



Hamlet of Arviat
ATTN: ED MURPHY
PO Box 150
Arviat NU X0C 0E0

Date Received: 19-JUN-12
Report Date: 04-JUL-12 15:33 (MT)
Version: FINAL

Client Phone: 867-857-2841

Certificate of Analysis

Lab Work Order #: L1164572
Project P.O. #: NOT SUBMITTED
Job Reference: HAMLET OF ARTVIAT WWTP
C of C Numbers:
Legal Site Desc:

Gail Hill
Account Manager

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1164572-1 ARV-2							
Sampled By: LAUR on 18-JUN-12 @ 11:30							
Matrix: WASTEWATER							
Nitrate + Nitrite							
Nitrate as N by Ion Chromatography							
Nitrate-N	0.061		0.050	mg/L		20-JUN-12	R2386013
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		19-JUN-12	
Nitrite as N by Ion Chromatography							
Nitrite-N	<0.050		0.050	mg/L		20-JUN-12	R2386013
Miscellaneous Parameters							
Ammonia, Total (as N)	3.81	DLA	0.10	mg/L		28-JUN-12	R2389667
Biochemical Oxygen Demand	6.6		6.0	mg/L	20-JUN-12	25-JUN-12	R2387455
Conductivity	971		20	umhos/cm		20-JUN-12	R2385446
Fecal Coliforms	9		3	MPN/100mL		23-JUN-12	R2387230
Mercury (Hg)-Total	<0.000020		0.000020	mg/L	20-JUN-12	20-JUN-12	R2385515
Oil and Grease, Total	<2.0		2.0	mg/L	21-JUN-12	21-JUN-12	R2386340
Phenols (4AAP)	0.0130		0.0010	mg/L	26-JUN-12	26-JUN-12	R2388630
Sulfate	192		0.50	mg/L		20-JUN-12	R2386013
Total Suspended Solids	12.0		5.0	mg/L		22-JUN-12	R2388033
pH	7.81		0.10	pH units		20-JUN-12	R2385446
Total Metals by ICP-MS							
Aluminum (Al)-Total	<0.050	DLM	0.050	mg/L	21-JUN-12	22-JUN-12	R2387384
Antimony (Sb)-Total	0.0043	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Arsenic (As)-Total	0.0022	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Barium (Ba)-Total	0.0254	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Beryllium (Be)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Bismuth (Bi)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Boron (B)-Total	0.49	DLM	0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Cadmium (Cd)-Total	0.00022	DLM	0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Calcium (Ca)-Total	114	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Cesium (Cs)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Chromium (Cr)-Total	<0.010	DLM	0.010	mg/L	21-JUN-12	22-JUN-12	R2387384
Cobalt (Co)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Copper (Cu)-Total	0.0130	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Iron (Fe)-Total	1.7	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Lead (Pb)-Total	0.00148	DLM	0.00090	mg/L	21-JUN-12	22-JUN-12	R2387384
Lithium (Li)-Total	<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Magnesium (Mg)-Total	17.8	DLM	0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Manganese (Mn)-Total	0.681	DLM	0.0030	mg/L	21-JUN-12	22-JUN-12	R2387384
Molybdenum (Mo)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Nickel (Ni)-Total	<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Phosphorus (P)-Total	<1.0	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Potassium (K)-Total	15.4	DLM	0.20	mg/L	21-JUN-12	22-JUN-12	R2387384
Rubidium (Rb)-Total	0.0133	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Selenium (Se)-Total	<0.010	DLM	0.010	mg/L	21-JUN-12	22-JUN-12	R2387384
Silicon (Si)-Total	1.80	DLM	0.50	mg/L	21-JUN-12	22-JUN-12	R2387384
Silver (Ag)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Sodium (Na)-Total	78.7	DLM	0.30	mg/L	21-JUN-12	22-JUN-12	R2387384
Strontium (Sr)-Total	0.679	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Tellurium (Te)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Thallium (Tl)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Thorium (Th)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Tin (Sn)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Titanium (Ti)-Total	0.0041	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1164572-1	ARV-2							
Sampled By:	LAUR on 18-JUN-12 @ 11:30							
Matrix:	WASTEWATER							
Total Metals by ICP-MS								
Tungsten (W)-Total		<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Uranium (U)-Total		<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Vanadium (V)-Total		<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Zinc (Zn)-Total		0.112	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Zirconium (Zr)-Total		<0.0040	DLM	0.0040	mg/L	21-JUN-12	22-JUN-12	R2387384
L1164572-2	ARV-4							
Sampled By:	LAUR on 18-JUN-12 @ 14:30							
Matrix:	WASTEWATER							
Nitrate + Nitrite								
Nitrate as N by Ion Chromatography								
Nitrate-N		0.386		0.050	mg/L		20-JUN-12	R2386013
Nitrate+Nitrite								
Nitrate and Nitrite as N		0.469		0.071	mg/L		19-JUN-12	
Nitrite as N by Ion Chromatography								
Nitrite-N		0.082		0.050	mg/L		20-JUN-12	R2386013
Miscellaneous Parameters								
Ammonia, Total (as N)		3.21	DLA	0.10	mg/L		28-JUN-12	R2389667
Biochemical Oxygen Demand		80.0		6.0	mg/L	20-JUN-12	25-JUN-12	R2387455
Conductivity		479		20	umhos/cm		20-JUN-12	R2385446
Fecal Coliforms		<3		3	MPN/100mL		23-JUN-12	R2387230
Mercury (Hg)-Total		<0.000020		0.000020	mg/L	20-JUN-12	20-JUN-12	R2385515
Oil and Grease, Total		<2.0		2.0	mg/L	21-JUN-12	21-JUN-12	R2386340
Phenols (4AAP)		0.0060		0.0010	mg/L	26-JUN-12	26-JUN-12	R2388630
Sulfate		6.73		0.50	mg/L		20-JUN-12	R2386013
Total Suspended Solids		124		5.0	mg/L		22-JUN-12	R2388033
pH		9.64		0.10	pH units		20-JUN-12	R2385446
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.157	DLM	0.050	mg/L	21-JUN-12	22-JUN-12	R2387384
Antimony (Sb)-Total		<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Arsenic (As)-Total		0.0075	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Barium (Ba)-Total		0.0110	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Beryllium (Be)-Total		<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Bismuth (Bi)-Total		<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Boron (B)-Total		0.15	DLM	0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Cadmium (Cd)-Total		0.00016	DLM	0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Calcium (Ca)-Total		15.1	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Cesium (Cs)-Total		<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Chromium (Cr)-Total		<0.010	DLM	0.010	mg/L	21-JUN-12	22-JUN-12	R2387384
Cobalt (Co)-Total		0.0027	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Copper (Cu)-Total		0.0573	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Iron (Fe)-Total		2.9	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Lead (Pb)-Total		0.00151	DLM	0.00090	mg/L	21-JUN-12	22-JUN-12	R2387384
Lithium (Li)-Total		<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Magnesium (Mg)-Total		8.28	DLM	0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Manganese (Mn)-Total		0.228	DLM	0.0030	mg/L	21-JUN-12	22-JUN-12	R2387384
Molybdenum (Mo)-Total		<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Nickel (Ni)-Total		<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Phosphorus (P)-Total		4.2	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384
Potassium (K)-Total		17.2	DLM</					

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

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1164572-3	ARV-5							
Sampled By:	LAUR on 18-JUN-12 @ 14:50							
Matrix:	WASTEWATER							
Total Metals by ICP-MS								
Iron (Fe)-Total	7.2	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384	
Lead (Pb)-Total	<0.00090	DLM	0.00090	mg/L	21-JUN-12	22-JUN-12	R2387384	
Lithium (Li)-Total	<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Magnesium (Mg)-Total	15.6	DLM	0.10	mg/L	21-JUN-12	22-JUN-12	R2387384	
Manganese (Mn)-Total	0.0585	DLM	0.0030	mg/L	21-JUN-12	22-JUN-12	R2387384	
Molybdenum (Mo)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Nickel (Ni)-Total	<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Phosphorus (P)-Total	<1.0	DLM	1.0	mg/L	21-JUN-12	22-JUN-12	R2387384	
Potassium (K)-Total	5.56	DLM	0.20	mg/L	21-JUN-12	22-JUN-12	R2387384	
Rubidium (Rb)-Total	0.0042	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Selenium (Se)-Total	<0.010	DLM	0.010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Silicon (Si)-Total	0.66	DLM	0.50	mg/L	21-JUN-12	22-JUN-12	R2387384	
Silver (Ag)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Sodium (Na)-Total	87.8	DLM	0.30	mg/L	21-JUN-12	22-JUN-12	R2387384	
Strontium (Sr)-Total	0.139	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Tellurium (Te)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Thallium (Tl)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Thorium (Th)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Tin (Sn)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Titanium (Ti)-Total	0.0037	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Tungsten (W)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Uranium (U)-Total	<0.0010	DLM	0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384	
Vanadium (V)-Total	<0.0020	DLM	0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Zinc (Zn)-Total	<0.020	DLM	0.020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Zirconium (Zr)-Total	<0.0040	DLM	0.0040	mg/L	21-JUN-12	22-JUN-12	R2387384	
L1164572-4	ARV-6							
Sampled By:	LAUR on 18-JUN-12 @ 14:05							
Matrix:	WASTEWATER							
Nitrate + Nitrite								
Nitrate as N by Ion Chromatography								
Nitrate-N	<0.050		0.050	mg/L		20-JUN-12	R2386013	
Nitrate+Nitrite								
Nitrate and Nitrite as N	<0.071		0.071	mg/L		19-JUN-12		
Nitrite as N by Ion Chromatography								
Nitrite-N	<0.050		0.050	mg/L		20-JUN-12	R2386013	
Miscellaneous Parameters								
Ammonia, Total (as N)	<0.010		0.010	mg/L		27-JUN-12	R2389667	
Biochemical Oxygen Demand	6.0		6.0	mg/L	20-JUN-12	25-JUN-12	R2387455	
Conductivity	139		20	umhos/cm		20-JUN-12	R2385446	
Fecal Coliforms	<3		3	MPN/100mL		23-JUN-12	R2387230	
Mercury (Hg)-Total	<0.000020		0.000020	mg/L	20-JUN-12	20-JUN-12	R2385515	
Oil and Grease, Total	<2.0		2.0	mg/L	21-JUN-12	21-JUN-12	R2386340	
Phenols (4AAP)	0.0030		0.0010	mg/L	26-JUN-12	26-JUN-12	R2388630	
Sulfate	0.78		0.50	mg/L		20-JUN-12	R2386013	
Total Suspended Solids	7.0		5.0	mg/L		22-JUN-12	R2388033	
pH	7.39		0.10	pH units		20-JUN-12	R2385446	
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.0598		0.0050	mg/L	21-JUN-12	22-JUN-12	R2387384	
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384	
Arsenic (As)-Total	0.00028		0.00020	mg/L	21-JUN-12	2		

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1164572-4	ARV-6							
Sampled By:	LAUR on 18-JUN-12 @ 14:05							
Matrix:	WASTEWATER							
Total Metals by ICP-MS								
Barium (Ba)-Total		0.0278		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Boron (B)-Total		0.019		0.010	mg/L	21-JUN-12	22-JUN-12	R2387384
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	21-JUN-12	22-JUN-12	R2387384
Calcium (Ca)-Total		9.47		0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Cobalt (Co)-Total		0.00064		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Copper (Cu)-Total		0.00143		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Iron (Fe)-Total		1.91		0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Lead (Pb)-Total		0.000205		0.000090	mg/L	21-JUN-12	22-JUN-12	R2387384
Lithium (Li)-Total		<0.0020		0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Magnesium (Mg)-Total		3.28		0.010	mg/L	21-JUN-12	22-JUN-12	R2387384
Manganese (Mn)-Total		0.769	DLA	0.030	mg/L	21-JUN-12	28-JUN-12	R2390210
Molybdenum (Mo)-Total		0.00023		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Nickel (Ni)-Total		<0.0020		0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Phosphorus (P)-Total		<0.10		0.10	mg/L	21-JUN-12	22-JUN-12	R2387384
Potassium (K)-Total		3.04		0.020	mg/L	21-JUN-12	22-JUN-12	R2387384
Rubidium (Rb)-Total		0.00390		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Selenium (Se)-Total		<0.0010		0.0010	mg/L	21-JUN-12	22-JUN-12	R2387384
Silicon (Si)-Total		1.05		0.050	mg/L	21-JUN-12	22-JUN-12	R2387384
Silver (Ag)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Sodium (Na)-Total		12.4		0.030	mg/L	21-JUN-12	22-JUN-12	R2387384
Strontium (Sr)-Total		0.0549		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Tellurium (Te)-Total		<0.00020		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Thallium (Tl)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Thorium (Th)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Tin (Sn)-Total		<0.00020		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Titanium (Ti)-Total		0.00410		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Tungsten (W)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Uranium (U)-Total		<0.00010		0.00010	mg/L	21-JUN-12	22-JUN-12	R2387384
Vanadium (V)-Total		0.00031		0.00020	mg/L	21-JUN-12	22-JUN-12	R2387384
Zinc (Zn)-Total		0.0170		0.0020	mg/L	21-JUN-12	22-JUN-12	R2387384
Zirconium (Zr)-Total		<0.00040		0.00040	mg/L	21-JUN-12	22-JUN-12	R2387384

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

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
DLM	Detection Limit Adjusted For Sample Matrix Effects

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BOD-WP	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B
The sample is incubated for 5 days at 20 degrees Celcius. Comparison of dissolved oxygen content at the beginning and end of incubation provides a measure of biochemical oxygen demand. If carbonaceous BOD is requested, TCMP is added to the sample to chemically inhibit nitrogenous oxygen demand. If soluble BOD is requested, the sample is filtered prior to analysis. Surface waters have a DL of 1 mg/L. Effluents are diluted according to their history and will have a sample DL of 6 mg/L or greater, depending on the dilutions used.			
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.			
FC-MPN-WP	Water	Fecal Coliform	APHA 9221A-C
The Most Probable Number (MPN) method is based on the Multiple Tube Fermentation technique. The results of examination of replicate tubes and dilutions of a sample are reported after confirmations specific to total coliform, fecal coliform and E. coli are performed. Results are reported in MPN/100 mL for water and MPN/gram for food and solid samples.			
HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0
Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia in water samples forms indophenol when reacted with hypochlorite and phenol. The intensity is amplified by the addition of sodium nitroprusside and measured colourmetrically.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-WP	Water	Nitrite as N by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
NO3-IC-WP	Water	Nitrate as N by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
OGG-TOT-WT	Water	Oil and Grease, Total	APHA 5520 B
Sample is extracted with hexane, extract is then evaporated and the residue is weighed to determine total oil and grease.			
PH-WP	Water	pH	APHA 4500H
The pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
PHENOLS-4AAP-WT	Water	Phenol (4AAP)	EPA 9066
An automated method is used to distill the sample. The distillate is then buffered to pH 9.4 which reacts with 4AAP and potassium ferricyanide to form a red complex which is measured colorimetrically.			
SO4-IC-WP	Water	Sulfate by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
SOLIDS-TOTSUS-WP	Water	Total Suspended Solids	APHA 2540 D (modified)
Total suspended solids in aquesous matrices is determined gravimetrically after drying the residue at 103 105°C.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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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
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, 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 ww - 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.

