ANNUAL REPORT
FOR THE HAMLET OF NAUJAAT

YEAR BEING REPORTED: 2018

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence No. **3BM-REP1520** issued to the **Hamlet of Naujaat**.

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

Attached are results for Monitoring station REP-1 (water supply volume) and REP-3 (sewage discharge volume), as well as detailed chemical, physical and biological analysis required at REP-2, REP-4, REP-6 and REP-7.

Month Reported	Quantity of Water Obtained from all Sources (m^3)	Quantity of Sewage Waste Discharged (m^3)
January	3,660.029	Same
February	3,315.932	Same
March	3,696.037	Same
April	3,620.464	Same
May	3,503.453	Same
June	3,462.717	Same
July	3,638.837	Same
August	4,044.359	Same
September	3,888.109	Same
October	3,854.865	Same
November	3,666.077	Same
December	3,662.683	Same
ANNUAL TOTAL	**44,013.562**	**44,013.562**

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

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

- The new Water Treatment Plant was substantially completed December 2016 and warranty work is still being completed (Regional CGS Project Management Office).
- Updates on the relocation of the metals waste site has been discussed with INAC and is currently awaiting the go ahead to move the site. No update has been received to date.
- The solid waste site is reaching capacity very quickly, segregation must occur for hazardous wastes. This will be an ongoing project to properly store batteries, drums, and other hazardous materials.

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

Spill No.	Date	Site Description	Commodity	Quantity
2018187	2018-05-22	N/A	Petroleum – fuel oil	80 L
2018212	2018-06-03	N/A	Petroleum – fuel oil	30 L
2018258	2018-06-30	N/A	Petroleum – fuel oil	460 L

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

- none

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

- none

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

- none

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

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

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

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

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- The INAC Inspection took place on August 1st, 2018. A copy of the inspection report has not been received to date.

Appendix A: REP-6 Effluent Quality Limits – 1 page
Appendix B: Weekly Inspections at Monitoring Program Stations – 1 page
Appendix C: Certificate of Analysis August 2, 2018 – 9 pages
Appendix D: Hazardous Materials Spill Database, Naujaat 2018 – 1 page
Appendix E: Naujaat 2018 Sampling Results Summary – 4 pages

Appendix A

2018 Naujaat Monitoring Stations and Sampling Parameters Summary for Water License No. 3BM-REP1520
Part D, Item 2; REP-6 Effluent Quality Limits

Parameter	Maximum Concentration of any Grab sample	REP-6	
		02-Aug-18	
BOD_5	80 mg/L	36.5	
Total Suspended Solids	70 mg/L	62.5	
Fecal Coliforms	1×10^6 CFU/100 mL (1×10^6 CFU/dl)	<10	
Oil & Grease	No visible sheen	<5.0	
pH	between 6 and 9	9.88	

Appendix B

No Weekly Inspections at Monitoring Program Stations Document were recieved by CGS.

Appendix C

Hamlet of Naujaat (Repulse Bay)
ATTN: ROB HEDLEY
PO Box 10
Naujaat NU X0C 0H0

Date Received: 07-AUG-18
Report Date: 15-AUG-18 15:19 (MT)
Version: FINAL

Client Phone: 867-462-9952

Certificate of Analysis

Lab Work Order #: L2141946

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
L2141946-1 REP-2							
Sampled By: JAMIE on 02-AUG-18 @ 09:00							
Matrix: WW							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	254		1.2	mg/L		08-AUG-18	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		08-AUG-18	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		08-AUG-18	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	209		1.0	mg/L		07-AUG-18	R4160588
Ammonia by colour							
Ammonia, Total (as N)	1.08		0.10	mg/L		08-AUG-18	R4161955
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	7.6		2.0	mg/L		08-AUG-18	R4168679
Carbonaceous BOD							
BOD Carbonaceous	5.0		2.0	mg/L		08-AUG-18	R4168679
Chloride in Water by IC							
Chloride (Cl)	12.7		0.50	mg/L		07-AUG-18	R4162742
Conductivity							
Conductivity	411		1.0	umhos/cm		07-AUG-18	R4160588
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		07-AUG-18	R4160706
Hardness Calculated							
Hardness (as CaCO3)	178	HTC	0.20	mg/L		09-AUG-18	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	07-AUG-18	08-AUG-18	R4161347
Nitrate in Water by IC							
Nitrate (as N)	0.108		0.020	mg/L		07-AUG-18	R4162742
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.108		0.070	mg/L		10-AUG-18	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		07-AUG-18	R4162742
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-18	R4163021
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		08-AUG-18	R4161642
Phosphorus, Total							
Phosphorus (P)-Total	0.111		0.0010	mg/L		08-AUG-18	R4161857
Sulfate in Water by IC							
Sulfate (SO4)	3.69		0.30	mg/L		07-AUG-18	R4162742
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0279		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Arsenic (As)-Total	0.00080		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cadmium (Cd)-Total	0.0000098		0.0000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Calcium (Ca)-Total	54.9		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Chromium (Cr)-Total	0.00080		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cobalt (Co)-Total	0.00035		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Copper (Cu)-Total	0.00220		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547
Iron (Fe)-Total	0.630		0.010	mg/L	08-AUG-18	08-AUG-18	R4161547
Lead (Pb)-Total	0.000431		0.000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Magnesium (Mg)-Total	9.88		0.0050	mg/L	08-AUG-18	08-AUG-18	R4161547
Manganese (Mn)-Total	0.217		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Nickel (Ni)-Total	0.00262		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547

* 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
L2141946-1 REP-2							
Sampled By: JAMIE on 02-AUG-18 @ 09:00							
Matrix: WW							
Total Metals in Water by CRC ICPMS							
Potassium (K)-Total	5.14		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Sodium (Na)-Total	21.3		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Zinc (Zn)-Total	0.0036		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Total Organic Carbon by Combustion							
Total Organic Carbon	14.9		0.50	mg/L		08-AUG-18	R4162003
Total Suspended Solids							
Total Suspended Solids	8.1		2.0	mg/L		07-AUG-18	R4161007
pH							
pH	8.00		0.10	pH units		07-AUG-18	R4160588
L2141946-2 REP-2A							
Sampled By: JAMIE on 02-AUG-18 @ 09:30							
Matrix: WW							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	234		1.2	mg/L		08-AUG-18	
Alkalinity, Carbonate							
Carbonate (CO3)	<0.60		0.60	mg/L		08-AUG-18	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		08-AUG-18	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	191		1.0	mg/L		07-AUG-18	R4160588
Ammonia by colour							
Ammonia, Total (as N)	0.72		0.10	mg/L		08-AUG-18	R4161955
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	6.1		2.0	mg/L		08-AUG-18	R4168679
Carbonaceous BOD							
BOD Carbonaceous	3.5	BODP	2.0	mg/L		08-AUG-18	R4168679
Chloride in Water by IC							
Chloride (Cl)	15.1		0.50	mg/L		07-AUG-18	R4162742
Conductivity							
Conductivity	395		1.0	umhos/cm		07-AUG-18	R4160588
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		07-AUG-18	R4160706
Hardness Calculated							
Hardness (as CaCO3)	169	HTC	0.20	mg/L		09-AUG-18	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	07-AUG-18	08-AUG-18	R4161347
Nitrate in Water by IC							
Nitrate (as N)	0.076		0.020	mg/L		07-AUG-18	R4162742
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.076		0.070	mg/L		10-AUG-18	
Nitrite in Water by IC							
Nitrite (as N)	<0.010		0.010	mg/L		07-AUG-18	R4162742
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-18	R4163021
Phenol (4AAP)							
Phenols (4AAP)	0.0026		0.0010	mg/L		08-AUG-18	R4161642
Phosphorus, Total							
Phosphorus (P)-Total	0.0702		0.0010	mg/L		09-AUG-18	R4162524
Sulfate in Water by IC							
Sulfate (SO4)	4.86		0.30	mg/L		07-AUG-18	R4162742

* 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
L2141946-2 REP-2A							
Sampled By: JAMIE on 02-AUG-18 @ 09:30							
Matrix: WW							
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0301		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Arsenic (As)-Total	0.00068		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cadmium (Cd)-Total	0.0000097		0.0000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Calcium (Ca)-Total	54.7		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Chromium (Cr)-Total	0.00085		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cobalt (Co)-Total	0.00029		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Copper (Cu)-Total	0.00184		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547
Iron (Fe)-Total	0.525		0.010	mg/L	08-AUG-18	08-AUG-18	R4161547
Lead (Pb)-Total	0.000252		0.000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Magnesium (Mg)-Total	7.81		0.0050	mg/L	08-AUG-18	08-AUG-18	R4161547
Manganese (Mn)-Total	0.200		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Nickel (Ni)-Total	0.00250		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547
Potassium (K)-Total	4.53		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Sodium (Na)-Total	27.8		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Zinc (Zn)-Total	0.0145		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Total Organic Carbon by Combustion							
Total Organic Carbon	15.6		0.50	mg/L		08-AUG-18	R4162003
Total Suspended Solids							
Total Suspended Solids	58.1		2.0	mg/L		07-AUG-18	R4161007
pH							
pH	7.95		0.10	pH units		07-AUG-18	R4160588
L2141946-3 REP-6							
Sampled By: JAMIE on 02-AUG-18 @ 10:00							
Matrix: WW							
Nunavut WW Group 1							
Alkalinity, Bicarbonate							
Bicarbonate (HCO3)	52.8		1.2	mg/L		08-AUG-18	
Alkalinity, Carbonate							
Carbonate (CO3)	44.5		0.60	mg/L		08-AUG-18	
Alkalinity, Hydroxide							
Hydroxide (OH)	<0.34		0.34	mg/L		08-AUG-18	
Alkalinity, Total (as CaCO3)							
Alkalinity, Total (as CaCO3)	118		1.0	mg/L		07-AUG-18	R4160588
Ammonia by colour							
Ammonia, Total (as N)	0.69		0.10	mg/L		08-AUG-18	R4161955
Biochemical Oxygen Demand (BOD)							
Biochemical Oxygen Demand	36.5		6.0	mg/L		08-AUG-18	R4168679
Carbonaceous BOD							
BOD Carbonaceous	13.3		2.0	mg/L		08-AUG-18	R4168679
Chloride in Water by IC							
Chloride (Cl)	17.9		0.50	mg/L		07-AUG-18	R4162742
Conductivity							
Conductivity	264		1.0	umhos/cm		07-AUG-18	R4160588
Fecal coliforms, 1:10 dilution by QT97							
Fecal Coliforms	<10	PEHR	10	MPN/100mL		07-AUG-18	R4160706
Hardness Calculated							
Hardness (as CaCO3)	116	HTC	0.20	mg/L		09-AUG-18	
Mercury Total							
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L	07-AUG-18	08-AUG-18	R4161347
Nitrate in Water by IC							
Nitrate (as N)	0.435		0.020	mg/L		07-AUG-18	R4162742

* 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
L2141946-3 REP-6							
Sampled By: JAMIE on 02-AUG-18 @ 10:00							
Matrix: WW							
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.648		0.070	mg/L		10-AUG-18	
Nitrite in Water by IC							
Nitrite (as N)	0.213		0.010	mg/L		07-AUG-18	R4162742
Oil & Grease - Gravimetric							
Oil and Grease	<5.0		5.0	mg/L		09-AUG-18	R4163021
Phenol (4AAP)							
Phenols (4AAP)	<0.0010		0.0010	mg/L		08-AUG-18	R4161642
Phosphorus, Total							
Phosphorus (P)-Total	2.03		0.0050	mg/L		08-AUG-18	R4161857
Sulfate in Water by IC							
Sulfate (SO4)	8.64		0.30	mg/L		07-AUG-18	R4162742
Total Metals in Water by CRC ICPMS							
Aluminum (Al)-Total	0.0432		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Arsenic (As)-Total	0.00037		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cadmium (Cd)-Total	0.0000070		0.0000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Calcium (Ca)-Total	35.2		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Chromium (Cr)-Total	0.00040		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Cobalt (Co)-Total	0.00017		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Copper (Cu)-Total	0.00424		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547
Iron (Fe)-Total	0.336		0.010	mg/L	08-AUG-18	08-AUG-18	R4161547
Lead (Pb)-Total	0.000114		0.000050	mg/L	08-AUG-18	08-AUG-18	R4161547
Magnesium (Mg)-Total	6.83		0.0050	mg/L	08-AUG-18	08-AUG-18	R4161547
Manganese (Mn)-Total	0.0294		0.00010	mg/L	08-AUG-18	08-AUG-18	R4161547
Nickel (Ni)-Total	0.00164		0.00050	mg/L	08-AUG-18	08-AUG-18	R4161547
Potassium (K)-Total	5.60		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Sodium (Na)-Total	18.6		0.050	mg/L	08-AUG-18	08-AUG-18	R4161547
Zinc (Zn)-Total	0.0060		0.0030	mg/L	08-AUG-18	08-AUG-18	R4161547
Total Organic Carbon by Combustion							
Total Organic Carbon	38.8		0.50	mg/L		08-AUG-18	R4162003
Total Suspended Solids							
Total Suspended Solids	62.5		2.0	mg/L		07-AUG-18	R4161007
pH							
pH	9.88		0.10	pH units		07-AUG-18	R4160588

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

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
LPML	Lab-Preserved for Total Metals. Sample received with pH > 2 and preserved at the lab. Total Metals results may be biased low.

Sample Parameter Qualifier Key:

Qualifier	Description
BODP	BOD dilution results differed by more than 30% RPD. Precision of reported BOD result may be less than usual.
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.			
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)

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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 200.2/6020A (mod.)
Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.			
Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia in water samples forms indophenol when reacted with hypochlorite and phenol. The intensity is amplified by the addition of sodium nitroprusside and measured colourmetrically.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-N-WP	Water	Nitrite in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
NO3-IC-N-WP	Water	Nitrate in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
OG-GRAV-WP	Water	Oil & Grease - Gravimetric	EPA 1664 (modified)
Water samples are acidified and extracted with hexane; the hexane extract is collected in a pre-weighed vial. The solvent is evaporated and Total Oil & Grease is determined from the weight of the residue in the vial.			
P-T-L-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 Phosphorous is determined colourimetrically 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 (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2141946-COFC

COC Number: 14 - 503396

Page 1 of 1

Report To		Report Format		Turnaround Time (TAT) Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	Hamlet of Nayjaat	Select Report Format:	☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)	R ☐ Regular (Standard TAT if received by 3pm)
Contact:	Rob Hedley	Quality Control (QC) Report with Report	☐ Yes ☐ No	P ☑ Priority (2-4 business days if received)
Address:	P.O Box 10 Nayjaat, NU X0C 0H0	☐ Criteria on Report - provide details below if box checked		E ☐ Emergency (1-2 business days if received)
Phone:	867-462-9952	Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency – contact ALS for surcharge.
		Email 1 or Fax	Jaonayjaat@qiniq.com	Specify Date Required for E2,E or P:
		Email 2	mlusty@gov.nu.ca / cfaulkner@gov.nu.ca	SH

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	

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	WLO624	Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact:	Sampler: Jamil

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	BOD	Bacteria	total metals	Total Nutrients	Phenols	Total Mercury	Oil + Grease						Number of Containers
	REP-2	2/8/18	9:00	WW	✓	✓	✓		✓	✓	✓	✓						
	REP-2a	2/8/18	9:30	WW	✓	✓	✓	✓	✓	✓	✓	✓						
	REP-6	2/8/18	10:00	WW	✓	✓	✓	✓	✓	✓	✓	✓						
	* No water at REP-5																	
	* REP-2 is labeled as REP-2a																	

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	Nunavut-WW GRP1-WP
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	
		8°C	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by: JD	Date: [redacted]	Time: 12:10	Received by:	Date:	Time:
	2/8/18	15:00						

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0328e v08 Front/04 January 2014

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.

NAC 07/12 15.8°C

Appendix D

Spills

Occurance Date

Start date

Jan | 1 | 2018

End date

Dec | 31 | 2018

Spill Region

- Any -

Spill Location

--Repulse Bay

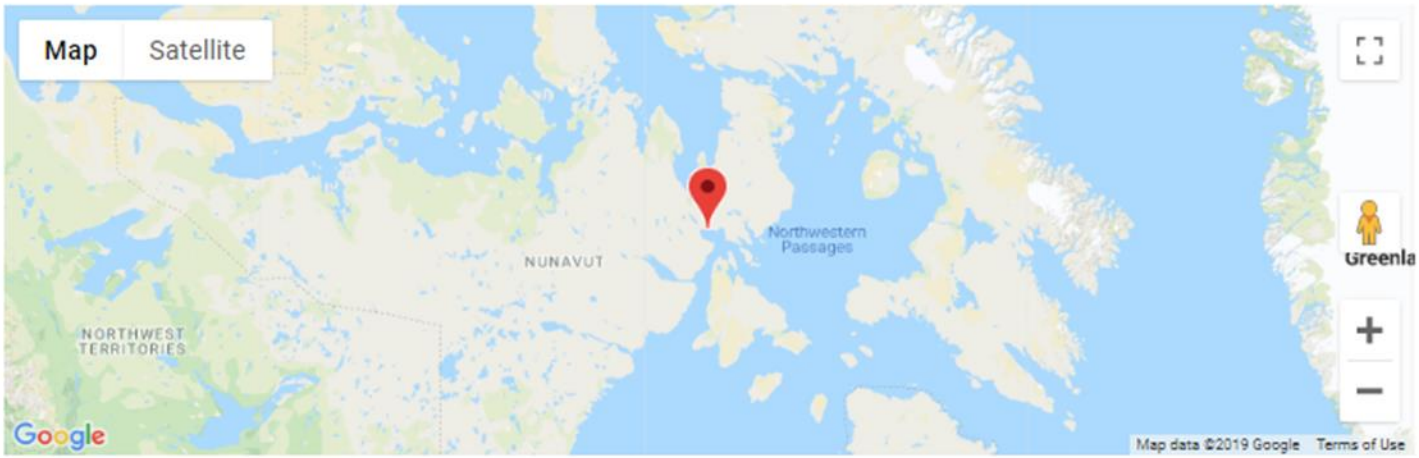
Spill Location Description

Report Number

Items per page

100

Go | Reset



Spill	Occurance Date	Spill Region	Location	Location Description	Product Spilled	Quantity	Spill Cause	Lead Agency
spill-2018258	June 30, 2018	Keewatin	Repulse Bay, Community, Nunavut		Petroleum - fuel oil (jet A, diesel, turbo A, heat)	460.00		GN - Government of Nunavut
spill-2018212	June 3, 2018	Keewatin	Repulse Bay, Community, Nunavut		Petroleum - fuel oil (jet A, diesel, turbo A, heat)	30.00	Tank Leak	GN - Government of Nunavut
spill-2018187	May 22, 2018	Keewatin	Repulse Bay, Community, Nunavut		Petroleum - fuel oil (jet A, diesel, turbo A, heat)	80.00	Breakage	GN - Government of Nunavut

Displaying 1 - 3 of 3

Appendix E

Naujaat
REP-2

			2018	Statistics		
Parameter	**Unit**	**DL**	**02-Aug-18**	**Min**	**Max**	**Average**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	234	102	455	239.67
Carbonate (CO3)	mg/L	0.60	<0.60	0.60	1.92	0.82
Hydroxide (OH)	mg/L	0.34	<0.34	0.34	0.34	0.34
Total (as CaCO3)	mg/L	1.0	191	83.4	373	195.34
Ammonia by Colour						
Total (as N)	mg/L	0.20	0.72	0.01	18.3	2.67
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	6.1	2.0	450	67.04
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	3.5	2.0	330	67.84
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	15.1	10	32.1	20.85
Conductivity						
Conductivity	umhos/cm	1.0	395	213	1120	501.14
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	<10	3	75	16.17
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	169	95.2	487	220.31
Mercury Total						
Mercury (Hg)	mg/L	0.00020	<0.0000050	0.0000067	0.000047	0.000022
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.076	0.02	0.297	0.13
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.076	0.07	0.297	0.15
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	<0.010	0.010	0.020	0.012
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	<5.0	2.0	8.0	3.71
Phenol						
Phenols	mg/L	0.0010	0.026	0.001	0.0598	0.010
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	0.0702	0.01	3.5	0.61
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	4.86	10.2	194	43.47
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0301	0.0176	0.773	0.21
Arsenic (As)	mg/L	0.00020	0.00068	0.0002	0.00287	0.00064
Cadmium (Cd)	mg/L	0.000010	0.0000097	0.00001	0.000349	0.000060
Calcium (Ca)	mg/L	0.10	54.7	29.4	175	71.23
Chromium (Cr)	mg/L	0.0010	0.00085	0.00046	0.0068	0.0018
Cobalt (Co)	mg/L	0.00020	0.00029	0.0002	0.00415	0.0009
Copper (Cu)	mg/L	0.00020	0.00184	0.00076	0.0256	0.005
Iron (Fe)	mg/L	0.010	0.525	0.051	3.93	0.72
Lead (Pb)	mg/L	0.000090	0.000252	0.00009	0.00857	0.0014
Magnesium (Mg)	mg/L	0.010	7.81	5.31	13.7	10.32
Manganese (Mn)	mg/L	0.00030	0.200	0.00518	0.529	0.12
Nickel (Ni)	mg/L	0.0020	0.00250	0.002	0.0108	0.0033
Potassium (K)	mg/L	0.020	4.53	2.14	25.1	6.33
Sodium (Na)	mg/L	0.030	27.8	9.69	68.5	27.51
Zinc (Zn)	mg/L	0.0020	0.0145	0.002	0.276	0.049
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	15.6	3.5	253	47.30
Total Suspended Solids						
Total Suspended Solids	mg/L	13	58.1	5.0	54	13.86
pH						
pH	pH Units	0.10	7.95	6.92	8.3	7.97
Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
Toluene	mg/L	0.0010	/	0.001	0.0101	0.0025
Ethyl Benzene	mg/L	0.00050	/	0.0005	0.00212	0.00077
o-Xylene	mg/L	0.00050	/	0.0005	0.00339	0.00098
F1 (C6-C10)	mg/L	0.10	/	0.10	0.27	0.13
F2 (C10-C16)	mg/L	0.25	/	0.10	0.88	0.31
F3 (C16-C34)	mg/L	0.25	/	0.25	2.99	0.71
F4 (C34-C50)	mg/L	0.25	/	0.25	0.50	0.29
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	0.38	4.14	1.04

Naujaat
NAU-2A

			2018	Statistics		
Parameter	**Unit**	**DL**	**02-Aug-18**	**Min**	**Max**	**Average**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	254	42.5	767	280.70
Carbonate (CO3)	mg/L	0.60	<0.60	0.60	3.00	1.08
Hydroxide (OH)	mg/L	0.34	<0.34	0.34	0.34	0.34
Total (as CaCO3)	mg/L	1.0	209	34.8	629	231.16
Ammonia by Colour						
Total (as N)	mg/L	0.20	1.08	0.04	25.6	5.34
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	7.6	2.0	263	54.20
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	5.0	2.0	258	53.20
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	12.7	1.21	47	17.50
Conductivity						
Conductivity	umhos/cm	1.0	411	64.1	1250	469.82
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	<10	9	240	75.50
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	178	31.2	411	182.84
Mercury Total						
Mercury (Hg)	mg/L	0.00020	<0.0000050	0.000005	0.0002	0.00009
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.108	0.02	0.193	0.09
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.108	0.07	0.193	0.10
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	<0.0010	0.01	0.02	0.01
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	<5.0	2.0	5.0	3.80
Phenol						
Phenols	mg/L	0.0010	<0.0010	0.001	0.132	0.03
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	0.111	0.02	2.21	0.47
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	3.69	1.29	26.3	11.11
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0279	0.008	0.121	0.063
Arsenic (As)	mg/L	0.00020	0.00080	0.0002	0.00347	0.0010
Cadmium (Cd)	mg/L	0.000010	0.0000098	0.000007	0.000327	0.00007
Calcium (Ca)	mg/L	0.10	54.9	9.87	142	59.57
Chromium (Cr)	mg/L	0.0010	0.00080	0.0004	0.0073	0.00
Cobalt (Co)	mg/L	0.00020	0.00035	0.0002	0.00562	0.0013
Copper (Cu)	mg/L	0.00020	0.00220	0.00057	0.0686	0.015
Iron (Fe)	mg/L	0.010	0.630	0.154	2.85	0.74
Lead (Pb)	mg/L	0.000090	0.000431	0.000116	0.0104	0.0022
Magnesium (Mg)	mg/L	0.010	9.88	1.6	13.6	8.24
Manganese (Mn)	mg/L	0.00030	0.217	0.0406	0.923	0.23
Nickel (Ni)	mg/L	0.0020	0.00262	0.00182	0.0116	0.0039
Potassium (K)	mg/L	0.020	5.14	0.652	31.5	8.75
Sodium (Na)	mg/L	0.030	21.3	1.21	98.2	30.70
Zinc (Zn)	mg/L	0.0020	0.0036	0.0024	0.312	0.065
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	14.9	1.83	266	59.72
Total Suspended Solids						
Total Suspended Solids	mg/L	13	8.1	5.0	54	18.60
pH						
pH	pH Units	0.10	8.00	7.28	8.45	7.93
Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
Toluene	mg/L	0.0010	/	0.0010	0.0022	0.0012
Ethyl Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
o-Xylene	mg/L	0.00050	/	0.00050	0.00050	0.00050
F1 (C6-C10)	mg/L	0.10	/	0.10	0.10	0.10
F2 (C10-C16)	mg/L	0.25	/	0.10	0.42	0.19
F3 (C16-C34)	mg/L	0.25	/	0.25	1.51	0.50
F4 (C34-C50)	mg/L	0.25	/	0.25	0.55	0.31
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	0.38	2.48	0.81

Naujaat
REP-5

			2018	Statistics		
Parameter	**Unit**	**DL**	**02-Aug-18**	**Min**	**Max**	**Average**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	/	167	373	270
Carbonate (CO3)	mg/L	0.60	/	0.60	0.60	0.60
Hydroxide (OH)	mg/L	0.34	/	0.34	0.34	0.34
Total (as CaCO3)	mg/L	1.0	/	137	306	221.5
Ammonia by Colour						
Total (as N)	mg/L	0.20	/	0.026	0.075	0.0505
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	/	2.0	2.0	2.0
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	/	2.0	2.0	2.0
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	/	8.97	33.5	21.235
Conductivity						
Conductivity	umhos/cm	1.0	/	305	866	585.5
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	/	3	3	3
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	/	160	361	260.5
Mercury Total						
Mercury (Hg)	mg/L	0.00020	/	0.000020	0.000020	0.000020
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	/	0.020	0.057	0.0385
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	/	0.070	0.070	0.070
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	/	0.010	0.020	0.015
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	/	2.0	5.0	3.5
Phenol						
Phenols	mg/L	0.0010	/	0.0033	0.0034	0.00335
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	/	0.029	0.045	0.037
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	/	19.8	130	74.9
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	/	0.039	0.348	0.1935
Arsenic (As)	mg/L	0.00020	/	0.00036	0.00065	0.000505
Cadmium (Cd)	mg/L	0.000010	/	0.00001	0.000029	1.95E-05
Calcium (Ca)	mg/L	0.10	/	49.1	89.9	69.5
Chromium (Cr)	mg/L	0.0010	/	0.0010	0.0010	0.0010
Cobalt (Co)	mg/L	0.00020	/	0.0002	0.00021	0.000205
Copper (Cu)	mg/L	0.00020	/	0.00203	0.00405	0.00304
Iron (Fe)	mg/L	0.010	/	0.29	1.03	0.66
Lead (Pb)	mg/L	0.000090	/	0.000163	0.000309	0.000236
Magnesium (Mg)	mg/L	0.010	/	9.1	33.1	21.1
Manganese (Mn)	mg/L	0.00030	/	0.00525	0.0447	0.024975
Nickel (Ni)	mg/L	0.0020	/	0.002	0.002	0.002
Potassium (K)	mg/L	0.020	/	3.07	15	9.035
Sodium (Na)	mg/L	0.030	/	5.68	56.5	31.09
Zinc (Zn)	mg/L	0.0020	/	0.002	0.0585	0.03025
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	/	12.6	17.6	15.1
Total Suspended Solids						
Total Suspended Solids	mg/L	13	/	5.0	5.0	5.0
pH						
pH	pH Units	0.10	/	8.12	8.23	8.175
Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
Toluene	mg/L	0.0010	/	0.0010	0.0010	0.0010
Ethyl Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
o-Xylene	mg/L	0.00050	/	0.00050	0.00050	0.00050
F1 (C6-C10)	mg/L	0.10	/	0.10	0.10	0.10
F2 (C10-C16)	mg/L	0.25	/	0.24	0.25	0.245
F3 (C16-C34)	mg/L	0.25	/	0.25	0.45	0.35
F4 (C34-C50)	mg/L	0.25	/	0.25	0.25	0.25
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	0.44	0.68	0.56

Naujaat
REP-6

			2018	Statistics		
Parameter	**Unit**	**DL**	**02-Aug-18**	**Min**	**Max**	**Average**
Alkalinity						
Bicarbonate (HCO3)	mg/L	1.2	52.8	38.9	179	138.98
Carbonate (CO3)	mg/L	0.60	44.5	0.60	51.5	13.60
Hydroxide (OH)	mg/L	0.34	<0.34	0.34	0.34	0.34
Total (as CaCO3)	mg/L	1.0	118	116	157	136.33
Ammonia by Colour						
Total (as N)	mg/L	0.20	0.69	0.038	15.9	5.94
Biochemical Oxygen Demand (BOD)						
Biochemical Oxygen Demand	mg/L	6.0	36.5	12.7	44	22.72
Carbonaceous BOD						
BOD Carbonaceous	mg/L	6.0	13.3	10.5	25.6	17.28
Chloride in Water by IC						
Chloride (Cl)	mg/L	10	17.9	16.6	31.1	22.17
Conductivity						
Conductivity	umhos/cm	1.0	264	274	392	338.50
Fecal Coliforms						
Fecal Coliforms	MPN/100mL	3	<10	3	9300	1661.17
Hardness Calculated						
Hardness (as CaCO3)	mg/L	0.30	116	71.7	151	110.58
Mercury Total						
Mercury (Hg)	mg/L	0.00020	<0.0000050	0.000005	0.0002	0.00011
Nitrate in Water by IC						
Nitrate (as N)	mg/L	0.40	0.435	0.031	0.68	0.31
Nitrate + Nitrite						
Nitrate and Nitrite as N	mg/L	0.45	0.648	0.07	0.86	0.41
Nitrite in Water by IC						
Nitrite (as N)	mg/L	0.20	0.213	0.010	0.179	0.11
Oil & Grease - Gravimetric						
Oil and Grease	mg/L	5.0	<5.0	2.0	11.2	4.53
Phenol						
Phenols	mg/L	0.0010	<0.0010	0.001	0.0067	0.0026
Phosphorus, Total						
Phosphorus (P)	mg/L	0.010	2.03	1.28	2.82	1.87
Sulfate in Water by IC						
Sulfate (SO4)	mg/L	6.0	8.64	5.27	17.8	10.88
Total Metals by ICP-MS						
Aluminium (Al)	mg/L	0.0050	0.0432	0.024	0.0783	0.04
Arsenic (As)	mg/L	0.00020	0.00037	0.00026	0.00049	0.0003
Cadmium (Cd)	mg/L	0.000010	0.0000070	0.00001	0.0001	0.00003
Calcium (Ca)	mg/L	0.10	35.2	21	46.8	33.10
Chromium (Cr)	mg/L	0.0010	0.00040	0.00023	0.001	0.0009
Cobalt (Co)	mg/L	0.00020	0.00017	0.0002	0.00024	0.0002
Copper (Cu)	mg/L	0.00020	0.00424	0.00332	0.0111	0.007
Iron (Fe)	mg/L	0.010	0.336	0.21	0.474	0.37
Lead (Pb)	mg/L	0.000090	0.000114	0.00009	0.000228	0.0002
Magnesium (Mg)	mg/L	0.010	6.83	4.52	9.24	6.77
Manganese (Mn)	mg/L	0.00030	0.0294	0.0274	0.0334	0.030
Nickel (Ni)	mg/L	0.0020	0.00164	0.00139	0.0020	0.0019
Potassium (K)	mg/L	0.020	5.60	4.22	10.3	7.14
Sodium (Na)	mg/L	0.030	18.6	15.2	29.8	20.77
Zinc (Zn)	mg/L	0.0020	0.0060	0.0039	0.013	0.009
Total Organic Carbon by Combustion						
Total Organic Carbon	mg/L	0.50	38.8	3.61	35.5	17.34
Total Suspended Solids						
Total Suspended Solids	mg/L	13	62.5	5.0	280	66.17
pH						
pH	pH Units	0.10	9.88	7.75	10.12	8.61
Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
Toluene	mg/L	0.0010	/	0.0010	0.0010	0.0010
Ethyl Benzene	mg/L	0.00050	/	0.00050	0.00050	0.00050
o-Xylene	mg/L	0.00050	/	0.00050	0.00050	0.00050
F1 (C6-C10)	mg/L	0.10	/	0.10	0.10	0.100
F2 (C10-C16)	mg/L	0.25	/	0.25	0.25	0.25
F3 (C16-C34)	mg/L	0.25	/	0.35	0.75	0.51
F4 (C34-C50)	mg/L	0.25	/	0.25	0.26	0.25
Total Hydrocarbons (C6-C50)	mg/L	0.44	/	0.44	1.01	0.63