ANNUAL REPORT
FOR THE HAMLET OF BAKER LAKE

YEAR BEING REPORTED: 2019

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water License No. 3BM-BAK1526 issued to the Hamlet of Baker Lake.

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

Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (m^3)	Quantity of Sewage Waste Discharged (Estimated, m^3)
January	6,126.961	Same
February	*	Same
March	*	Same
April	3,219.312	Same
May	946.075	Same
June	6,232.893	Same
July	6,405.682	Same
August	6,738.409	Same
September	6,488.481	Same
October	6,605.654	Same
November	6,355.050	Same
December	6,295.874	Same
ANNUAL TOTAL		

Note: There is no meter existing at the end of the Sewage Truck discharge pipe. Therefore, the monthly sewage discharge volume is considered as equal volume to the monthly water consumption.

*This data was not available from the Hamlet at the time of submission.

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

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

Spill	Occurrence Date	Location Description	Product Spilled	Quantity
spill-2020028	13-Nov-19	4003 First Avenue	Wastewater (sewage, mine tailings)	50 L
spill-2019328	19-Aug-19	RCMP #7022	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity
spill-2019306	01-Aug-19	2065 3rd Avenue, Baker Lake	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	5 L
spill-2019304	19-Jul-19	Unit 27	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	10 L
spill-2019222	29-May-19	Whale Tail Pit Project- 65 24' 30.8"N 96 40' 54.8"W	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	300 L
spill-2019183	02-May-19	3001, 1st Avenue	Petroleum - waste oil (slops, sludge)	Unknown Quantity
spill-2019176	26-Apr-19	Unit 3022 A, 4th Avenue	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity
spill-2019175	26-Apr-19	Unit 2026	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity
spill-2019164	20-Apr-19	whale tail pit project- 65 24' 12"N 96 42' 20"W	Petroleum - lubricating oil (lube, hydraulic)	400 L
spill-2019117	18-Mar-19	L071, Block 64 or 4071 6th Street	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	1 L
spill-2019089	06-Mar-19	Unit 4003, 1st Avenue	Wastewater (sewage, mine tailings)	10 L
spill-2019076	25-Feb-19	Loop Road #2 Hamlet of Baker Lake, NU	Wastewater (sewage, mine tailings)	350 L
spill-2019074	25-Feb-19	Baker Lake, corner of 6th Crescent and 2nd Road	Wastewater (sewage, mine tailings)	Unknown Quantity
spill-2019041	05-Feb-19	Baker Lake NU, Canada 64 18' 57" 96 0' 58"	Wastewater (sewage, mine tailings)	140 L
spill-2019065	05-Feb-19	Unit 12plex, 2044 4th Street	Wastewater (sewage, mine tailings)	Unknown Quantity

spill-2019053	31-Jan-19	Baker Lake, (1st Street and 6th Avenue)	Wastewater (sewage, mine tailings)	250 L
spill-2019068	29-Jan-19	Baker Lake		Unknown Quantity

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

- No abandonment or restoration work was done in 2019.

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

- none

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

- GN engaged Associated Engineering to complete a study on the raw water intake for the water treatment plant and on the treatment train within the water treatment plant.

ix. updates or revisions to the approved Operation and Maintenance Plans.
-none

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

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

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- The 3BM-BAK1526 INAC Inspection report has not been received to date.

Appendix A: BAK-5 Effluent Quality Limits – 1 page
Appendix B: Weekly Inspections at Monitoring Stations – 1 Page
Appendix C: Certificate of Analysis June 17, 2019 – 12 pages
Certificate of Analysis August 29, 2019 – 7 pages
Appendix D: Hazardous Materials Spill Database, Baker Lake 2019 – 3 pages
Appendix E: Baker Lake Sampling Results Summary 2019– 4 pages

Appendix A

Baker Lake Monitoring Stations and Sampling Parameters for Licence No. 3BM-BAK1623
Part D, Item 2; BAK-5 Effluent Quality Limits

Parameter	Maximum Concentration of any grab sample	BAK-5
		17-Jun-19
BOD	80 mg/L	3.9
Total Suspended Solids	100 mg/L	2
Fecal Coliforms	1 x 10^4 CFU/100mL	1860
Oil & Grease	no visible sheen	5
pH	between 6 and 9	6.92

The annual sample taken at BAK-5, as per Part H, Item 1, was below maximum concentration for the effluent quality limits with the exception of Fecal Coliforms

Appendix B

No Weekly Inspections at Monitoring Stations Document was received by CGS

Appendix C

Hamlet of Baker Lake
ATTN: PAUL NARKYAGIK
Public Works Foreman - Wastewater
PO Box 149
Baker Lake NU X0C 0A0

Date Received: 30-AUG-19
Report Date: 11-SEP-19 09:45 (MT)
Version: FINAL

Client Phone: 867-793-2881

Certificate of Analysis

Lab Work Order #: L2339491

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

Hua Wo
Chemistry Laboratory Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2339491-1 BAK-2							
Sampled By: CLIENT on 29-AUG-19 @ 09:00							
Matrix: wastewater							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	29.0		1.2	mg/L		05-SEP-19	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		05-SEP-19	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		05-SEP-19	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	23.8		1.0	mg/L		04-SEP-19	R4783324
Ammonia by colour							
Ammonia, Total (as N)	<0.010		0.010	mg/L		09-SEP-19	R4795431
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	7.0		2.0	mg/L		31-AUG-19	R4784617
Carbonaceous BOD							
BOD Carbonaceous	2.8		2.0	mg/L		31-AUG-19	R4784617
Chloride in Water by IC							
Chloride (Cl)	12.4		0.50	mg/L		31-AUG-19	R4783564
Conductivity							
Conductivity	99.8		1.0	umhos/cm		04-SEP-19	R4783324
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	20	MBHT	10	MPN/100mL		30-AUG-19	R4781408
Hardness Calculated							
Hardness (as CaCO3)	31.9	HTC	0.20	mg/L		10-SEP-19	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	05-SEP-19	09-SEP-19	R4792194
Nitrate in Water by IC							
Nitrate (as N)	0.080		0.020	mg/L		31-AUG-19	R4783564
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.080		0.070	mg/L		05-SEP-19	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		31-AUG-19	R4783564
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-SEP-19	R4791490
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		04-SEP-19	R4783340
Phosphorus, Total							
Phosphorus (P)-Total	0.124		0.0030	mg/L		05-SEP-19	R4783693
Sulfate in Water by IC							
Sulfate (SO4)	7.31		0.30	mg/L		31-AUG-19	R4783564
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0324		0.0030	mg/L	09-SEP-19	09-SEP-19	R4791470
Arsenic (As)-Total	0.00057		0.00010	mg/L	09-SEP-19	09-SEP-19	R4791470
Cadmium (Cd)-Total	0.0000073		0.0000050	mg/L	09-SEP-19	09-SEP-19	R4791470
Calcium (Ca)-Total	9.74		0.050	mg/L	09-SEP-19	09-SEP-19	R4791470
Chromium (Cr)-Total	0.00035		0.00010	mg/L	09-SEP-19	09-SEP-19	R4791470
Cobalt (Co)-Total	0.00018		0.00010	mg/L	09-SEP-19	09-SEP-19	R4791470
Copper (Cu)-Total	0.00230		0.00050	mg/L	09-SEP-19	09-SEP-19	R4791470
Iron (Fe)-Total	0.358		0.010	mg/L	09-SEP-19	09-SEP-19	R4791470
Lead (Pb)-Total	0.000079		0.000050	mg/L	09-SEP-19	09-SEP-19	R4791470
Magnesium (Mg)-Total	1.85		0.0050	mg/L	09-SEP-19	09-SEP-19	R4791470
Manganese (Mn)-Total	0.0378		0.00010	mg/L	09-SEP-19	09-SEP-19	R4791470
Nickel (Ni)-Total	0.00084		0.00050	mg/L	09-SEP-19	09-SEP-19	R4791470

* 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
L2339491-1 BAK-2							
Sampled By: CLIENT on 29-AUG-19 @ 09:00							
Matrix: wastewater							
Total Metals in Water by CRC ICPMS							
Potassium (K)-Total	1.34		0.050	mg/L	09-SEP-19	09-SEP-19	R4791470
Sodium (Na)-Total	7.13		0.050	mg/L	09-SEP-19	09-SEP-19	R4791470
Zinc (Zn)-Total	0.0040		0.0030	mg/L	09-SEP-19	09-SEP-19	R4791470
Total Organic Carbon by Combustion							
Total Organic Carbon	11.1		0.50	mg/L		06-SEP-19	R4788854
Total Suspended Solids							
Total Suspended Solids	10.0		2.0	mg/L		05-SEP-19	R4784577
pH							
pH	7.81		0.10	pH units		04-SEP-19	R4783324

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

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
MBHT	The APHA 30 hour hold time was exceeded for microbiological testing. Samples processed within 48 hours from time of sampling may be valid in some cases (refer to Health Canada guidance).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

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.

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.

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

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

HARDNESS-CALC-WP	Water	Hardness Calculated	APHA 2340B

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

HG-T-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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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.			
PH-WP	Water	pH	APHA 4500H
The pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
PHENOLS-4AAP-WT	Water	Phenol (4AAP)	EPA 9066
An automated method is used to distill the sample. The distillate is then buffered to pH 9.4 which reacts with 4AAP and potassium ferricyanide to form a red complex which is measured colorimetrically.			
SO4-IC-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.			

** 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:

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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.

ALS Environmental
www.alsglobal.com

Chain of Custody / Reque

Canada Toll Fr

L2339491-COFC

...de label here (only)

COC Number: 17 - 747826

Page of L2339491

Report To	Contact and company name below will appear on the final report	Select Report Format: PDF EXCEL EDD (DIGITAL)
Company:	Hamlet of Baker Lake	Quality Control (QC) Report with Report YES NO
Contact:	Paul Narkyagik	Compare Results to Criteria on Report - provide details below if box checked
Phone:	867-793-2881	Select Distribution: EMAIL MAIL FAX
	Company address below will appear on the final report	Email 1 or Fax
Street:	3022-4th Avenue	Email 2
City/Province:	Baker Lake Nunavut	Email 3
Postal Code:	X0C-0A0	
Invoice To	Same as Report To YES NO	Invoice Distribution
	Copy of Invoice with Report YES NO	Select Invoice Distribution: EMAIL MAIL FAX
Company:		Email 1 or Fax
Contact:		Email 2

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		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:

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may

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)]

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	NUMBER OF CONTAINERS	Routine	BOD	Oil and Grease	Bacteria	Phenols	Nutrients	Metals	Mercury	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
										P	P	P	P		
	BAK-2					X	X	X	X	X	X	X	X		

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 [X] NO	
Are samples for human consumption/ use? YES [X] 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			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Paul Narkyagik	Aug. 29, 2019	9:30		AUG 30/19	1125			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

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

9.8

Hamlet of Baker Lake
ATTN: PAUL NARKYAGIK
Public Works Foreman - Wastewater
PO Box 149
Baker Lake NU X0C 0A0

Date Received: 17-JUN-19
Report Date: 03-JUL-19 16:05 (MT)
Version: FINAL

Client Phone: 867-793-2881

Certificate of Analysis

Lab Work Order #: L2292774

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

Comments: ADDITIONAL 17-JUN-19 13:25
ADDITIONAL 17-JUN-19 13:01

Craig Riddell, B.Sc.Ag
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2292774-1 BAK-2							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	29.3		1.2	mg/L		19-JUN-19	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		19-JUN-19	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		19-JUN-19	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	24.0		1.0	mg/L		18-JUN-19	R4673671
Ammonia by colour							
Ammonia, Total (as N)	0.758		0.020	mg/L		22-JUN-19	R4682939
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		19-JUN-19	R4683432
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		19-JUN-19	R4683432
Chloride in Water by IC							
Chloride (Cl)	6.60		0.50	mg/L		18-JUN-19	R4681000
Conductivity							
Conductivity	71.8		1.0	umhos/cm		18-JUN-19	R4673671
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	390		10	MPN/100mL		17-JUN-19	R4672459
Hardness Calculated							
Hardness (as CaCO3)	22.9	HTC	0.20	mg/L		24-JUN-19	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	24-JUN-19	26-JUN-19	R4688859
Nitrate in Water by IC							
Nitrate (as N)	0.047		0.020	mg/L		18-JUN-19	R4681000
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-JUN-19	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		18-JUN-19	R4681000
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		21-JUN-19	R4680908
Phenol (4AAP)							
Phenols (4AAP)	0.0013		0.0010	mg/L		19-JUN-19	R4677196
Phosphorus, Total							
Phosphorus (P)-Total	0.147		0.0030	mg/L		19-JUN-19	R4673866
Sulfate in Water by IC							
Sulfate (SO4)	2.53		0.30	mg/L		18-JUN-19	R4681000
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.105		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Arsenic (As)-Total	0.00027		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cadmium (Cd)-Total	0.0000083		0.0000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Calcium (Ca)-Total	7.01		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Chromium (Cr)-Total	0.00021		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cobalt (Co)-Total	0.00011		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Copper (Cu)-Total	0.00306		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Iron (Fe)-Total	0.130		0.010	mg/L	21-JUN-19	21-JUN-19	R4682271
Lead (Pb)-Total	0.000101		0.000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Magnesium (Mg)-Total	1.31		0.0050	mg/L	21-JUN-19	21-JUN-19	R4682271
Manganese (Mn)-Total	0.0283		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Nickel (Ni)-Total	0.00055		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271

* 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
L2292774-1 BAK-2							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Total Metals in Water by CRC ICPMS							
Potassium (K)-Total	1.26		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Sodium (Na)-Total	3.61		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Zinc (Zn)-Total	0.0051		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Total Organic Carbon by Combustion							
Total Organic Carbon	8.08		0.50	mg/L		26-JUN-19	R4689283
Total Suspended Solids							
Total Suspended Solids	<2.0		2.0	mg/L		20-JUN-19	R4681118
pH							
pH	6.94		0.10	pH units		18-JUN-19	R4673671
L2292774-2 BAK-3							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	32.5		1.2	mg/L		19-JUN-19	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		19-JUN-19	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		19-JUN-19	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	26.6		1.0	mg/L		18-JUN-19	R4673671
Ammonia by colour							
Ammonia, Total (as N)	1.22		0.050	mg/L		22-JUN-19	R4682939
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	2.9		2.0	mg/L		19-JUN-19	R4683432
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		19-JUN-19	R4683432
Chloride in Water by IC							
Chloride (Cl)	8.47		0.50	mg/L		18-JUN-19	R4681000
Conductivity							
Conductivity	86.2		1.0	umhos/cm		18-JUN-19	R4673671
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	160		10	MPN/100mL		17-JUN-19	R4672459
Hardness Calculated							
Hardness (as CaCO3)	29.0	HTC	0.20	mg/L		24-JUN-19	
Mercury Total							
Mercury (Hg)-Total	0.0000060		0.0000050	mg/L	24-JUN-19	26-JUN-19	R4688859
Nitrate in Water by IC							
Nitrate (as N)	0.047		0.020	mg/L		18-JUN-19	R4681000
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-JUN-19	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		18-JUN-19	R4681000
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		21-JUN-19	R4680908
Phenol (4AAP)							
Phenols (4AAP)	0.0011		0.0010	mg/L		19-JUN-19	R4677196
Phosphorus, Total							
Phosphorus (P)-Total	0.220		0.0030	mg/L		19-JUN-19	R4673866
Sulfate in Water by IC							
Sulfate (SO4)	3.59		0.30	mg/L		18-JUN-19	R4681000

* 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
L2292774-2 BAK-3							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.135		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Arsenic (As)-Total	0.00037		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cadmium (Cd)-Total	0.0000110		0.0000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Calcium (Ca)-Total	9.09		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Chromium (Cr)-Total	0.00043		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cobalt (Co)-Total	0.00017		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Copper (Cu)-Total	0.00376		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Iron (Fe)-Total	0.266		0.010	mg/L	21-JUN-19	21-JUN-19	R4682271
Lead (Pb)-Total	0.000174		0.000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Magnesium (Mg)-Total	1.54		0.0050	mg/L	21-JUN-19	21-JUN-19	R4682271
Manganese (Mn)-Total	0.0381		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Nickel (Ni)-Total	0.00086		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Potassium (K)-Total	1.70		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Sodium (Na)-Total	4.93		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Zinc (Zn)-Total	0.0406		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Total Organic Carbon by Combustion							
Total Organic Carbon	8.30		0.50	mg/L		26-JUN-19	R4689283
Total Suspended Solids							
Total Suspended Solids	3.6		2.0	mg/L		20-JUN-19	R4681118
pH							
pH	6.93		0.10	pH units		18-JUN-19	R4673671
L2292774-3 BAK-4							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		25-JUN-19	R4691852
Toluene	<0.0010		0.0010	mg/L		25-JUN-19	R4691852
Ethyl benzene	<0.00050		0.00050	mg/L		25-JUN-19	R4691852
o-Xylene	<0.00050		0.00050	mg/L		25-JUN-19	R4691852
m+p-Xylenes	<0.00040		0.00040	mg/L		25-JUN-19	R4691852
F1 (C6-C10)	<0.10		0.10	mg/L		25-JUN-19	R4691852
Surrogate: 4-Bromofluorobenzene (SS)	90.0		70-130	%		25-JUN-19	R4691852
CCME PHC F2-F4 in Water							
F2 (C10-C16)	<0.10		0.10	mg/L	24-JUN-19	26-JUN-19	R4687788
F3 (C16-C34)	<0.25		0.25	mg/L	24-JUN-19	26-JUN-19	R4687788
F4 (C34-C50)	<0.25		0.25	mg/L	24-JUN-19	26-JUN-19	R4687788
Surrogate: 2-Bromobenzotrifluoride	145.8	SURR-ND	60-140	%	24-JUN-19	26-JUN-19	R4687788
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		03-JUL-19	
Total Hydrocarbons (C6-C50)	<0.38		0.38	mg/L		03-JUL-19	
Sum of Xylene Isomer Concentrations							
Xylenes (Total)	<0.00064		0.00064	mg/L		03-JUL-19	
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	29.9		1.2	mg/L		19-JUN-19	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		19-JUN-19	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		19-JUN-19	
Alkalinity, Total (as CaCO3)							

* 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
L2292774-3 BAK-4							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	24.5		1.0	mg/L		18-JUN-19	R4673671
Ammonia by colour							
Ammonia, Total (as N)	0.686		0.020	mg/L		22-JUN-19	R4682939
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		19-JUN-19	R4683432
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		19-JUN-19	R4683432
Chloride in Water by IC							
Chloride (Cl)	6.55		0.50	mg/L		18-JUN-19	R4681000
Conductivity							
Conductivity	71.6		1.0	umhos/cm		18-JUN-19	R4673671
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	2050		10	MPN/100mL		17-JUN-19	R4672459
Hardness Calculated							
Hardness (as CaCO3)	24.9	HTC	0.20	mg/L		24-JUN-19	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	24-JUN-19	26-JUN-19	R4688859
Nitrate in Water by IC							
Nitrate (as N)	<0.020		0.020	mg/L		18-JUN-19	R4681000
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-JUN-19	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		18-JUN-19	R4681000
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		21-JUN-19	R4680908
Phenol (4AAP)							
Phenols (4AAP)	0.0026		0.0010	mg/L		19-JUN-19	R4677196
Phosphorus, Total							
Phosphorus (P)-Total	0.0962		0.0030	mg/L		19-JUN-19	R4673866
Sulfate in Water by IC							
Sulfate (SO4)	2.13		0.30	mg/L		18-JUN-19	R4681000
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.148		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Arsenic (As)-Total	0.00031		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cadmium (Cd)-Total	0.0000107		0.0000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Calcium (Ca)-Total	7.67		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Chromium (Cr)-Total	0.00027		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cobalt (Co)-Total	0.00015		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Copper (Cu)-Total	0.00244		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Iron (Fe)-Total	0.195		0.010	mg/L	21-JUN-19	21-JUN-19	R4682271
Lead (Pb)-Total	0.000199		0.000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Magnesium (Mg)-Total	1.39		0.0050	mg/L	21-JUN-19	21-JUN-19	R4682271
Manganese (Mn)-Total	0.0220		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Nickel (Ni)-Total	0.00073		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Potassium (K)-Total	1.24		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Sodium (Na)-Total	3.77		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Zinc (Zn)-Total	0.0105		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Total Organic Carbon by Combustion							
Total Organic Carbon	7.99		0.50	mg/L		26-JUN-19	R4689283
Total Suspended Solids							
Total Suspended Solids	8.0		2.0	mg/L		20-JUN-19	R4681118
pH							

* 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
L2292774-3 BAK-4							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
pH							
pH	6.93		0.10	pH units		18-JUN-19	R4673671
L2292774-4 BAK-5							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	29.0		1.2	mg/L		19-JUN-19	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		19-JUN-19	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		19-JUN-19	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	23.8		1.0	mg/L		18-JUN-19	R4673671
Ammonia by colour							
Ammonia, Total (as N)	0.643		0.020	mg/L		22-JUN-19	R4682939
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	3.9		2.0	mg/L		19-JUN-19	R4683432
Carbonaceous BOD							
BOD Carbonaceous	<2.0		2.0	mg/L		19-JUN-19	R4683432
Chloride in Water by IC							
Chloride (Cl)	6.49		0.50	mg/L		18-JUN-19	R4681000
Conductivity							
Conductivity	70.1		1.0	umhos/cm		18-JUN-19	R4673671
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	1860		10	MPN/100mL		17-JUN-19	R4672459
Hardness Calculated							
Hardness (as CaCO3)	24.0	HTC	0.20	mg/L		24-JUN-19	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	24-JUN-19	26-JUN-19	R4688859
Nitrate in Water by IC							
Nitrate (as N)	0.023		0.020	mg/L		18-JUN-19	R4681000
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.070		0.070	mg/L		21-JUN-19	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		18-JUN-19	R4681000
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		21-JUN-19	R4680908
Phenol (4AAP)							
Phenols (4AAP)	0.0020		0.0010	mg/L		19-JUN-19	R4677196
Phosphorus, Total							
Phosphorus (P)-Total	0.0769		0.0030	mg/L		19-JUN-19	R4673866
Sulfate in Water by IC							
Sulfate (SO4)	2.06		0.30	mg/L		18-JUN-19	R4681000
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0403		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Arsenic (As)-Total	0.00023		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cadmium (Cd)-Total	0.0000084		0.0000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Calcium (Ca)-Total	7.49		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Chromium (Cr)-Total	0.00012		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Cobalt (Co)-Total	<0.00010		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Copper (Cu)-Total	0.00189		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271

* 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
L2292774-4 BAK-5							
Sampled By: CLIENT on 17-JUN-19							
Matrix:							
Total Metals in Water by CRC ICPMS							
Iron (Fe)-Total	0.098		0.010	mg/L	21-JUN-19	21-JUN-19	R4682271
Lead (Pb)-Total	0.000064		0.000050	mg/L	21-JUN-19	21-JUN-19	R4682271
Magnesium (Mg)-Total	1.30		0.0050	mg/L	21-JUN-19	21-JUN-19	R4682271
Manganese (Mn)-Total	0.0176		0.00010	mg/L	21-JUN-19	21-JUN-19	R4682271
Nickel (Ni)-Total	0.00058		0.00050	mg/L	21-JUN-19	21-JUN-19	R4682271
Potassium (K)-Total	1.09		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Sodium (Na)-Total	3.51		0.050	mg/L	21-JUN-19	21-JUN-19	R4682271
Zinc (Zn)-Total	0.0106		0.0030	mg/L	21-JUN-19	21-JUN-19	R4682271
Total Organic Carbon by Combustion							
Total Organic Carbon	7.68		0.50	mg/L		26-JUN-19	R4689283
Total Suspended Solids							
Total Suspended Solids	<2.0		2.0	mg/L		20-JUN-19	R4681118
pH							
pH	6.92		0.10	pH units		18-JUN-19	R4673671

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

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
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.
SURR-ND	Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.

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.

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

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

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

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

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

HARDNESS-CALC-WP Water Hardness Calculated APHA 2340B

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

HG-T-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.

PH-WP Water pH APHA 4500H

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

PHENOLS-4AAP-WT Water Phenol (4AAP) EPA 9066

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

SO4-IC-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.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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:

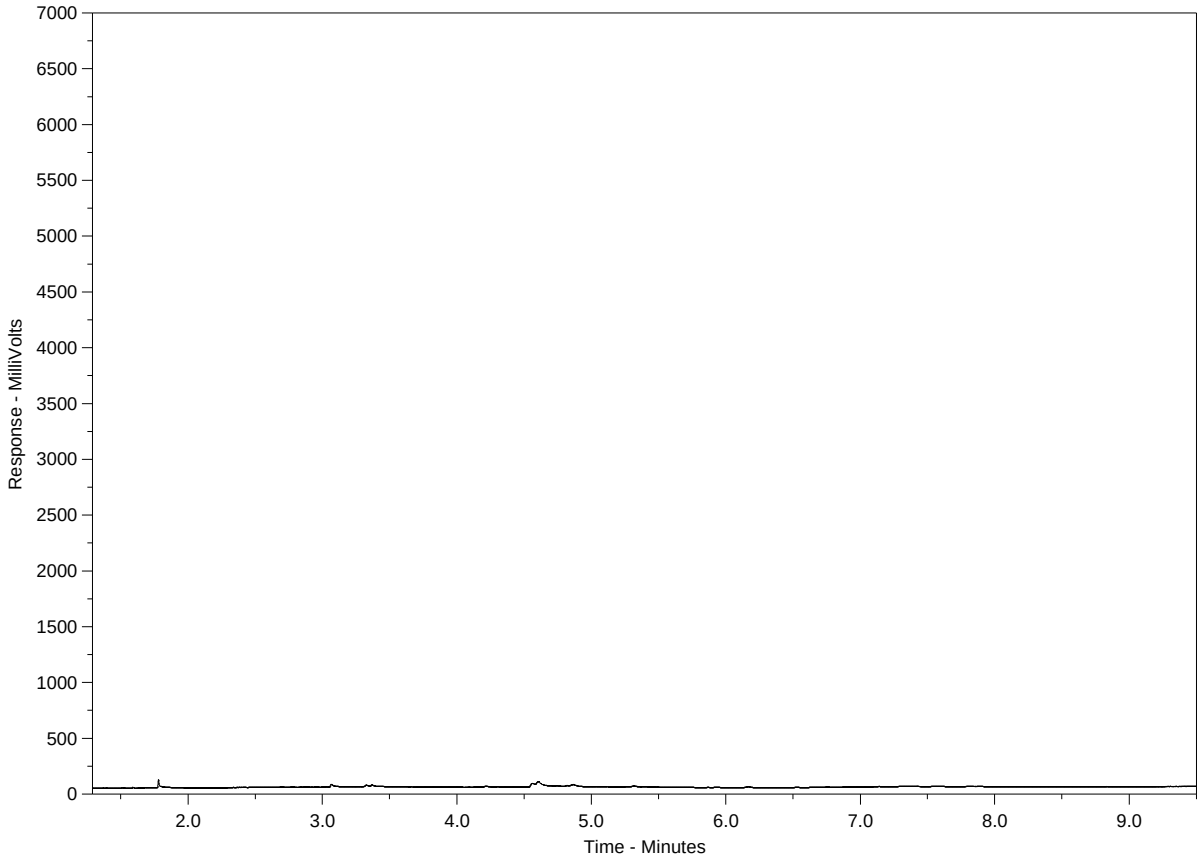
GLOSSARY OF REPORT TERMS

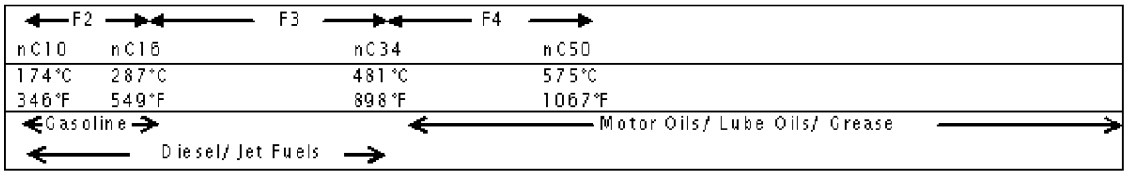
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates 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: L2292774-3
Client Sample ID: BAK-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.

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2292774-COFC

COC Number: 14 - 450495

Page ____ of ____

Report To		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	Hamlet of Baker Lake	Select Report Format:	☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)	R ☐ Regular (Standard TAT if received by 3pm)
Contact:	Paul Narkyagik	Quality Control (QC) Report with Report	☐ Yes ☐ No	P ☐ Priority (2-4 business days if received by 3pm)
Address:	3022-4th Avenue. P.O. Box 149 Baker Lake, Nu X0C-0A0	☐ Criteria on Report - provide details below if box checked		E ☐ Emergency (1-2 business days if received by 3pm)
		Select Distribution:	☐ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Phone:	867-793-2881	Email 1 or Fax		Specify Date Required for E2,E or P:
		Email 2		

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

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)	L2292774	ALS Contact:	Sampler:

Analysis Request

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

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Routine (P)	BOD (P)	Oil and Grease (P)	Bacteria	Phenols (P)	Nutrients (P)	Metals (P)	Mercury (P)	PAH/EPH/F2-F4 (P)	BTEX/VOC (P)			Number of Containers
	BAK-2				X	X	X	X	X	X	X	X					
	BAK-3				X	X	X	X	X	X	X	X					
	BAK-4				X	X	X	X	X	X	X	X	X	X			
	BAK-5				X	X	X	X	X	X	X	X					

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

SAMPLE CONDITION AS RECEIVED (lab use only)

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

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
10.6					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Paul Narkyagik	06-13-19	12:00		17-6-19	1237		17-6-19	1456

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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

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

Appendix D

Spills

Occurance Date

Start date

Jan | 1 | 2019

End date

Dec | 31 | 2019

Spill Region

- Any -

Spill Location

--Baker Lake

Spill Location Description

Report Number

Items per page

100

Go | Reset

Spill	Occurance Date	Spill Region	Location	Location Description	Product Spilled	Quantity	Measurement	Spill Cause	Lead Agency
spill-2020028	November 13, 2019	Keewatin	Baker Lake, Community, Nunavut	4003 First Avenue	Wastewater (sewage, mine tailings)	50.00			GN - Government of Nunavut
spill-2019328	August 19, 2019	Keewatin	Baker Lake, Community, Nunavut	RCMP #7022	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity			GN - Government of Nunavut
spill-2019306	August 1, 2019	Keewatin	Baker Lake, Community, Nunavut	2065 3rd Avenue, Baker Lake	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	5.00		Tank Leak	GN - Government of Nunavut
spill-2019304	July 19, 2019	Keewatin	Baker Lake, Community, Nunavut	Unit 27	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	10.00		Tank Leak	GN - Government of Nunavut
spill-2019222	May 29, 2019	Keewatin	Baker Lake, Community, Nunavut	Whale Tail Pit Project- 65 24' 30.8"N 96 40' 54.8"W	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	300.00	Litres	Overflow Event	INAC - Indigenous and Northern Affairs Canada

spill-2019183	May 2, 2019	Keewatin	Baker Lake, Community, Nunavut	3001, 1st Avenue	Petroleum - waste oil (slops, sludge)	Unknown Quantity		Deliberate Discharge	GN - Government of Nunavut
spill-2019176	April 26, 2019	Keewatin	Baker Lake, Community, Nunavut	Unit 3022 A, 4th Avenue	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity		Overflow Event	GN - Government of Nunavut
spill-2019175	April 26, 2019	Keewatin	Baker Lake, Community, Nunavut	Unit 2026	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Unknown Quantity		Overflow Event	GN - Government of Nunavut
spill-2019164	April 20, 2019		Baker Lake, Community, Nunavut, Meadowbank, Mine, Oil Field, etc	whale tail pit project- 65 24' 12"N 96 42' 20"W	Petroleum - lubricating oil (lube, hydraulic)	400.00	Litres	Breakage	INAC - Indigenous and Northern Affairs Canada
spill-2019117	March 18, 2019	Keewatin	Baker Lake, Community, Nunavut	L071, Block 64 or 4071 6th Street	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	1.00	Litres	Overflow Event	GN - Government of Nunavut
spill-2019089	March 6, 2019	Keewatin	Baker Lake, Community, Nunavut	Unit 4003, 1st Avenue	Wastewater (sewage, mine tailings)	10.00	Litres		GN - Government of Nunavut
spill-2019076	February 25, 2019	Keewatin	Baker Lake, Community, Nunavut	Loop Road #2 Hamlet of Baker Lake, NU	Wastewater (sewage, mine tailings)	350.00	Litres		GN - Government of Nunavut
spill-2019074	February 25, 2019	Keewatin	Baker Lake, Community, Nunavut	Baker Lake, corner of 6th Crescent and 2nd Road	Wastewater (sewage, mine tailings)	Unknown Quantity		Unkown Cause	GN - Government of Nunavut
spill-2019041	February 5, 2019	Keewatin	Baker Lake, Community, Nunavut	Baker Lake NU, Canada 64 18' 57" 96 0' 58"	Wastewater (sewage, mine tailings)	140.00	Cubic Meters		INAC - Indigenous and Northern Affairs Canada
spill-2019065	February 5, 2019	Keewatin	Baker Lake, Community, Nunavut	Unit 12plex, 2044 4th Street	Wastewater (sewage, mine tailings)	Unknown Quantity			GN - Government of Nunavut

spill-2019053	January 31, 2019	Keewatin	Baker Lake, Community, Nunavut	Baker Lake, (1st Street and 6th Avenue)	Wastewater (sewage, mine tailings)	250.00	Litres		GN - Government of Nunavut
spill-2019068	January 29, 2019	Keewatin	Baker Lake, Community, Nunavut	Baker Lake		Unknown Quantity			GN - Government of Nunavut

Displaying 1 - 17 of 17

CSV

Appendix E

Baker Lake
BAK-2

			2014		2015		2016			2017			2018			2019		Statistics		
Parameter	**Unit**	**DL**	**29-Jul-14**	**18-Aug-14**	**29-Jun-15**	**18-Aug-15**	**19-Jul-16**	**23-Aug-16**	**27-Sep-16**	**15-Jun-17**	**20-Jul-17**	**29-Aug-17**	**21-Jun-18**	**19-Jul-18**	**23-Aug-18**	**17-Jun-19**	**29-Aug-19**	**Min**	**Max**	**Average**
Alkalinity																				
Bicarbonate (HCO3)	mg/L	1.2	57	56	20.3	46.8	35.7	31.0	36.0	16.5	38.6	62.1	30.5	24.2	50.6	29.3	29.0	16.5	62.1	37.57
Carbonate (CO3)	mg/L	0.60	12	12	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.6	12	2.12
Hydroxide (OH)	mg/L	0.34	6.8	6.8	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	6.8	1.20
Total (as CaCO3)	mg/L	1.0	47	46	16.6	38.4	29.3	25.4	29.5	13.5	31.6	50.9	25.0	19.8	41.5	24.0	23.8	13.5	50.9	30.82
Ammonia by Colour																				
Total (as N)	mg/L	0.20	0.053	1.03	1.04	0.026	0.086	0.047	0.335	0.354	0.067	0.01	0.01	0.020	0.171	0.758	0.010	0.010	1.040	0.268
Biochemical Oxygen Demand (BOD)																				
Biochemical Oxygen Demand	mg/L	6.0	6.0	8.6	2.0	2.0	2.1	2.8	2.0	9.0	2.8	2.6	2.0	4.5	2.0	2.0	7.0	2	9	3.83
Carbonaceous BOD																				
BOD Carbonaceous	mg/L	6.0	6.0	6.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.8	2	6	2.59
Chloride in Water by IC																				
Chloride (Cl)	mg/L	10	31.0	31.1	9.24	19.9	15.2	12.8	13.3	4.21	14.5	20.1	4.06	9.51	28.5	6.6	12.4	4.06	31.1	15.49
Conductivity																				
Conductivity	umhos/cm	1.0	251	279	97.1	196	163	155	148	63.8	180	245	66.7	75.8	254	71.8	99.8	63.8	279	156.40
Fecal Coliforms																				
Fecal Coliforms	MPN/100mL	3	38	2300	75	4	93	430	930	110	40	50	20	10	10	390	20	4	2300	301.33
Hardness Calculated																				
Hardness (as CaCO3)	mg/L	0.30	57.4	65.5	23.1	58.0	50.0	49.4	45.5	19.6	64.6	79.7	29.6	23.4	66.9	22.9	31.9	19.6	79.7	45.83
Mercury Total																				
Mercury (Hg)	mg/L	0.00020	0.000058	0.000020	0.000020	0.000020	0.000020	0.000020	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.000005	0.000058	0.00
Nitrate in Water by IC																				
Nitrate (as N)	mg/L	0.40	1.30	1.38	0.980	0.686	0.475	1.63	1.28	0.461	0.577	0.349	0.02	0.02	1.58	0.047	0.08	0.02	1.63	0.72
Nitrate + Nitrite																				
Nitrate and Nitrite as N	mg/L	0.45	1.38	1.58	1.01	0.686	0.522	1.66	1.30	0.481	0.607	0.349	0.070	0.070	1.630	0.070	0.080	0.07	1.66	0.77
Nitrite in Water by IC																				
Nitrite (as N)	mg/L	0.20	0.089	0.198	0.033	0.010	0.047	0.026	0.028	0.021	0.031	0.01	<.010	0.01	0.051	0.01	0.01	0.01	0.198	0.04
Oil & Grease - Gravimetric																				
Oil and Grease	mg/L	5.0	2.0	2.0	2.0	2.0	5.0	5.0	5.0	19.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2	19.3	5.15
Phenol																				
Phenols	mg/L	0.0010	0.0010	0.0010	0.0010	0.0010	0.0017	0.0014	0.0013	0.026	0.0010	0.0010	0.0013	0.0010	0.0010	0.0013	0.0010	0.001	0.026	0.00
Phosphorus, Total																				
Phosphorus (P)	mg/L	0.010	1.72	1.08	0.413	0.374	0.451	0.289	0.191	0.168	0.339	0.17	0.0192	0.247	0.741	0.147	0.124	0.0192	1.72	0.43
Sulfate in Water by IC																				
Sulfate (SO4)	mg/L	6.0	15.6	26.8	6.71	24.0	20.8	19.8	15.1	7.27	27.5	35.3	0.71	4.42	30.7	2.53	7.31	0.71	35.3	16.30
Total Metals by ICP-MS																				
Aluminium (Al)	mg/L	0.0050	0.0792	0.237	0.0798	0.0494	0.0630	0.0644	0.0789	0.0757	0.0809	0.0342	0.0421	0.0157	0.121	0.105	0.0324	0.0157	0.237	0.08
Arsenic (As)	mg/L	0.00020	0.00112	0.00093	0.00055	0.00066	0.00076	0.00054	0.00042	0.00027	0.00084	0.00065	0.00038	0.00050	0.00103	0.00027	0.00057	0.00027	0.00112	0.00
Cadmium (Cd)	mg/L	0.000010	0.000010	0.000019	0.000010	0.000010	0.000010	0.000010	0.000010	0.000010	0.0000096	0.0000092	0.000005	0.0000051	0.000005	0.0000083	0.0000073	0.000005	0.000019	0.00
Calcium (Ca)	mg/L	0.10	16.8	19.5	6.91	17.5	15.4	15.6	14.0	6.15	19.7	24.8	9.92	7.21	20.00	7.01	9.74	6.15	24.8	14.02
Chromium (Cr)	mg/L	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.00020	0.00170	0.00036	0.00017	0.00047	0.00021	0.00035	0.00017	0.0017	0.00
Cobalt (Co)	mg/L	0.00020	0.00046	0.00043	0.00020	0.00027	0.0037	0.00020	0.00020	0.00020	0.00035	0.0027	0.00019	0.00012	0.00033	0.00011	0.00018	0.00011	0.0037	0.00
Copper (Cu)	mg/L	0.00020	0.00314	0.00490	0.00340	0.00273	0.00311	0.00401	0.00398	0.00255	0.00387	0.00275	0.00155	0.00202	0.0043	0.00306	0.0023	0.00155	0.0049	0.00
Iron (Fe)	mg/L	0.010	1.18	1.03	0.32	0.54	0.761	0.375	0.262	0.224	0.684	0.317	0.128	0.388	0.836	0.130	0.358	0.128	1.18	0.50
Lead (Pb)	mg/L	0.000090	0.000237	0.000495	0.000124	0.000113	0.000184	0.000144	0.000114	0.000090	0.000258	0.000072	0.0005	0.000062	0.000488	0.000101	0.000079	0.000062	0.0005	0.00
Magnesium (Mg)	mg/L	0.010	3.77	4.05	1.41	3.44	2.79	2.53	2.56	1.02	3.74	4.31	1.17	1.32	4.11	1.31	1.85	1.02	4.31	2.63
Manganese (Mn)	mg/L	0.00030	0.141	0.0894	0.0464	0.0640	0.104	0.0210	0.0239	0.0266	0.0935	0.049	0.0491	0.0214	0.0573	0.0283	0.0378	0.021	0.141	0.06
Nickel (Ni)	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.00104	0.00114	0.00088	0.00066	0.0017	0.00055	0.00084	0.00055	0.002	0.00
Potassium (K)	mg/L	0.020	6.05	5.30	2.02	3.30	2.58	2.34	2.10	1.18	2.72	3.56	0.765	1.370	5.260	1.26	1.34	0.765	6.05	2.74
Sodium (Na)	mg/L	0.030	22.1	21.6	6.59	15.2	10.0	8.83	9.05	2.95	10.8	14.6	1.02	5.56	18.6	3.61	7.13	1.02	22.1	10.51
Zinc (Zn)	mg/L	0.0020	0.0117	0.0091	0.0063	0.0029	0.0038	0.0058	0.0061	0.0053	0.0064	0.003	0.0031	0.0037	0.0055	0.0051	0.0040	0.0029	0.0117	0.01
Total Organic Carbon by Combustion																				
Total Organic Carbon	mg/L	0.50	14.4	18.1	6.2	9.2	8.57	7.82	6.54	4.81	6.93	7.24	8.48	8.20	9.91	8.08	11.1	4.81	18.1	9.04
Total Suspended Solids																				
Total Suspended Solids	mg/L	13	<5.0	13.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5	2	8.8	3.5	2	10	2	13	6.33
pH																				
pH	pH Units	0.10	7.51	7.47	6.98	7.50	7.27	7.17	7.32	7.04	7.24	7.66	7.05	7.29	7.34	6.94	7.81	6.94	7.81	7.31
Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
Toluene	mg/L	0.0010	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
Ethyl Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
o-Xylene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
F1 (C6-C10)	mg/L	0.10	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
F2 (C10-C16)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
F3 (C16-C34)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
F4 (C34-C50)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	/	/	/	/	/	/	/	/	/	N/A	N/A	N/A	/		0	0	#DIV/0!

Baker Lake
BAK-3

			2014		2015		2016			2017			2018	2019		Statistics		
Parameter	**Unit**	**DL**	**29-Jul-14**	**18-Aug-14**	**29-Jun-15**	**18-Aug-15**	**19-Jul-16**	**23-Aug-16**	**27-Sep-16**	**15-Jun-17**	**20-Jul-17**	**29-Aug-17**	**21-Jun-18**	**17-Jun-19**		**Min**	**Max**	**Average**
Alkalinity																		
Bicarbonate (HCO3)	mg/L	1.2	39	/	21.8	/	18.2	/	/	25.6	/	/	31.0	32.5		18.2	39	28.02
Carbonate (CO3)	mg/L	0.60	12	/	0.60	/	0.60	/	/	0.60	/	/	0.6	0.60		0.60	12	2.50
Hydroxide (OH)	mg/L	0.34	6.8	/	0.34	/	0.34	/	/	0.34	/	/	0.3	0.34		0.34	6.8	1.42
Total (as CaCO3)	mg/L	1.0	35	/	17.9	/	14.9	/	/	21.0	/	/	25.4	26.6		14.9	35	23.47
Ammonia by Colour																		
Total (as N)	mg/L	0.20	0.010	/	0.247	/	0.010	/	/	0.202	/	/	1.19	1.22		0.01	1.22	0.48
Biochemical Oxygen Demand (BOD)																		
Biochemical Oxygen Demand	mg/L	6.0	6.0	/	2.3	/	7.1	/	/	2.0	/	/	3.5	2.9		2	7.1	3.97
Carbonaceous BOD																		
BOD Carbonaceous	mg/L	6.0	6.0	/	2.4	/	3.5	/	/	2.0	/	/	2.0	2.0		2	6	2.98
Chloride in Water by IC																		
Chloride (Cl)	mg/L	10	9.20	/	9.53	/	11.4	/	/	7.82	/	/	9.39	8.47		7.82	11.4	9.30
Conductivity																		
Conductivity	umhos/cm	1.0	85	/	83.4	/	88.0	/	/	72.2	/	/	92.9	86.2		72.2	92.9	84.62
Fecal Coliforms																		
Fecal Coliforms	MPN/100mL	3	3	/	3	/	150	/	/	10	/	/	190	160		3	190	86.00
Hardness Calculated																		
Hardness (as CaCO3)	mg/L	0.30	23.5	/	23.3	/	24.6	/	/	21.3	/	/	25.8	29.0		21.3	29	24.58
Mercury Total																		
Mercury (Hg)	mg/L	0.00020	0.000020	0.000020	0.000020	/	0.000020	/	/	0.0000050	/	/	0.0	0.0000060		0.0000050	0.0000200	0.0000137
Nitrate in Water by IC																		
Nitrate (as N)	mg/L	0.40	0.052	/	0.179	/	0.020	/	/	0.045	/	/	0.031	0.047		0.020	0.179	0.062
Nitrate + Nitrite																		
Nitrate and Nitrite as N	mg/L	0.45	0.071	/	0.179	/	0.070	/	/	0.070	/	/	0.1	0.070		0.07	0.179	0.09
Nitrite in Water by IC																		
Nitrite (as N)	mg/L	0.20	0.050	/	0.010	/	0.010	/	/	0.010	/	/	0.0	0.010		0.01	0.05	0.02
Oil & Grease - Gravimetric																		
Oil and Grease	mg/L	5.0	2.0	/	2.0	/	5.0	/	/	5.0	/	/	5.0	5.0		2	5	4.00
Phenol																		
Phenols	mg/L	0.0010	0.0010	/	0.0010	/	0.0033	/	/	0.0027	/	/	0.0	0.0011		0.001	0.0033	0.00
Phosphorus, Total																		
Phosphorus (P)	mg/L	0.010	0.120	/	0.145	/	0.079	/	/	0.090	/	/	0.2	0.220		0.079	0.22	0.14
Sulfate in Water by IC																		
Sulfate (SO4)	mg/L	6.0	4.12	/	3.97	/	6.09	/	/	3.24	/	/	4.47	3.59		3.24	6.09	4.25
Total Metals by ICP-MS																		
Aluminium (Al)	mg/L	0.0050	0.0706	/	0.0469	/	0.0198	/	/	0.0629	/	/	0.0908	0.135		0.0198	0.135	0.07
Arsenic (As)	mg/L	0.00020	0.00063	/	0.00040	/	0.00056	/	/	0.00029	/	/	0.00042	0.00037		0.00029	0.00063	0.00
Cadmium (Cd)	mg/L	0.000010	0.000010	/	0.000010	/	0.000010	/	/	0.000010	/	/	0.0000079	0.0000110		0.0000079	0.000011	0.00
Calcium (Ca)	mg/L	0.10	7.01	/	6.97	/	7.35	/	/	6.55	/	/	7.74	9.09		6.55	9.09	7.45
Chromium (Cr)	mg/L	0.0010	0.0010	/	0.0010	/	0.0010	/	/	0.0010	/	/	0.00022	0.00043		0.00022	0.001	0.00
Cobalt (Co)	mg/L	0.00020	0.00026	/	0.00020	/	0.00020	/	/	0.00020	/	/	0.00019	0.00017		0.00017	0.00026	0.00
Copper (Cu)	mg/L	0.00020	0.00238	/	0.00179	/	0.00210	/	/	0.00142	/	/	0.00300	0.00376		0.00142	0.00376	0.00
Iron (Fe)	mg/L	0.010	0.46	/	0.47	/	0.335	/	/	0.426	/	/	0.383	0.266		0.266	0.47	0.39
Lead (Pb)	mg/L	0.000090	0.000090	/	0.000090	/	0.000090	/	/	0.000090	/	/	0.000106	0.000174		0.00009	0.000174	0.00
Magnesium (Mg)	mg/L	0.010	1.46	/	1.43	/	1.53	/	/	1.21	/	/	1.50	1.54		1.21	1.54	1.45
Manganese (Mn)	mg/L	0.00030	0.0811	/	0.0599	/	0.0295	/	/	0.0375	/	/	0.0693	0.0381		0.0295	0.0811	0.05
Nickel (Ni)	mg/L	0.0020	0.0020	/	0.0020	/	0.0020	/	/	0.0020	/	/	0.00079	0.00086		0.00079	0.002	0.00
Potassium (K)	mg/L	0.020	1.54	/	1.36	/	1.41	/	/	1.00	/	/	1.84	1.70		1	1.84	1.48
Sodium (Na)	mg/L	0.030	5.81	/	5.87	/	6.89	/	/	4.07	/	/	5.77	4.93		4.07	6.89	5.56
Zinc (Zn)	mg/L	0.0020	0.0038	/	0.0035	/	0.0024	/	/	0.0035	/	/	0.0039	0.0406		0.0024	0.0406	0.01
Total Organic Carbon by Combustion																		
Total Organic Carbon	mg/L	0.50	13.9	/	5.9	/	7.02	/	/	5.51	/	/	7.19	8.30		5.51	13.9	7.97
Total Suspended Solids																		
Total Suspended Solids	mg/L	13	15.0	/	7.0	/	8.0	/	/	9.0	/	/	3.9	3.6		3.6	15	7.75
pH																		
pH	pH Units	0.10	8.46	/	7.18	/	7.35	/	/	7.16	/	/	6.9	6.9		6.9	8.46	7.33
Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
Toluene	mg/L	0.0010	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
Ethyl Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
o-Xylene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
F1 (C6-C10)	mg/L	0.10	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
F2 (C10-C16)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
F3 (C16-C34)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
F4 (C34-C50)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	/	/	/	/	/	/	/	/	/	N/A	/		0	0	#DIV/0!

Baker Lake
BAK-4

			2014		2015		2016			2017			2018	2019		Statistics		
Parameter	**Unit**	**DL**	**29-Jul-14**	**18-Aug-14**	**29-Jun-15**	**18-Aug-15**	**19-Jul-16**	**23-Aug-16**	**27-Sep-16**	**15-Jun-17**	**20-Jul-17**	**29-Aug-17**	**21-Jun-18**	**17-Jun-19**		**Min**	**Max**	**Average**
Alkalinity																		
Bicarbonate (HCO3)	mg/L	1.2	79	/	30.4	/	38.9	/	/	44.2	/	/	52.1	29.9		29.9	79	45.75
Carbonate (CO3)	mg/L	0.60	12	/	0.60	/	0.60	/	/	0.60	/	/	0.6	0.6		0.6	12	2.50
Hydroxide (OH)	mg/L	0.34	6.8	/	0.34	/	0.34	/	/	0.34	/	/	0.3	0.34		0.34	6.8	1.42
Total (as CaCO3)	mg/L	1.0	64	/	24.9	/	31.9	/	/	36.2	/	/	42.7	24.5		24.5	64	37.37
Ammonia by Colour																		
Total (as N)	mg/L	0.20	2.65	/	2.86	/	0.95	/	/	3.90	/	/	4.68	0.686		0.686	4.68	2.62
Biochemical Oxygen Demand (BOD)																		
Biochemical Oxygen Demand	mg/L	6.0	12.7	/	4.0	/	3.0	/	/	4.1	/	/	10.5	2.0		2	12.7	6.05
Carbonaceous BOD																		
BOD Carbonaceous	mg/L	6.0	8.9	/	2.4	/	2.1	/	/	2.9	/	/	7.0	2.0		2	8.9	4.22
Chloride in Water by IC																		
Chloride (Cl)	mg/L	10	38.3	/	8.66	/	16.5	/	/	3.87	/	/	11.40	6.55		3.87	38.3	14.21
Conductivity																		
Conductivity	umhos/cm	1.0	317	/	89.2	/	175	/	/	69.0	/	/	149	71.6		69	317	145.13
Fecal Coliforms																		
Fecal Coliforms	MPN/100mL	3	4	/	9300	/	2400	/	/	12000	/	/	24200.0	2050		4	24200	8325.67
Hardness Calculated																		
Hardness (as CaCO3)	mg/L	0.30	59.9	/	16.2	/	51.2	/	/	18.2	/	/	30.1	24.9		16.2	59.9	33.42
Mercury Total																		
Mercury (Hg)	mg/L	0.00020	0.000020	0.000020	0.00020	/	0.000020	/	/	0.0000050	/	/	0.0	0.0000050		0.000005	0.0002	0.00
Nitrate in Water by IC																		
Nitrate (as N)	mg/L	0.40	0.400	/	0.044	/	0.265	/	/	0.056	/	/	0.030	0.020		0.02	0.4	0.14
Nitrate + Nitrite																		
Nitrate and Nitrite as N	mg/L	0.45	0.902	/	0.070	/	0.290	/	/	0.070	/	/	0.1	0.070		0.07	0.902	0.25
Nitrite in Water by IC																		
Nitrite (as N)	mg/L	0.20	0.502	/	0.010	/	0.025	/	/	0.011	/	/	0.0	0.010		0.01	0.502	0.09
Oil & Grease - Gravimetric																		
Oil and Grease	mg/L	5.0	2.3	/	2.0	/	5.0	/	/	5.1	/	/	5.0	5.0		2	5.1	4.07
Phenol																		
Phenols	mg/L	0.0010	0.0010	/	0.0010	/	0.0041	/	/	0.0039	/	/	0.0080	0.0026		0.001	0.008	0.00
Phosphorus, Total																		
Phosphorus (P)	mg/L	0.010	2.16	/	0.467	/	0.554	/	/	0.385	/	/	0.745	0.0962		0.0962	2.16	0.73
Sulfate in Water by IC																		
Sulfate (SO4)	mg/L	6.0	17.9	/	1.90	/	21.9	/	/	1.42	/	/	9.14	2.13		1.42	21.9	9.07
Total Metals by ICP-MS																		
Aluminium (Al)	mg/L	0.0050	0.204	/	0.0511	/	0.0846	/	/	0.0533	/	/	0.289	0.148		0.0511	0.289	0.14
Arsenic (As)	mg/L	0.00020	0.00114	/	0.00029	/	0.00078	/	/	0.00030	/	/	0.00055	0.00031		0.00029	0.00114	0.00
Cadmium (Cd)	mg/L	0.000010	0.000017	/	0.000010	/	0.000010	/	/	0.000010	/	/	0.0000164	0.0000107		0.00001	0.000017	0.00
Calcium (Ca)	mg/L	0.10	17.0	/	4.66	/	15.7	/	/	5.90	/	/	8.96	7.67		4.66	17	9.98
Chromium (Cr)	mg/L	0.0010	0.0010	/	0.0010	/	0.0010	/	/	0.0010	/	/	0.00041	0.00027		0.00027	0.001	0.00
Cobalt (Co)	mg/L	0.00020	0.00053	/	0.00020	/	0.00028	/	/	0.00020	/	/	0.00034	0.00015		0.00015	0.00053	0.00
Copper (Cu)	mg/L	0.00020	0.00379	/	0.00494	/	0.00371	/	/	0.00425	/	/	0.00977	0.00244		0.00244	0.00977	0.00
Iron (Fe)	mg/L	0.010	1.30	/	0.29	/	0.662	/	/	0.247	/	/	0.608	0.195		0.195	1.3	0.55
Lead (Pb)	mg/L	0.000090	0.000418	/	0.000129	/	0.000256	/	/	0.000163	/	/	0.000416	0.000199		0.000129	0.000418	0.00
Magnesium (Mg)	mg/L	0.010	4.26	/	1.11	/	2.91	/	/	0.839	/	/	1.87	1.39		0.839	4.26	2.06
Manganese (Mn)	mg/L	0.00030	0.239	/	0.0416	/	0.0734	/	/	0.0419	/	/	0.0975	0.0220		0.022	0.239	0.09
Nickel (Ni)	mg/L	0.0020	0.0020	/	0.0020	/	0.0020	/	/	0.0020	/	/	0.00101	0.00073		0.00073	0.002	0.00
Potassium (K)	mg/L	0.020	7.54	/	1.53	/	3.18	/	/	1.10	/	/	3.42	1.24		1.1	7.54	3.00
Sodium (Na)	mg/L	0.030	25.7	/	5.69	/	10.9	/	/	2.24	/	/	8.03	3.77		2.24	25.7	9.39
Zinc (Zn)	mg/L	0.0020	0.0106	/	0.0068	/	0.0054	/	/	0.0070	/	/	0.0117	0.0105		0.0054	0.0117	0.01
Total Organic Carbon by Combustion																		
Total Organic Carbon	mg/L	0.50	18.6	/	6.3	/	9.14	/	/	6.33	/	/	10.8	7.99		6.3	18.6	9.86
Total Suspended Solids																		
Total Suspended Solids	mg/L	13	25.0	/	5.0	/	5.0	/	/	5.0	/	/	12.0	8.0		5	25	10.00
pH																		
pH	pH Units	0.10	7.42	/	6.87	/	7.22	/	/	7.08	/	/	6.85	6.93		6.85	7.42	7.06
Benzene	mg/L	0.00050	0.00050	/	0.00050	/	0.00050	/	/	0.00050	/	/	0.0	0.00050		0.0005	0.0005	0.00
Toluene	mg/L	0.0010	0.0010	/	0.0010	/	0.0010	/	/	0.0010	/	/	0.0	0.0010		0.001	0.001	0.00
Ethyl Benzene	mg/L	0.00050	0.00050	/	0.00050	/	0.00050	/	/	0.00050	/	/	0.0	0.00050		0.0005	0.0005	0.00
o-Xylene	mg/L	0.00050	0.00050	/	0.00050	/	0.00050	/	/	0.00050	/	/	0.0	0.00050		0.0005	0.0005	0.00
F1 (C6-C10)	mg/L	0.10	0.10	/	0.10	/	0.10	/	/	0.10	/	/	0.1	0.10		0.1	0.1	0.10
F2 (C10-C16)	mg/L	0.25	0.25	/	0.25	/	0.10	/	/	0.10	/	/	0.1	0.10		0.1	0.25	0.15
F3 (C16-C34)	mg/L	0.25	0.32	/	0.42	/	0.27	/	/	0.37	/	/	0.48	0.25		0.25	0.48	0.35
F4 (C34-C50)	mg/L	0.25	0.25	/	0.25	/	0.25	/	/	0.25	/	/	0.3	0.25		0.25	0.25	0.25
Total Hydrocarbons (C6-C50)	mg/L	0.44	0.44	/	0.44	/	0.38	/	/	0.38	/	/	0.48	0.38		0.38	0.48	0.42

Baker Lake
BAK-5

			2014		2015		2016			2017			2018	2019		Statistics		
Parameter	**Unit**	**DL**	**29-Jul-14**	**18-Aug-14**	**29-Jun-15**	**18-Aug-15**	**19-Jul-16**	**23-Aug-16**	**27-Sep-16**	**15-Jun-17**	**20-Jul-17**	**29-Aug-17**	**21-Jun-18**	**17-Jun-19**		**Min**	**Max**	**Average**
Alkalinity																		
Bicarbonate (HCO3)	mg/L	1.2	96	/	32.7	/	46.0	/	/	31.4	/	/	38.1	29.0		31.4	96	51.53
Carbonate (CO3)	mg/L	0.60	12	/	0.60	/	0.60	/	/	0.60	/	/	0.6	0.60		0.6	12	3.45
Hydroxide (OH)	mg/L	0.34	6.8	/	0.34	/	0.34	/	/	0.34	/	/	0.3	0.34		0.34	6.8	1.96
Total (as CaCO3)	mg/L	1.0	79	/	26.8	/	37.7	/	/	25.7	/	/	31.2	23.8		25.7	79	42.30
Ammonia by Colour																		
Total (as N)	mg/L	0.20	6.3	/	2.63	/	2.85	/	/	3.64	/	/	4.29	0.643		2.63	6.3	3.86
Biochemical Oxygen Demand (BOD)																		
Biochemical Oxygen Demand	mg/L	6.0	15.2	/	3.7	/	12.0	/	/	6.5	/	/	10.9	3.9		3.7	15.2	9.35
Carbonaceous BOD																		
BOD Carbonaceous	mg/L	6.0	6.2	/	2.3	/	15.9	/	/	4.2	/	/	7.7	2.0		2.3	15.9	7.15
Chloride in Water by IC																		
Chloride (Cl)	mg/L	10	47.8	/	9.01	/	17.1	/	/	4.24	/	/	6.93	6.49		4.24	47.8	19.54
Conductivity																		
Conductivity	umhos/cm	1.0	357	/	92.8	/	151	/	/	67.3	/	/	95.2	70.1		67.3	357	167.03
Fecal Coliforms																		
Fecal Coliforms	MPN/100mL	3	2300	/	2300	/	930	/	/	19900	/	/	24200	1860		930	19900	6357.50
Hardness Calculated																		
Hardness (as CaCO3)	mg/L	0.30	43.7	/	17.2	/	29.1	/	/	14.1	/	/	16.7	24.0		14.1	43.7	26.03
Mercury Total																		
Mercury (Hg)	mg/L	0.00020	0.000020	0.000020	0.00020	/	0.000020	/	/	0.0000050	/	/	0.0	0.0000050		0.000005	0.0002	0.00005
Nitrate in Water by IC																		
Nitrate (as N)	mg/L	0.40	0.672	/	0.046	/	0.473	/	/	0.035	/	/	0.030	0.023		0.035	0.672	0.31
Nitrate + Nitrite																		
Nitrate and Nitrite as N	mg/L	0.45	2.29	/	0.070	/	0.732	/	/	0.070	/	/	0.1	0.070		0.07	2.29	0.79
Nitrite in Water by IC																		
Nitrite (as N)	mg/L	0.20	1.62	/	0.010	/	0.258	/	/	0.010	/	/	0.0	0.010		0.01	1.62	0.47
Oil & Grease - Gravimetric																		
Oil and Grease	mg/L	5.0	2.0	/	2.0	/	5.0	/	/	5.0	/	/	5.0	5.0		2.0	5.0	3.80
Phenol																		
Phenols	mg/L	0.0010	0.0010	/	0.0010	/	0.0025	/	/	0.0050	/	/	0.0111	0.0020		0.001	0.005	0.0024
Phosphorus, Total																		
Phosphorus (P)	mg/L	0.010	2.32	/	0.503	/	0.768	/	/	0.401	/	/	0.582	0.0769		0.401	2.32	1.00
Sulfate in Water by IC																		
Sulfate (SO4)	mg/L	6.0	3.50	/	2.01	/	3.21	/	/	1.36	/	/	2.55	2.06		1.36	3.5	2.52
Total Metals by ICP-MS																		
Aluminium (Al)	mg/L	0.0050	0.0728	/	0.0490	/	0.0602	/	/	0.0608	/	/	0.104	0.0403		0.049	0.0728	0.06
Arsenic (As)	mg/L	0.00020	0.00158	/	0.00034	/	0.00079	/	/	0.00023	/	/	0.00035	0.00023		0.00023	0.00158	0.00074
Cadmium (Cd)	mg/L	0.000010	0.000010	/	0.000010	/	0.000010	/	/	0.000010	/	/	0.0000174	0.0000084		0.00001	0.00001	0.00001
Calcium (Ca)	mg/L	0.10	11.9	/	4.97	/	8.55	/	/	4.3	/	/	5.00	7.49		4.33	11.9	7.44
Chromium (Cr)	mg/L	0.0010	0.0010	/	0.0010	/	0.0010	/	/	0.0010	/	/	0.00021	0.00012		0.001	0.001	0.00100
Cobalt (Co)	mg/L	0.00020	0.00061	/	0.00023	/	0.00039	/	/	0.00020	/	/	0.00019	0.00010		0.0002	0.00061	0.00036
Copper (Cu)	mg/L	0.00020	0.00455	/	0.00506	/	0.00537	/	/	0.00597	/	/	0.0104	0.00189		0.00455	0.00597	0.005
Iron (Fe)	mg/L	0.010	0.73	/	0.47	/	0.808	/	/	0.286	/	/	0.223	0.098		0.286	0.808	0.57
Lead (Pb)	mg/L	0.000090	0.000176	/	0.000155	/	0.000220	/	/	0.000132	/	/	0.000224	0.000064		0.000132	0.00022	0.00017
Magnesium (Mg)	mg/L	0.010	3.37	/	1.17	/	1.88	/	/	0.800	/	/	1.02	1.30		0.8	3.37	1.81
Manganese (Mn)	mg/L	0.00030	0.166	/	0.0612	/	0.0803	/	/	0.0276	/	/	0.0339	0.0176		0.0276	0.166	0.084
Nickel (Ni)	mg/L	0.0020	0.0022	/	0.0020	/	0.0020	/	/	0.0020	/	/	0.00076	0.00058		0.002	0.0022	0.0021
Potassium (K)	mg/L	0.020	9.43	/	1.56	/	3.34	/	/	1.25	/	/	2.23	1.09		1.25	9.43	3.90
Sodium (Na)	mg/L	0.030	32.9	/	5.59	/	11.8	/	/	2.82	/	/	5.21	3.51		2.82	32.9	13.28
Zinc (Zn)	mg/L	0.0020	0.0067	/	0.0105	/	0.0049	/	/	0.0068	/	/	0.0105	0.0106		0.0049	0.0105	0.007
Total Organic Carbon by Combustion																		
Total Organic Carbon	mg/L	0.50	25.6	/	6.7	/	13.4	/	/	6.45	/	/	13.30	7.68		6.45	25.6	13.04
Total Suspended Solids																		
Total Suspended Solids	mg/L	13	28.0	/	5.0	/	10.0	/	/	6.0	/	/	6.3	2.0		5.0	28.0	12.25
pH																		
pH	pH Units	0.10	7.67	/	6.94	/	7.08	/	/	6.73	/	/	6.76	6.92		6.73	7.67	7.11
Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
Toluene	mg/L	0.0010	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
Ethyl Benzene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
o-Xylene	mg/L	0.00050	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
F1 (C6-C10)	mg/L	0.10	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
F2 (C10-C16)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
F3 (C16-C34)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
F4 (C34-C50)	mg/L	0.25	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	/	/	/	/	/	/	/	/	/	N/A			0	0	0.00