mg/L		18-SEP-20	R5229336
Ethyl benzene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
o-Xylene	<0.00050		0.00050	mg/L		18-SEP-20	R5229336
m+p-Xylenes	<0.00040		0.00040	mg/L		18-SEP-20	R5229336
F1 (C6-C10)	<0.10		0.10	mg/L		18-SEP-20	R5229336
Surrogate: 4-Bromofluorobenzene (SS)	85.8		70-130	%		18-SEP-20	R5229336
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	17-SEP-20	17-SEP-20	R5228457
F3 (C16-C34)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
F4 (C34-C50)	<0.25		0.25	mg/L	17-SEP-20	17-SEP-20	R5228457
Surrogate: 2-Bromobenzotrifluoride	100.9		60-140	%	17-SEP-20	17-SEP-20	R5228457
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		22-SEP-20	
F2-Naphth	<0.10		0.10	mg/L		22-SEP-20	
F3-PAH	<0.25		0.25	mg/L		22-SEP-20	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		22-SEP-20	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		18-SEP-20	
Total and E. coli, 1:10 dilution by QT97							
Total Coliforms	10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
Escherichia Coli	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224776
CCME PAHs in mg/L							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Acenaphthylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Acridine	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)anthracene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Chrysene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluoranthene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Fluorene	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400
Naphthalene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Phenanthrene	<0.000050		0.000050	mg/L	17-SEP-20	22-SEP-20	R5232400
Pyrene	<0.000010		0.000010	mg/L	17-SEP-20	22-SEP-20	R5232400

* 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
L2503215-5 COR-7							
Sampled By: CLIENT on 11-SEP-20 @ 10:56							
Matrix: EFFLUENT							
CCME PAHs in mg/L							
Quinoline	<0.000020		0.000020	mg/L	17-SEP-20	22-SEP-20	R5232400
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	17-SEP-20	22-SEP-20	R5232400
Surrogate: d8-Naphthalene	90.3		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Phenanthrene	96.0		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d12-Chrysene	95.1		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d10-Acenaphthene	91.2		50-150	%	17-SEP-20	22-SEP-20	R5232400
Surrogate: d9-Acridine (SS)	87.4		50-150	%	17-SEP-20	22-SEP-20	R5232400
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	184		1.2	mg/L		17-SEP-20	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		17-SEP-20	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		17-SEP-20	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	151		1.0	mg/L		16-SEP-20	R5225679
Ammonia by colour							
Ammonia, Total (as N)	0.029		0.010	mg/L		16-SEP-20	R5227317
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		16-SEP-20	R5232007
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		16-SEP-20	R5232007
Chloride in Water by IC							
Chloride (Cl)	6.7		1.0	mg/L		16-SEP-20	R5230882
Conductivity							
Conductivity	976		1.0	umhos/cm		16-SEP-20	R5225679
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		15-SEP-20	R5224789
Hardness Calculated							
Hardness (as CaCO3)	523	HTC	0.20	mg/L		18-SEP-20	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	21-SEP-20	21-SEP-20	R5231723
Nitrate in Water by IC							
Nitrate (as N)	<0.040	DLM	0.040	mg/L		16-SEP-20	R5230882
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-SEP-20	
Nitrite in Water by IC							
Nitrite (as N)	<0.020	DLM	0.020	mg/L		16-SEP-20	R5230882
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		24-SEP-20	R5234180
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		18-SEP-20	R5229080
Phosphorus, Total							
Phosphorus (P)-Total	0.0524		0.0030	mg/L		18-SEP-20	R5229452
Sulfate in Water by IC							
Sulfate (SO4)	422		0.60	mg/L		16-SEP-20	R5230882
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0062		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Arsenic (As)-Total	0.00050		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Cadmium (Cd)-Total	0.0000074		0.0000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Calcium (Ca)-Total	193		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Chromium (Cr)-Total	0.00032		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537

* 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
L2503215-5 COR-7							
Sampled By: CLIENT on 11-SEP-20 @ 10:56							
Matrix: EFFLUENT							
Total Metals in Water by CRC ICPMS							
Cobalt (Co)-Total	0.00030		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Copper (Cu)-Total	0.00102		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Iron (Fe)-Total	1.17		0.010	mg/L	17-SEP-20	17-SEP-20	R5228537
Lead (Pb)-Total	0.000145		0.000050	mg/L	17-SEP-20	17-SEP-20	R5228537
Magnesium (Mg)-Total	10.0		0.0050	mg/L	17-SEP-20	17-SEP-20	R5228537
Manganese (Mn)-Total	0.0831		0.00010	mg/L	17-SEP-20	17-SEP-20	R5228537
Nickel (Ni)-Total	0.00273		0.00050	mg/L	17-SEP-20	17-SEP-20	R5228537
Potassium (K)-Total	6.84		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Sodium (Na)-Total	14.1		0.050	mg/L	17-SEP-20	17-SEP-20	R5228537
Zinc (Zn)-Total	0.0205		0.0030	mg/L	17-SEP-20	17-SEP-20	R5228537
Total Organic Carbon by Combustion							
Total Organic Carbon	16.9		0.50	mg/L		18-SEP-20	R5231578
Total Suspended Solids							
Total Suspended Solids	56.8		3.0	mg/L		16-SEP-20	R5225848
pH							
pH	8.15		0.10	pH units		16-SEP-20	R5225679

* 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-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 degrees 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-CVAA-WP	Water	Mercury Total	EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

MET-T-CCMS-WP	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020B (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-L

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

PAH-CCME-PPM-WT	Water	CCME PAHs in mg/L	EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

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.			
TC,EC10-QT97-WP	Water	Total and E. coli, 1:10 dilution by QT97	APHA 9223B QT97
Analysis is carried out using procedures adapted from APHA 9223 "Enzyme Susbtrate Coliform Test". Total coliforms and Eschericia coli bacteria are simultaneously 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 35.0 +/- 0.5 degrees C for 18 or 24 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.			
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:

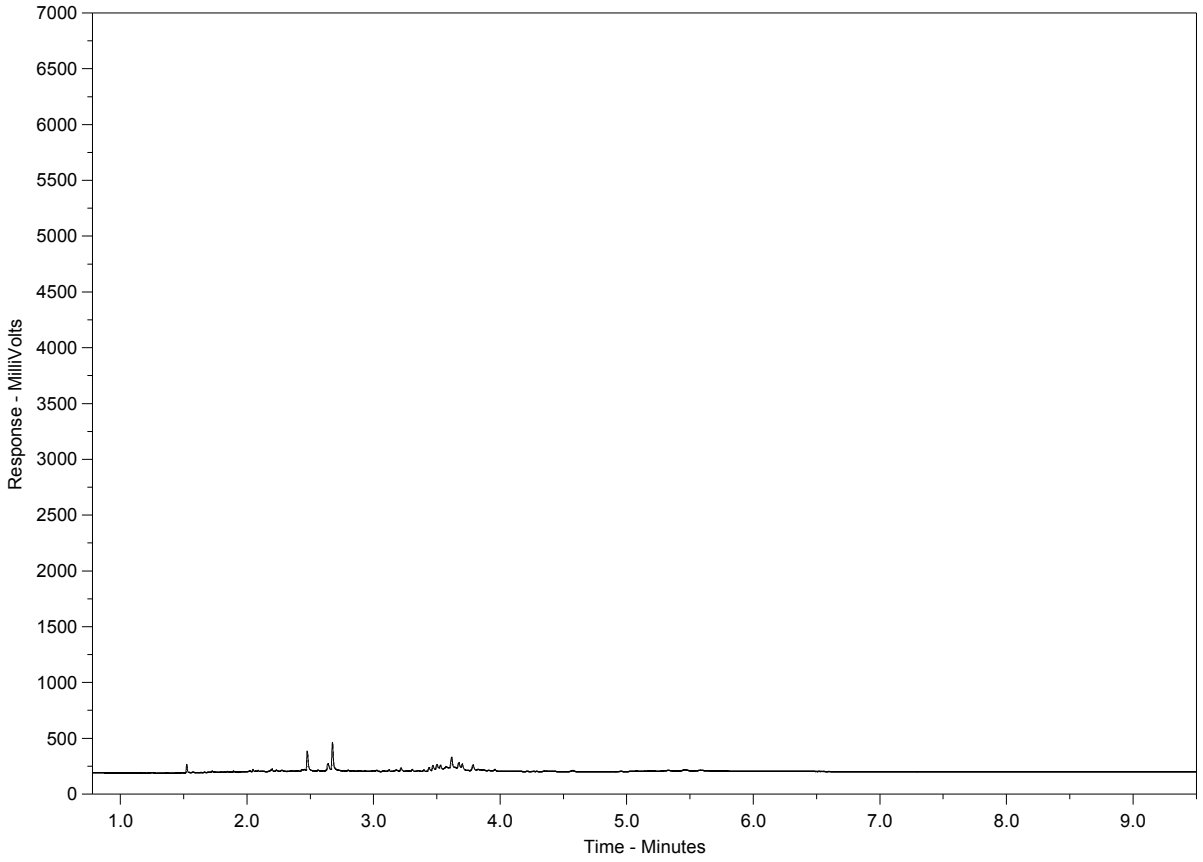
GLOSSARY OF REPORT TERMS

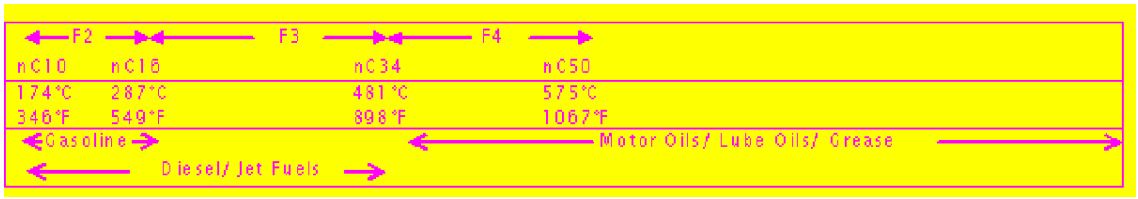
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates 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: L2503215-4
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.

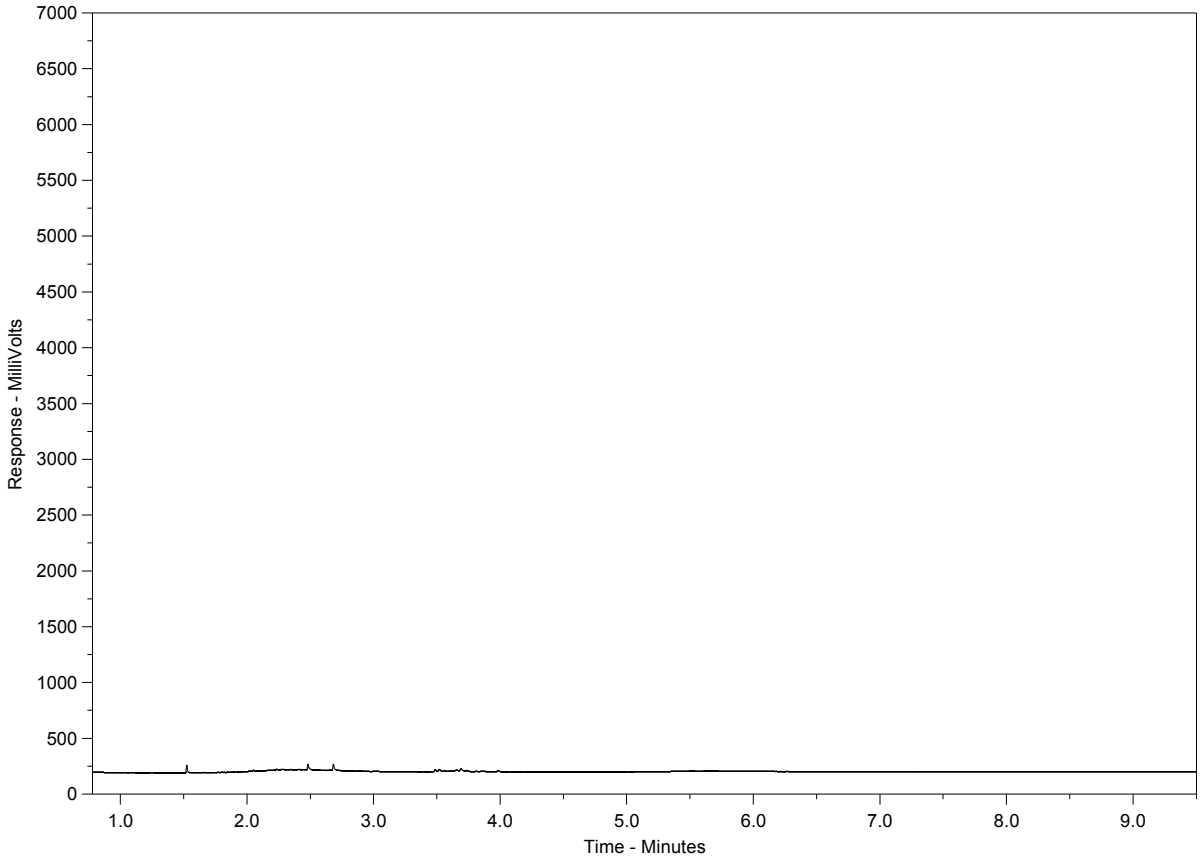
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

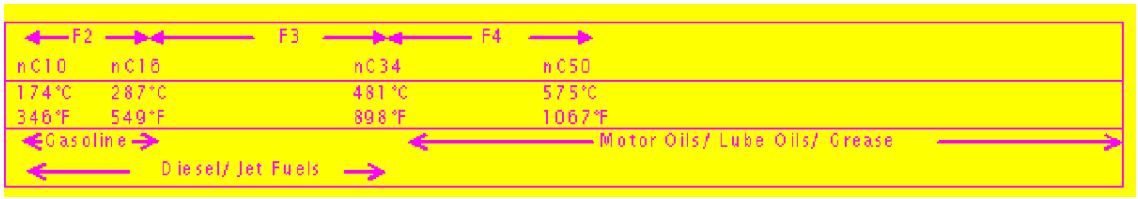
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

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: L2503215-5
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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2503215-COFC

COC Number: 15 -

Page 1 of 1

Report To	Contact and company name below will appear on the final report
Company:	Hamlet of Coral Harbour
Contact:	Darryl Nakoolak
Phone:	867-925-8970
	Company address below will appear on the final report
Street:	PO Box 30
City/Province:	Coral Harbour, NU
Postal Code:	X0C 0C0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Quality Control (QC) Report with Report ☐ YES ☐ NO
☐ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax foremanch@qiniq.com
Email 2 cfaulkner@gov.nu.ca
Email 3 scollins@gov.nu.ca

Invoice Distribution

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax
Email 2

Project Information

ALS Account # / Quote #: W10622
Job #:
PO / AFE:
LSD:
ALS Lab Work Order # (lab use only)

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#
Major/Minor Code: Routing Code:
Requisitioner:
Location:
ALS Contact: Sampler: Anna Mary / Darcy

Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4] ☐ | 3 day [P3] ☐ | 2 day [P2] ☐
EMERGENCY: 1 Business day [E1] ☐ | Same Day, Weekend or Statutory holiday [E0] ☐

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

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	Routine	CBOD	Total Metals	Total Mercury	Nutrients/Phenols (x2)	Bacteria	Oil & Grease (x2)	BTEX-F1 (x3)	F2-F4 (x2)	PAH (x2)			Number of Containers
	COR-3	11-Sep-20	11:13 AM	Effluent	R	R	R	R	R	R	R	R						10
	COR-4	"	11:22 AM	Effluent	R	R	R	R	R	R	R	R						10
	COR-5	"	11:32 AM	Effluent	R	R	R	R	R	R	R	R						10
	COR-6	"	11:06 AM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17
	COR-7	"	10:56 AM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?
☐ YES ☑ NO

Are samples for human drinking water use?
☐ YES ☑ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

NUNAVUT-WW-GRP1-WP, BTEX, F1-F4, PAH #Sample bacteria from 500 mL routine #

SAMPLE CONDITION AS RECEIVED (lab use only)

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

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
16.7					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date: 11-Sep-20	Time: 11:40 AM	Received by: CD	Date: Sept 15	Time: 1350	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

OCTOBER 2015 FRONT

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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2503215-COFC

COC Number: 15 -

Page 1 of 1

Report To	Contact and company name below will appear on the final report
Company:	Hamlet of Coral Harbour
Contact:	Darryl Nakoolak
Phone:	867-925-8970
	Company address below will appear on the final report
Street:	PO Box 30
City/Province:	Coral Harbour, NU
Postal Code:	X0C 0C0

Report Format / Distribution	
Select Report Format:	☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Quality Control (QC) Report with Report	☐ YES ☐ NO
☐ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	foremanch@qiniq.com
Email 2	cfaulkner@gov.nu.ca
Email 3	scollins@gov.nu.ca

Invoice To		
	Same as Report To	☑ YES ☐ NO
	Copy of Invoice with Report	☑ YES ☐ NO
Company:		
Contact:		

Invoice Distribution	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	
Email 2	

Project Information	
ALS Account # / Quote #:	W10622
Job #:	
PO / AFE:	
LSD:	
ALS Lab Work Order # (lab use only)	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	
ALS Contact:	Sampler: Anne-Mary / Darcy

Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days)		EMERGENCY	
4 day [P4]	☐	1 Business day [E1]	☐
3 day [P3]	☐	Same Day, Weekend or Statutory holiday [E0]	☐
2 day [P2]	☐		

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

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	Routine	CBOD	Total Metals	Total Mercury	Nutrients/Phenols (x2)	Bacteria	Oil & Grease (x2)	BTEX-F1 (x3)	F2-F4 (x2)	PAH (x2)			Number of Containers
	COR-3	11-Sep-20	11:13 AM	Effluent	R	R	R	R	R	R	R	R						10
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	COR-5	"	11:32 AM	Effluent	R	R	R	R	R	R	R	R						10
	COR-6	"	11:06 AM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17
	COR-7	"	10:56 AM	Effluent	R	R	R	R	R	R	R	R	R	R	R			17

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	NUNAVUT-WW-GRP1-WP, BTEX, F1-F4, PAH *Sample bacteria from 500 mL routine*
Are samples for human drinking water use? ☐ YES ☑ NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☐ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
16.9					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date: 11-Sep-20	Time: 11:40 AM	Received by: CD	Date: Sept 15	Time: 1350	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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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.

Appendix C: Hazardous Materials Spill Database

Spill	Occurance Date	Spill Region	Location	Location Description	Product Spilled	Quantity	Measurement	Spill Cause	Lead Agency
spill-2020145	May 21, 2020	Keewatin	Coral Harbour, Community, Nunavut	Coral Harbour	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	2200.00	Litres	Collision or Crash	GN - Government of Nunavut

Appendix D: Coral Harbour 2020 Sampling Summary

Coral Harbour
COR-3

			2020			
Parameter	**Unit**	**DL**	**08-Jul-20**	**26-Aug-20**	**10-Sep-20**	**11-Sep-20**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	404	187	364	342
Carbonate (CO3)	mg/L	0.60	0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L	0.34	0.34	<0.34	<0.34	<0.34
Total (as CaCO3)	mg/L	1.0	331	153	298	281
Ammonia by Colour						
Total (as N)	mg/L	0.20	62.5	0.049	33.3	31
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	141	<2.0	40	38
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	135	<2.0	35.2	34.2
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	38.3	50.4	62.6	60.3
Conductivity						
Conductivity	umhos/cm	1.0	745	535	799	774
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	N/A	<10	>24200	4610
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	108	164	142	153
Mercury Total						
Mercury (Hg)	mg/L	0.00020	0.0000250	<0.0000050	<0.0000050	<0.0000050
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.040	<0.020	0.436	0.385
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.070	<0.070	0.535	0.483
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.020	<0.010	0.099	0.099
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	10.8	<5.0	<5.0	<5.0
Phenol						
Phenols	mg/L	0.0010	0.424	0.002	<0.0050	<0.0050
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	8.16	0.0431	7.68	7.01
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	0.60	56.60	16.00	23.70
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0484	0.0081	0.0713	0.0530
Arsenic (As)	mg/L	0.00020	0.00397	0.00086	0.00105	0.00092
Cadmium (Cd)	mg/L	0.000010	0.0000823	<0.0000050	0.0000158	0.0000121
Calcium (Ca)	mg/L	0.10	36.1	48	47.5	51.5
Chromium (Cr)	mg/L	0.0010	0.00055	0.00028	0.00066	0.00046
Cobalt (Co)	mg/L	0.00020	0.000097	0.000280	0.000540	0.000510
Copper (Cu)	mg/L	0.00020	0.0245	0.00082	0.0144	0.0144
Iron (Fe)	mg/L	0.010	0.496	0.168	0.542	0.588
Lead (Pb)	mg/L	0.000090	0.000755	<0.000050	0.000411	0.000335
Magnesium (Mg)	mg/L	0.010	4.27	10.6	5.83	5.83
Manganese (Mn)	mg/L	0.00030	0.0618	0.0215	0.0679	0.0622
Nickel (Ni)	mg/L	0.0020	0.00335	0.00202	0.00242	0.00257
Potassium (K)	mg/L	0.020	18.8	10.5	23.9	23.5
Sodium (Na)	mg/L	0.030	35.1	49.3	54.7	54
Zinc (Zn)	mg/L	0.0020	0.0254	0.0057	0.0218	0.0331
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	122	19.9	122	150
Total Suspended Solids						
Total Suspended Solids	mg/L	13	34.4	<3.0	171	183
pH						
pH	pH Units	0.10	7.88	8.22	7.82	7.86
Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
Toluene	mg/L	0.0010	0.0075	N/A	N/A	N/A
Ethyl Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
o-Xylene	mg/L	0.00050	0.00050	N/A	N/A	N/A
F1 (C6-C10)	mg/L	0.10	0.10	N/A	N/A	N/A
F2 (C10-C16)	mg/L	0.25	0.52	N/A	N/A	N/A
F3 (C16-C34)	mg/L	0.25	5.81	N/A	N/A	N/A
F4 (C34-C50)	mg/L	0.25	1.73	N/A	N/A	N/A
Total Hydrocarbons (C6-C50)	mg/L	0.44	8.05	N/A	N/A	N/A

Coral Harbour
COR-4

			2020			
Parameter	**Unit**	**DL**	**08-Jul-20**	**26-Aug-20**	**10-Sep-20**	**11-Sep-20**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	338	329	321	322
Carbonate (CO3)	mg/L	0.60	9.96	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L	0.34	0.34	<0.34	<0.34	<0.34
Total (as CaCO3)	mg/L	1.0	294	270	263	264
Ammonia by Colour						
Total (as N)	mg/L	0.20	1.57	1.08	0.67	0.63
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	26	6.1	14.4	3.4
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	25	2.7	18.4	<2.0
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	79	61.7	90.7	91.3
Conductivity						
Conductivity	umhos/cm	1.0	749	710	822	836
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	N/A	30	150	10
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	277	257	292	304
Mercury Total						
Mercury (Hg)	mg/L	0.00020	0.0000050	<0.0000050	<0.0000050	<0.0000050
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.162	2.11	3.72	3.94
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.204	2.21	3.81	3.98
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.041	0.104	0.093	0.047
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	5	<5.0	<5.0	<5.0
Phenol						
Phenols	mg/L	0.0010	0.0017	0.0023	0.0011	<0.0010
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	2.08	0.146	0.274	0.119
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	19.2	23.0	37.1	37.3
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.140	0.012	0.041	0.009
Arsenic (As)	mg/L	0.00020	0.00205	0.00104	0.00108	0.00091
Cadmium (Cd)	mg/L	0.000010	0.000170	0.000026	0.000063	0.000037
Calcium (Ca)	mg/L	0.10	98.9	88.2	100	105
Chromium (Cr)	mg/L	0.0010	0.00109	0.00019	0.00064	0.00043
Cobalt (Co)	mg/L	0.00020	0.00175	0.00154	0.00139	0.00135
Copper (Cu)	mg/L	0.00020	0.00865	0.00221	0.0059	0.00399
Iron (Fe)	mg/L	0.010	1.35	0.187	0.459	0.094
Lead (Pb)	mg/L	0.000090	0.000496	<0.000050	0.000089	<0.000050
Magnesium (Mg)	mg/L	0.010	7.30	8.86	10.00	10.30
Manganese (Mn)	mg/L	0.00030	0.169	0.103	0.0725	0.0744
Nickel (Ni)	mg/L	0.0020	0.00595	0.00544	0.00556	0.00548
Potassium (K)	mg/L	0.020	15.7	10.3	11.6	11.8
Sodium (Na)	mg/L	0.030	68.9	50.9	64.2	66.2
Zinc (Zn)	mg/L	0.0020	0.0413	0.0030	0.0069	0.0116
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	29.9	11.4	14.6	14.3
Total Suspended Solids						
Total Suspended Solids	mg/L	13	86.4	127	23.4	8.8
pH						
pH	pH Units	0.10	8.42	8.23	7.66	7.91
Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
Toluene	mg/L	0.0010	0.0010	N/A	N/A	N/A
Ethyl Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
o-Xylene	mg/L	0.00050	0.00050	N/A	N/A	N/A
F1 (C6-C10)	mg/L	0.10	0.10	N/A	N/A	N/A
F2 (C10-C16)	mg/L	0.25	0.10	N/A	N/A	N/A
F3 (C16-C34)	mg/L	0.25	0.25	N/A	N/A	N/A
F4 (C34-C50)	mg/L	0.25	0.25	N/A	N/A	N/A
Total Hydrocarbons (C6-C50)	mg/L	0.44	0.38	N/A	N/A	N/A

Coral Harbour
COR-5

			2020			
Parameter	**Unit**	**DL**	**08-Jul-20**	**26-Aug-20**	**10-Sep-20**	**11-Sep-20**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	112	422	206	214
Carbonate (CO3)	mg/L	0.60	4.20	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L	0.34	0.34	<0.34	<0.34	<0.34
Total (as CaCO3)	mg/L	1.0	98.5	346	169	176
Ammonia by Colour						
Total (as N)	mg/L	0.20	0.034	45.2	0.048	0.037
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	12.1	47	<2.0	<2.0
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	7.7	30.2	<2.0	<2.0
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	35.5	60.1	59	58.5
Conductivity						
Conductivity	umhos/cm	1.0	359	879	591	603
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	N/A	3080	10	10
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	95.6	151	195	205
Mercury Total						
Mercury (Hg)	mg/L	0.00020	0.0000050	0.0000060	<0.0000050	<0.0000050
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.020	0.070	<0.020	0.026
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.070	0.100	<0.070	<0.070
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.010	0.031	<0.010	<0.010
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	5	<5.0	<5.0	<5.0
Phenol						
Phenols	mg/L	0.0010	0.0010	<0.0050	<0.0010	<0.0010
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	0.166	8.55	0.0294	0.0299
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	41.7	12.8	67.3	65.8
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0137	0.0738	0.0039	0.0047
Arsenic (As)	mg/L	0.00020	0.00146	0.00109	0.00061	0.00061
Cadmium (Cd)	mg/L	0.000010	0.0000646	0.0000131	<0.0000050	<0.0000050
Calcium (Ca)	mg/L	0.10	27.7	50.7	59.9	64
Chromium (Cr)	mg/L	0.0010	0.00046	0.00037	0.00023	0.00051
Cobalt (Co)	mg/L	0.00020	0.00058	0.00056	0.00024	0.00024
Copper (Cu)	mg/L	0.00020	0.00213	0.01	0.00075	0.00081
Iron (Fe)	mg/L	0.010	0.280	0.429	0.107	0.119
Lead (Pb)	mg/L	0.000090	0.000111	0.000288	<0.000050	<0.000050
Magnesium (Mg)	mg/L	0.010	5.83	6.04	10.90	10.90
Manganese (Mn)	mg/L	0.00030	0.0523	0.063	0.00846	0.0108
Nickel (Ni)	mg/L	0.0020	0.00235	0.00245	0.00189	0.00193
Potassium (K)	mg/L	0.020	11.6	24.7	9.45	9.51
Sodium (Na)	mg/L	0.030	31.5	57.3	48.3	47.7
Zinc (Zn)	mg/L	0.0020	0.0141	0.0184	<0.0030	0.0076
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	26.4	89.9	17.4	16.4
Total Suspended Solids						
Total Suspended Solids	mg/L	13	11.8	152	<3.0	<3.0
pH						
pH	pH Units	0.10	8.44	7.79	8.28	8.24
Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
Toluene	mg/L	0.0010	0.0010	N/A	N/A	N/A
Ethyl Benzene	mg/L	0.00050	0.00050	N/A	N/A	N/A
o-Xylene	mg/L	0.00050	0.00050	N/A	N/A	N/A
F1 (C6-C10)	mg/L	0.10	0.10	N/A	N/A	N/A
F2 (C10-C16)	mg/L	0.25	0.10	N/A	N/A	N/A
F3 (C16-C34)	mg/L	0.25	0.25	N/A	N/A	N/A
F4 (C34-C50)	mg/L	0.25	0.25	N/A	N/A	N/A
Total Hydrocarbons (C6-C50)	mg/L	0.44	0.38	N/A	N/A	N/A

Coral Harbour
COR-6

			2020			
Parameter	**Unit**	**DL**	**08-Jul-20**	**26-Aug-20**	**10-Sep-20**	**11-Sep-20**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	163	297	394	418
Carbonate (CO3)	mg/L	0.60	4.44	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L	0.34	0.34	<0.34	<0.34	<0.34
Total (as CaCO3)	mg/L	1.0	141	243	323	343
Ammonia by Colour						
Total (as N)	mg/L	0.20	0.051	0.091	1.4	1.26
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	16.4	27.9	9.1	11.6
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	10.3	9.9	6.4	9.2
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	28.1	53.9	60.9	56.1
Conductivity						
Conductivity	umhos/cm	1.0	365	655	753	790
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	365	40	20	50
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	134	241	299	291
Mercury Total						
Mercury (Hg)	mg/L	0.00020	0.0000050	0.0000050	<0.0000050	<0.0000050
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.020	<0.020	0.151	<0.020
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.070	<0.070	0.151	<0.070
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.010	<0.010	<0.010	<0.010
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	5	<5.0	620	<5.0
Phenol						
Phenols	mg/L	0.0010	0.0016	0.0018	0.0069	0.0029
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	0.427	0.308	0.304	0.302
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	20.5	35.8	26.1	23.5
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.116	0.126	0.047	0.046
Arsenic (As)	mg/L	0.00020	0.00136	0.00266	0.0022	0.00211
Cadmium (Cd)	mg/L	0.000010	0.0000458	0.0000087	<0.0000050	<0.0000050
Calcium (Ca)	mg/L	0.10	41	62.1	84.8	83
Chromium (Cr)	mg/L	0.0010	0.00051	0.00076	0.00084	0.00107
Cobalt (Co)	mg/L	0.00020	0.00022	0.00030	0.00023	0.00024
Copper (Cu)	mg/L	0.00020	0.00378	0.0027	0.00108	0.00124
Iron (Fe)	mg/L	0.010	0.592	1.500	0.670	0.685
Lead (Pb)	mg/L	0.000090	0.000341	0.000524	0.000191	0.000246
Magnesium (Mg)	mg/L	0.010	7.57	20.80	21.10	20.40
Manganese (Mn)	mg/L	0.00030	0.0653	0.0663	0.0739	0.0876
Nickel (Ni)	mg/L	0.0020	0.00116	0.00218	0.00205	0.00192
Potassium (K)	mg/L	0.020	11.2	24.4	26.6	25
Sodium (Na)	mg/L	0.030	20.7	48.8	49.4	48.3
Zinc (Zn)	mg/L	0.0020	0.0102	0.0082	0.0076	0.0074
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	27.3	38.8	32.9	32.4
Total Suspended Solids						
Total Suspended Solids	mg/L	13	10.4	34.9	31.4	12.2
pH						
pH	pH Units	0.10	8.34	8.19	8.17	8.06
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0010	0.0010	<0.0010	<0.0010	<0.0010
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.10	0.10	<0.10	<0.10	<0.10
F2 (C10-C16)	mg/L	0.25	0.10	<0.10	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25	0.25	0.28	<0.25	0.27
F4 (C34-C50)	mg/L	0.25	0.25	<0.25	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.44	0.38	<0.38	<0.38	<0.38

Coral Harbour
COR-7

			2020			
Parameter	**Unit**	**DL**	**08-Jul-20**	**26-Aug-20**	**10-Sep-20**	**11-Sep-20**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	130	120	189	184
Carbonate (CO3)	mg/L	0.60	0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L	0.34	0.34	<0.34	<0.34	<0.34
Total (as CaCO3)	mg/L	1.0	107	98.5	155	151
Ammonia by Colour						
Total (as N)	mg/L	0.20	0.049	0.079	0.029	0.029
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	2	7.7	2.7	<2.0
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	2	<6.0	<2.0	<2.0
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	4.18	6.8	10	6.7
Conductivity						
Conductivity	umhos/cm	1.0	526	901	1020	976
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	N/A	30	10	<10
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	264	486	576	523
Mercury Total						
Mercury (Hg)	mg/L	0.00020	0.0000050	<0.0000050	<0.0000050	<0.0000050
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.020	<0.040	0.094	<0.040
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.070	<0.070	0.094	<0.070
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.010	<0.020	<0.020	<0.020
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	5	<5.0	<5.0	<5.0
Phenol						
Phenols	mg/L	0.0010	0.0010	0.0010	<0.0010	<0.0010
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	0.0856	0.0794	0.0638	0.0524
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	178	421	441	422
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0081	0.0234	0.0170	0.0062
Arsenic (As)	mg/L	0.00020	0.00062	0.0007	0.00051	0.0005
Cadmium (Cd)	mg/L	0.000010	0.0000636	0.0000426	0.0000288	0.0000074
Calcium (Ca)	mg/L	0.10	98	178	213	193
Chromium (Cr)	mg/L	0.0010	0.00028	0.00037	0.00065	0.00032
Cobalt (Co)	mg/L	0.00020	0.00019	0.00029	0.00034	0.00030
Copper (Cu)	mg/L	0.00020	0.00311	0.00395	0.0023	0.00102
Iron (Fe)	mg/L	0.010	0.454	1.360	1.330	1.170
Lead (Pb)	mg/L	0.000090	0.000186	0.000544	0.000455	0.000145
Magnesium (Mg)	mg/L	0.010	4.59	9.99	10.70	10.00
Manganese (Mn)	mg/L	0.00030	0.0313	0.0334	0.0842	0.0831
Nickel (Ni)	mg/L	0.0020	0.00195	0.00354	0.003	0.00273
Potassium (K)	mg/L	0.020	3.82	6.61	7.6	6.84
Sodium (Na)	mg/L	0.030	5.3	12.5	14.7	14.1
Zinc (Zn)	mg/L	0.0020	0.0499	0.0559	0.0282	0.0205
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	11.9	17.7	17.1	16.9
Total Suspended Solids						
Total Suspended Solids	mg/L	13	3	15.7	11	56.8
pH						
pH	pH Units	0.10	7.98	7.89	8.06	8.15
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0010	0.0010	<0.0010	<0.0010	<0.0010
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.10	0.10	<0.10	<0.10	<0.10
F2 (C10-C16)	mg/L	0.25	0.10	<0.10	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25	0.25	<0.25	<0.25	<0.25
F4 (C34-C50)	mg/L	0.25	0.25	<0.25	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.44	0.38	<0.38	<0.38	<0.38

Appendix E : CIRNAC Inspection Report

The CIRNAC inspection report was not received by CGS at the time of this submission.