

**APPENDIX E:
LABORATORY CERTIFICATES OF
ANALYSIS (ON CD)**

Your Project #: 160900764
 Site Location: CLARINGTON TS - SURFACE WATER
 Your C.O.C. #: 607236-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/05
 Report #: R4450286
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B783705

Received: 2017/04/26, 08:30

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	3	N/A	2017/05/04	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	2	2017/05/02	2017/05/03	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	1	2017/05/02	2017/05/04	CAM SOP-00301	EPA 8270 m
Acidity as CaCO3 in liquid (1, 2)	3	N/A	2017/05/01	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	3	N/A	2017/04/29	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2017/04/30	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	3	N/A	2017/05/01		EPA 8260C m
Chloride by Automated Colourimetry	3	N/A	2017/04/28	CAM SOP-00463	EPA 325.2 m
Conductivity	3	N/A	2017/04/29	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	3	N/A	2017/04/27	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	3	N/A	2017/04/30	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (3)	3	2017/05/01	2017/05/02	CAM SOP-00316	CCME PHC-CWS m
Fluoride	3	2017/04/28	2017/04/29	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2017/05/02	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	3	2017/05/01	2017/05/02	CAM SOP-00453	EPA 7470A m
Lab Filtered Metals Analysis by ICP	3	2017/04/29	2017/05/01	CAM SOP-00408	EPA 6010C m
Total Metals Analysis by ICPMS	3	N/A	2017/05/01	CAM SOP-00447	EPA 6020B m
Total Ammonia-N	3	N/A	2017/05/02	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	1	N/A	2017/04/28	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (4)	2	N/A	2017/04/29	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	3	2017/04/28	2017/04/29	CAM SOP-00309	EPA 8082A m
pH	3	N/A	2017/04/29	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	3	N/A	2017/04/28	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	3	N/A	2017/05/02		
Sat. pH and Langelier Index (@ 4C)	3	N/A	2017/05/02		
Sulphate by Automated Colourimetry	3	N/A	2017/04/28	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids	3	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (5)	3	N/A	2017/05/01	CAM SOP-00446	SM 22 5310B m
Total Phosphorus (Colourimetric)	3	2017/05/01	2017/05/02	CAM SOP-00407	SM 22 4500 P B H m

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Received: 2017/04/26, 08:30

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date		Laboratory Method	Reference
		Extracted	Analyzed		
Total Suspended Solids	3	2017/04/27	2017/05/05	CAM SOP-00428	SM 22 2540D m
Turbidity	3	N/A	2017/04/29	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2017/04/28	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (5) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - SURFACE WATER (WATER)

Maxxam ID		EGX441	EGX441		EGX442		
Sampling Date		2017/04/25 14:44	2017/04/25 14:44		2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01		607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-101 Lab-Dup	QC Batch	WS-160900764- 20170425-KR-102	RDL	QC Batch

Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220		4956709	210	1.0	4956709
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.6		4956709	1.8	1.0	4956709
Hardness (CaCO3)	mg/L	300		4957127	370	1.0	4957127
Langelier Index (@ 20C)	N/A	1.04		4955798	0.881		4955798
Langelier Index (@ 4C)	N/A	0.787		4955799	0.633		4955799
Saturation pH (@ 20C)	N/A	7.07		4955798	7.08		4955798
Saturation pH (@ 4C)	N/A	7.32		4955799	7.33		4955799
Inorganics							
Total Ammonia-N	mg/L	<0.050		4962540	<0.050	0.050	4962540
Conductivity	umho/cm	630		4959893	830	1.0	4959893
Orthophosphate (P)	mg/L	<0.010		4959054	<0.010	0.010	4959054
pH	pH	8.11		4959890	7.96		4959890
Total Phosphorus	mg/L	0.012	0.012	4962621	0.005	0.004	4962621
Dissolved Sulphate (SO4)	mg/L	63		4959043	160	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	220		4959870	210	1.0	4959870
Dissolved Chloride (Cl)	mg/L	21		4959038	29	1.0	4959038
Nitrite (N)	mg/L	<0.010		4959062	<0.010	0.010	4959917
Nitrate (N)	mg/L	1.91		4959062	1.32	0.10	4959917
Metals							
Dissolved Calcium (Ca)	mg/L	110		4961880	120	0.05	4961880
Dissolved Magnesium (Mg)	mg/L	9.5		4961880	18	0.05	4961880
Dissolved Potassium (K)	mg/L	2		4961880	5	1	4961880
Dissolved Sodium (Na)	mg/L	15		4961880	31	0.5	4961880
Total Aluminum (Al)	mg/L	0.11		4962585	0.023	0.0050	4962585
Total Antimony (Sb)	mg/L	<0.00050		4962585	<0.00050	0.00050	4962585
Total Arsenic (As)	mg/L	<0.0010		4962585	<0.0010	0.0010	4962585
Total Barium (Ba)	mg/L	0.034		4962585	0.053	0.0020	4962585
Total Beryllium (Be)	mg/L	<0.00050		4962585	<0.00050	0.00050	4962585
Total Boron (B)	mg/L	0.10		4962585	0.34	0.010	4962585
Total Cadmium (Cd)	mg/L	<0.00010		4962585	<0.00010	0.00010	4962585

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - SURFACE WATER (WATER)

Maxxam ID		EGX441	EGX441		EGX442		
Sampling Date		2017/04/25 14:44	2017/04/25 14:44		2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01		607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-101 Lab-Dup	QC Batch	WS-160900764- 20170425-KR-102	RDL	QC Batch
Total Calcium (Ca)	mg/L	100		4962585	120	0.20	4962585
Total Chromium (Cr)	mg/L	<0.0050		4962585	<0.0050	0.0050	4962585
Total Cobalt (Co)	mg/L	<0.00050		4962585	<0.00050	0.00050	4962585
Total Copper (Cu)	mg/L	<0.0010		4962585	<0.0010	0.0010	4962585
Total Iron (Fe)	mg/L	0.13		4962585	<0.10	0.10	4962585
Total Lead (Pb)	mg/L	<0.00050		4962585	<0.00050	0.00050	4962585
Total Magnesium (Mg)	mg/L	9.6		4962585	18	0.050	4962585
Total Manganese (Mn)	mg/L	0.032		4962585	0.037	0.0020	4962585
Total Molybdenum (Mo)	mg/L	0.00053		4962585	0.0015	0.00050	4962585
Total Nickel (Ni)	mg/L	<0.0010		4962585	0.0021	0.0010	4962585
Total Phosphorus (P)	mg/L	<0.10		4962585	<0.10	0.10	4962585
Total Potassium (K)	mg/L	2.1		4962585	5.4	0.20	4962585
Total Selenium (Se)	mg/L	<0.0020		4962585	<0.0020	0.0020	4962585
Total Silicon (Si)	mg/L	3.1		4962585	3.1	0.050	4962585
Total Silver (Ag)	mg/L	<0.00010		4962585	<0.00010	0.00010	4962585
Total Sodium (Na)	mg/L	15		4962585	31	0.10	4962585
Total Strontium (Sr)	mg/L	0.53		4962585	1.7	0.0010	4962585
Total Thallium (Tl)	mg/L	<0.000050		4962585	<0.000050	0.000050	4962585
Total Titanium (Ti)	mg/L	0.0056		4962585	<0.0050	0.0050	4962585
Total Uranium (U)	mg/L	0.00058		4962585	0.00098	0.00010	4962585
Total Vanadium (V)	mg/L	0.00079		4962585	0.00053	0.00050	4962585
Total Zinc (Zn)	mg/L	0.0085		4962585	0.031	0.0050	4962585
Total Zirconium (Zr)	mg/L	<0.0010		4962585	<0.0010	0.0010	4962585
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							

RCAP - SURFACE WATER (WATER)

Maxxam ID		EGX443		
Sampling Date		2017/04/25 15:29		
COC Number		607236-01-01		
	UNITS	WS-160900764- 20170425-KR-103	RDL	QC Batch

Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	210	1.0	4956709
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	4956709
Hardness (CaCO3)	mg/L	370	1.0	4957127
Langelier Index (@ 20C)	N/A	0.864		4955798
Langelier Index (@ 4C)	N/A	0.617		4955799
Saturation pH (@ 20C)	N/A	7.10		4955798
Saturation pH (@ 4C)	N/A	7.35		4955799

Inorganics				
Total Ammonia-N	mg/L	<0.050	0.050	4962540
Conductivity	umho/cm	830	1.0	4959893
Orthophosphate (P)	mg/L	<0.010	0.010	4959054
pH	pH	7.97		4959890
Total Phosphorus	mg/L	0.004	0.004	4962621
Dissolved Sulphate (SO4)	mg/L	160	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	210	1.0	4959870
Dissolved Chloride (Cl)	mg/L	29	1.0	4959038
Nitrite (N)	mg/L	<0.010	0.010	4959902
Nitrate (N)	mg/L	1.36	0.10	4959902

Metals				
Dissolved Calcium (Ca)	mg/L	120	0.05	4961880
Dissolved Magnesium (Mg)	mg/L	18	0.05	4961880
Dissolved Potassium (K)	mg/L	6	1	4961880
Dissolved Sodium (Na)	mg/L	31	0.5	4961880
Total Aluminum (Al)	mg/L	0.025	0.0050	4962585
Total Antimony (Sb)	mg/L	<0.00050	0.00050	4962585
Total Arsenic (As)	mg/L	<0.0010	0.0010	4962585
Total Barium (Ba)	mg/L	0.054	0.0020	4962585
Total Beryllium (Be)	mg/L	<0.00050	0.00050	4962585
Total Boron (B)	mg/L	0.34	0.010	4962585
Total Cadmium (Cd)	mg/L	<0.00010	0.00010	4962585

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

RCAP - SURFACE WATER (WATER)

Maxxam ID		EGX443		
Sampling Date		2017/04/25 15:29		
COC Number		607236-01-01		
	UNITS	WS-160900764- 20170425-KR-103	RDL	QC Batch
Total Calcium (Ca)	mg/L	120	0.20	4962585
Total Chromium (Cr)	mg/L	<0.0050	0.0050	4962585
Total Cobalt (Co)	mg/L	<0.00050	0.00050	4962585
Total Copper (Cu)	mg/L	0.0011	0.0010	4962585
Total Iron (Fe)	mg/L	<0.10	0.10	4962585
Total Lead (Pb)	mg/L	<0.00050	0.00050	4962585
Total Magnesium (Mg)	mg/L	18	0.050	4962585
Total Manganese (Mn)	mg/L	0.036	0.0020	4962585
Total Molybdenum (Mo)	mg/L	0.0014	0.00050	4962585
Total Nickel (Ni)	mg/L	0.0014	0.0010	4962585
Total Phosphorus (P)	mg/L	<0.10	0.10	4962585
Total Potassium (K)	mg/L	5.3	0.20	4962585
Total Selenium (Se)	mg/L	<0.0020	0.0020	4962585
Total Silicon (Si)	mg/L	3.1	0.050	4962585
Total Silver (Ag)	mg/L	<0.00010	0.00010	4962585
Total Sodium (Na)	mg/L	30	0.10	4962585
Total Strontium (Sr)	mg/L	1.6	0.0010	4962585
Total Thallium (Tl)	mg/L	<0.000050	0.000050	4962585
Total Titanium (Ti)	mg/L	<0.0050	0.0050	4962585
Total Uranium (U)	mg/L	0.00096	0.00010	4962585
Total Vanadium (V)	mg/L	0.00050	0.00050	4962585
Total Zinc (Zn)	mg/L	0.031	0.0050	4962585
Total Zirconium (Zr)	mg/L	<0.0010	0.0010	4962585
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGX441	EGX442	EGX443	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	WS-160900764- 20170425-KR-103 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	11	20	20	20	10	4960275
Total Dissolved Solids	mg/L	376	522	694		10	4958448
Fluoride (F-)	mg/L	0.12	0.30	0.31		0.10	4959879
Free Cyanide	ug/L	<1	<1	<1		1	4961940
Total Organic Carbon (TOC)	mg/L	3.1	2.7	2.7		0.20	4962598
Total Suspended Solids	mg/L	<10	<10	<10		10	4958445
Turbidity	NTU	0.5	0.6	0.6		0.1	4958903

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGX441	EGX442	EGX443	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	WS-160900764- 20170425-KR-103 Lab-Dup	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	<0.50		0.50	4958439
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4962590

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 PCBS (WATER)

Maxxam ID		EGX441	EGX442	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	RDL	QC Batch
PCBs						
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Surrogate Recovery (%)						
Decachlorobiphenyl	%	78	81	91		4960282
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGX441	EGX442	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	495826
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4958383
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4958383
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4958383
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4958383
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4958383
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4958383
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4958383
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4958383
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4958383
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4958383

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGX441	EGX442	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4958383
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4958383
F1 (C6-C10)	ug/L	<25	<25	<25	25	4958383
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4958383
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4962750
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4962750
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4962750
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4962750
Surrogate Recovery (%)						
o-Terphenyl	%	100	101	101		4962750
4-Bromofluorobenzene	%	91	91	91		4958383
D4-1,2-Dichloroethane	%	103	103	103		4958383
D8-Toluene	%	97	96	96		4958383
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGX441	EGX441	EGX442	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-101 Lab-Dup	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4964850
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4964850
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4964850
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4964850
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4964850
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4964850
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4964850
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4964850
Bis(2-ethylhexyl)phthalate	ug/L	2	1	4	3	1	4964850
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGX441	EGX441	EGX442	EGX443		
Sampling Date		2017/04/25 14:44	2017/04/25 14:44	2017/04/25 15:29	2017/04/25 15:29		
COC Number		607236-01-01	607236-01-01	607236-01-01	607236-01-01		
	UNITS	WS-160900764- 20170425-KR-101	WS-160900764- 20170425-KR-101 Lab-Dup	WS-160900764- 20170425-KR-102	WS-160900764- 20170425-KR-103	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4964850
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4964850
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964850
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4964850
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4964850
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28		<0.28	<0.28	0.28	4955468
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	42 (1)	27 (1)	55	20 (1)		4964850
2-Fluorobiphenyl	%	77	66	84	73		4964850
D14-Terphenyl (FS)	%	99	102	102	100		4964850
D5-Nitrobenzene	%	95	79	104	94		4964850
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

TEST SUMMARY

Maxxam ID: EGX441
Sample ID: WS-160900764-20170425-KR-101
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/05/02	2017/05/03	Milijana Avramovic
Acidity as CaCO3 in liquid		4960275	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4962750	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4957127	N/A	2017/05/02	Automated Statchk
Mercury	CV/AA	4962590	2017/05/01	2017/05/02	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	4961880	2017/04/29	2017/05/01	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	4962585	N/A	2017/05/01	Kevin Comerford
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959062	N/A	2017/04/28	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/29	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/02	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li (Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Phosphorus (Colourimetric)	LACH/P	4962621	2017/05/01	2017/05/02	Sarabjit Raina
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCS	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGX441 Dup
Sample ID: WS-160900764-20170425-KR-101
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/05/02	2017/05/03	Milijana Avramovic
Total Phosphorus (Colourimetric)	LACH/P	4962621	2017/05/01	2017/05/02	Sarabjit Raina

TEST SUMMARY

Maxxam ID: EGX442
Sample ID: WS-160900764-20170425-KR-102
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/05/02	2017/05/03	Milijana Avramovic
Acidity as CaCO3 in liquid		4960275	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4962750	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4957127	N/A	2017/05/02	Automated Statchk
Mercury	CV/AA	4962590	2017/05/01	2017/05/02	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	4961880	2017/04/29	2017/05/01	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	4962585	N/A	2017/05/01	Kevin Comerford
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/29	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/02	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li (Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Phosphorus (Colourimetric)	LACH/P	4962621	2017/05/01	2017/05/02	Sarabjit Raina
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGX443
Sample ID: WS-160900764-20170425-KR-103
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/05/02	2017/05/04	Milijana Avramovic
Acidity as CaCO3 in liquid		4960275	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai

TEST SUMMARY

Maxxam ID: EGX443
Sample ID: WS-160900764-20170425-KR-103
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4962750	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4957127	N/A	2017/05/02	Automated Statchk
Mercury	CV/AA	4962590	2017/05/01	2017/05/02	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	4961880	2017/04/29	2017/05/01	Suban Kanapathippilai
Total Metals Analysis by ICPMS	ICP/MS	4962585	N/A	2017/05/01	Kevin Comerford
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/29	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/02	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Phosphorus (Colourimetric)	LACH/P	4962621	2017/05/01	2017/05/02	Sarabjit Raina
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGX443 Dup
Sample ID: WS-160900764-20170425-KR-103
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4960275	N/A	2017/05/01	Grace Sison
Mercury	CV/AA	4962590	2017/05/01	2017/05/02	Ron Morrison

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.3°C
Package 2	5.0°C
Package 3	3.3°C

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958383	4-Bromofluorobenzene	2017/04/28	97	70 - 130	96	70 - 130	92	%				
4958383	D4-1,2-Dichloroethane	2017/04/28	101	70 - 130	98	70 - 130	100	%				
4958383	D8-Toluene	2017/04/28	100	70 - 130	103	70 - 130	97	%				
4960282	Decachlorobiphenyl	2017/04/28	71	60 - 130	82	60 - 130	79	%				
4962750	o-Terphenyl	2017/05/02	105	60 - 130	103	60 - 130	102	%				
4964850	2,4,6-Tribromophenol	2017/05/03	97	50 - 130	95	50 - 130	73	%				
4964850	2-Fluorobiphenyl	2017/05/03	64	50 - 130	74	50 - 130	83	%				
4964850	D14-Terphenyl (FS)	2017/05/03	105	50 - 130	108	50 - 130	102	%				
4964850	D5-Nitrobenzene	2017/05/03	80	50 - 130	100	50 - 130	100	%				
4958383	1,1,1,2-Tetrachloroethane	2017/04/28	99	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1,1-Trichloroethane	2017/04/28	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	1,1,2,2-Tetrachloroethane	2017/04/28	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1,2-Trichloroethane	2017/04/28	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1-Dichloroethane	2017/04/28	101	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4958383	1,1-Dichloroethylene	2017/04/28	106	70 - 130	109	70 - 130	<0.20	ug/L	NC	30		
4958383	1,2-Dichlorobenzene	2017/04/28	95	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4958383	1,2-Dichloroethane	2017/04/28	95	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
4958383	1,2-Dichloropropane	2017/04/28	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	1,3-Dichlorobenzene	2017/04/28	96	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4958383	1,4-Dichlorobenzene	2017/04/28	95	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4958383	Acetone (2-Propanone)	2017/04/28	91	60 - 140	86	60 - 140	<10	ug/L	NC	30		
4958383	Benzene	2017/04/28	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4958383	Bromodichloromethane	2017/04/28	99	70 - 130	98	70 - 130	<0.50	ug/L	2.6	30		
4958383	Bromoform	2017/04/28	94	70 - 130	94	70 - 130	<1.0	ug/L	0.96	30		
4958383	Bromomethane	2017/04/28	105	60 - 140	103	60 - 140	<0.50	ug/L	NC	30		
4958383	Carbon Tetrachloride	2017/04/28	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
4958383	Chlorobenzene	2017/04/28	98	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4958383	Chloroform	2017/04/28	99	70 - 130	99	70 - 130	<0.20	ug/L	2.8	30		
4958383	cis-1,2-Dichloroethylene	2017/04/28	102	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
4958383	cis-1,3-Dichloropropene	2017/04/28	96	70 - 130	93	70 - 130	<0.30	ug/L	NC	30		
4958383	Dibromochloromethane	2017/04/28	97	70 - 130	98	70 - 130	<0.50	ug/L	3.9	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958383	Dichlorodifluoromethane (FREON 12)	2017/04/28	92	60 - 140	96	60 - 140	<1.0	ug/L	NC	30		
4958383	Ethylbenzene	2017/04/28	94	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	Ethylene Dibromide	2017/04/28	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4958383	F1 (C6-C10) - BTEX	2017/04/28					<25	ug/L	NC	30		
4958383	F1 (C6-C10)	2017/04/28	95	60 - 140	100	60 - 140	<25	ug/L	NC	30		
4958383	Hexane	2017/04/28	104	70 - 130	107	70 - 130	<1.0	ug/L	NC	30		
4958383	Methyl Ethyl Ketone (2-Butanone)	2017/04/28	96	60 - 140	92	60 - 140	<10	ug/L	NC	30		
4958383	Methyl Isobutyl Ketone	2017/04/28	94	70 - 130	92	70 - 130	<5.0	ug/L	NC	30		
4958383	Methyl t-butyl ether (MTBE)	2017/04/28	93	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
4958383	Methylene Chloride(Dichloromethane)	2017/04/28	104	70 - 130	103	70 - 130	<2.0	ug/L	NC	30		
4958383	o-Xylene	2017/04/28	90	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4958383	p+m-Xylene	2017/04/28	89	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
4958383	Styrene	2017/04/28	91	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4958383	Tetrachloroethylene	2017/04/28	97	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4958383	Toluene	2017/04/28	95	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	Total Xylenes	2017/04/28					<0.20	ug/L	NC	30		
4958383	trans-1,2-Dichloroethylene	2017/04/28	102	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
4958383	trans-1,3-Dichloropropene	2017/04/28	96	70 - 130	95	70 - 130	<0.40	ug/L	NC	30		
4958383	Trichloroethylene	2017/04/28	98	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4958383	Trichlorofluoromethane (FREON 11)	2017/04/28	104	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
4958383	Vinyl Chloride	2017/04/28	105	70 - 130	108	70 - 130	<0.20	ug/L	NC	30		
4958439	Chromium (VI)	2017/04/27	99	80 - 120	98	80 - 120	<0.50	ug/L	NC	20		
4958445	Total Suspended Solids	2017/05/05					<10	mg/L	NC	25	97	85 - 115
4958448	Total Dissolved Solids	2017/04/28					<10	mg/L	1.6	25	99	90 - 110
4958903	Turbidity	2017/04/29			98	85 - 115	<0.1	NTU	NC	20		
4959038	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	102	80 - 120	<1.0	mg/L				
4959043	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	99	80 - 120	<1.0	mg/L				
4959054	Orthophosphate (P)	2017/04/28	103	75 - 125	98	80 - 120	<0.010	mg/L	NC	25		
4959062	Nitrate (N)	2017/04/28	103	80 - 120	104	80 - 120	<0.10	mg/L	NC	20		
4959062	Nitrite (N)	2017/04/28	101	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
4959870	Alkalinity (Total as CaCO3)	2017/04/29			95	85 - 115	<1.0	mg/L	0.55	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4959879	Fluoride (F-)	2017/04/29	82	80 - 120	101	80 - 120	<0.10	mg/L	1.9	20		
4959890	pH	2017/04/29			102	98 - 103			1.1	N/A		
4959893	Conductivity	2017/04/29			100	85 - 115	<1.0	umho/cm	0.084	25		
4959902	Nitrate (N)	2017/04/29	98	80 - 120	101	80 - 120	<0.10	mg/L	NC	20		
4959902	Nitrite (N)	2017/04/29	99	80 - 120	99	80 - 120	<0.010	mg/L	NC	20		
4959917	Nitrate (N)	2017/04/29	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.17	20		
4959917	Nitrite (N)	2017/04/29	98	80 - 120	98	80 - 120	<0.010	mg/L	NC	20		
4960275	Acidity as CaCO3	2017/05/01					<10	mg/L	NC	25		
4960282	Aroclor 1242	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1248	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1254	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1260	2017/04/28	64	60 - 130	83	60 - 130	<0.05	ug/L	NC	30		
4960282	Total PCB	2017/04/28	64	60 - 130	83	60 - 130	<0.05	ug/L	NC	40		
4961880	Dissolved Calcium (Ca)	2017/05/01	NC	80 - 120	99	80 - 120	<0.05	mg/L	2.3	25		
4961880	Dissolved Magnesium (Mg)	2017/05/01	NC	80 - 120	96	80 - 120	<0.05	mg/L	3.0	25		
4961880	Dissolved Potassium (K)	2017/05/01	103	80 - 120	99	80 - 120	<1	mg/L	1.9	25		
4961880	Dissolved Sodium (Na)	2017/05/01	NC	80 - 120	99	80 - 120	<0.5	mg/L	2.3	25		
4961940	Free Cyanide	2017/04/30	99	80 - 120	99	80 - 120	<1	ug/L	NC	20		
4962540	Total Ammonia-N	2017/05/02	99	80 - 120	100	85 - 115	<0.050	mg/L	9.5	20		
4962585	Total Aluminum (Al)	2017/05/01	97	80 - 120	101	80 - 120	<0.0050	mg/L				
4962585	Total Antimony (Sb)	2017/05/01	98	80 - 120	101	80 - 120	<0.00050	mg/L				
4962585	Total Arsenic (As)	2017/05/01	95	80 - 120	99	80 - 120	<0.0010	mg/L				
4962585	Total Barium (Ba)	2017/05/01	92	80 - 120	97	80 - 120	<0.0020	mg/L				
4962585	Total Beryllium (Be)	2017/05/01	93	80 - 120	96	80 - 120	<0.00050	mg/L				
4962585	Total Boron (B)	2017/05/01	88	80 - 120	93	80 - 120	<0.010	mg/L				
4962585	Total Cadmium (Cd)	2017/05/01	97	80 - 120	99	80 - 120	<0.00010	mg/L				
4962585	Total Calcium (Ca)	2017/05/01	NC	80 - 120	98	80 - 120	<0.20	mg/L				
4962585	Total Chromium (Cr)	2017/05/01	98	80 - 120	99	80 - 120	<0.0050	mg/L				
4962585	Total Cobalt (Co)	2017/05/01	97	80 - 120	102	80 - 120	<0.00050	mg/L				
4962585	Total Copper (Cu)	2017/05/01	96	80 - 120	100	80 - 120	<0.0010	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4962585	Total Iron (Fe)	2017/05/01	94	80 - 120	99	80 - 120	<0.10	mg/L				
4962585	Total Lead (Pb)	2017/05/01	97	80 - 120	100	80 - 120	<0.00050	mg/L				
4962585	Total Magnesium (Mg)	2017/05/01	94	80 - 120	98	80 - 120	<0.050	mg/L				
4962585	Total Manganese (Mn)	2017/05/01	94	80 - 120	98	80 - 120	<0.0020	mg/L				
4962585	Total Molybdenum (Mo)	2017/05/01	99	80 - 120	101	80 - 120	<0.00050	mg/L				
4962585	Total Nickel (Ni)	2017/05/01	93	80 - 120	98	80 - 120	<0.0010	mg/L				
4962585	Total Phosphorus (P)	2017/05/01	95	80 - 120	91	80 - 120	<0.10	mg/L				
4962585	Total Potassium (K)	2017/05/01	93	80 - 120	98	80 - 120	<0.20	mg/L				
4962585	Total Selenium (Se)	2017/05/01	98	80 - 120	104	80 - 120	<0.0020	mg/L				
4962585	Total Silicon (Si)	2017/05/01	92	80 - 120	97	80 - 120	<0.050	mg/L				
4962585	Total Silver (Ag)	2017/05/01	96	80 - 120	98	80 - 120	<0.00010	mg/L				
4962585	Total Sodium (Na)	2017/05/01	93	80 - 120	100	80 - 120	<0.10	mg/L				
4962585	Total Strontium (Sr)	2017/05/01	88	80 - 120	93	80 - 120	<0.0010	mg/L				
4962585	Total Thallium (Tl)	2017/05/01	97	80 - 120	97	80 - 120	<0.000050	mg/L				
4962585	Total Titanium (Ti)	2017/05/01	92	80 - 120	96	80 - 120	<0.0050	mg/L				
4962585	Total Uranium (U)	2017/05/01	93	80 - 120	96	80 - 120	<0.00010	mg/L				
4962585	Total Vanadium (V)	2017/05/01	94	80 - 120	97	80 - 120	<0.00050	mg/L				
4962585	Total Zinc (Zn)	2017/05/01	96	80 - 120	100	80 - 120	<0.0050	mg/L				
4962585	Total Zirconium (Zr)	2017/05/01	95	80 - 120	97	80 - 120	<0.0010	mg/L				
4962590	Mercury (Hg)	2017/05/02	100	75 - 125	95	80 - 120	<0.1	ug/L	NC	20		
4962598	Total Organic Carbon (TOC)	2017/05/01	101	80 - 120	102	80 - 120	<0.20	mg/L	1.5	20		
4962621	Total Phosphorus	2017/05/02	91	80 - 120	91	80 - 120	<0.004	mg/L	NC	20	94	80 - 120
4962750	F2 (C10-C16 Hydrocarbons)	2017/05/02	91	50 - 130	93	60 - 130	<100	ug/L	5.7	30		
4962750	F3 (C16-C34 Hydrocarbons)	2017/05/02	97	50 - 130	97	60 - 130	<200	ug/L	1.9	30		
4962750	F4 (C34-C50 Hydrocarbons)	2017/05/02	98	50 - 130	97	60 - 130	<200	ug/L	NC	30		
4964850	1,2,4-Trichlorobenzene	2017/05/03	61	40 - 130	78	40 - 130	<0.1	ug/L	NC	30		
4964850	1-Methylnaphthalene	2017/05/03	61	50 - 130	75	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4,5-Trichlorophenol	2017/05/03	101	50 - 130	103	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4,6-Trichlorophenol	2017/05/03	90	50 - 130	97	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4-Dichlorophenol	2017/05/03	71	50 - 130	88	50 - 130	<0.1	ug/L	NC	30		
4964850	2,4-Dimethylphenol	2017/05/03	51	30 - 130	52	30 - 130	<0.5	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4964850	2,4-Dinitrophenol	2017/05/03	107	30 - 130	84	30 - 130	<2	ug/L	NC	30		
4964850	2,4-Dinitrotoluene	2017/05/03	111	50 - 130	110	50 - 130	<0.3	ug/L	NC	30		
4964850	2,6-Dinitrotoluene	2017/05/03	98	50 - 130	98	50 - 130	<0.3	ug/L	NC	30		
4964850	2-Chlorophenol	2017/05/03	61	50 - 130	78	50 - 130	<0.1	ug/L	NC	30		
4964850	2-Methylnaphthalene	2017/05/03	59	50 - 130	73	50 - 130	<0.2	ug/L	NC	30		
4964850	3,3'-Dichlorobenzidine	2017/05/03	53	30 - 130	114	30 - 130	<0.5	ug/L	NC	30		
4964850	Acenaphthene	2017/05/03	81	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4964850	Acenaphthylene	2017/05/03	80	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4964850	Anthracene	2017/05/03	90	50 - 130	90	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(a)anthracene	2017/05/03	115	50 - 130	115	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(a)pyrene	2017/05/03	98	50 - 130	97	50 - 130	<0.01	ug/L	NC	30		
4964850	Benzo(b/j)fluoranthene	2017/05/03	123	50 - 130	117	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(g,h,i)perylene	2017/05/03	115	50 - 130	126	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(k)fluoranthene	2017/05/03	126	50 - 130	115	50 - 130	<0.05	ug/L	NC	30		
4964850	Biphenyl	2017/05/03	68	50 - 130	78	50 - 130	<0.1	ug/L	NC	30		
4964850	Bis(2-chloroethyl)ether	2017/05/03	70	50 - 130	88	50 - 130	<0.5	ug/L	NC	30		
4964850	Bis(2-chloroisopropyl)ether	2017/05/03	63	50 - 130	83	50 - 130	<0.5	ug/L	NC	30		
4964850	Bis(2-ethylhexyl)phthalate	2017/05/03	108	50 - 130	111	50 - 130	<1	ug/L	23	30		
4964850	Chrysene	2017/05/03	108	50 - 130	108	50 - 130	<0.05	ug/L	NC	30		
4964850	Dibenz(a,h)anthracene	2017/05/03	111	50 - 130	120	50 - 130	<0.1	ug/L	NC	30		
4964850	Diethyl phthalate	2017/05/03	105	50 - 130	103	50 - 130	<0.1	ug/L	NC	30		
4964850	Dimethyl phthalate	2017/05/03	89	50 - 130	89	50 - 130	<0.1	ug/L	NC	30		
4964850	Fluoranthene	2017/05/03	105	50 - 130	104	50 - 130	<0.2	ug/L	NC	30		
4964850	Fluorene	2017/05/03	84	50 - 130	86	50 - 130	<0.2	ug/L	NC	30		
4964850	Indeno(1,2,3-cd)pyrene	2017/05/03	114	50 - 130	123	50 - 130	<0.1	ug/L	NC	30		
4964850	Naphthalene	2017/05/03	65	50 - 130	81	50 - 130	<0.2	ug/L	NC	30		
4964850	p-Chloroaniline	2017/05/03	38	30 - 130	86	30 - 130	<1	ug/L	NC	30		
4964850	Pentachlorophenol	2017/05/03	103	50 - 130	56	50 - 130	<0.1	ug/L	NC	30		
4964850	Phenanthrene	2017/05/03	90	50 - 130	90	50 - 130	<0.1	ug/L	NC	30		
4964850	Phenol	2017/05/03	31	30 - 130	40	30 - 130	<0.5	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4964850	Pyrene	2017/05/03	124	50 - 130	124	50 - 130	<0.05	ug/L	NC	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

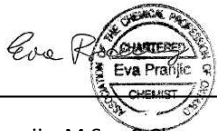
VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere

Cristina Carriere, Scientific Services

Ewa Pranjic



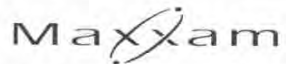
Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Grace Sison



Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1	4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		2	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		3	
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	8	4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	6	3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			

MAXXAM JOB#: B783705					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2
INTACT	<input type="checkbox"/>	<input type="checkbox"/>		3	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>JOSELYN GUEATHER</i> JOSELYN GUEATHER	2017/04/26	08:30



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page <u>1</u> of <u>1</u>	<u>CH 607236-01-01</u>
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COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 0 0
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6 3 2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 0 1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	

MAXXAM JOB#:			
<u>B783705</u>			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<u>Klaugus</u> <u>KLAWIUS ESUJPPA</u>	<u>20170126</u>	<u>13:50</u>



Maxxam Analytics International Corporation o/a Maxxam Analytics
 6740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel (905) 817-5700 Toll-free 800-563-6286 Fax (905) 817-5777 www.maxxam.ca

26-Apr-17 08:30

Deepthi Shaji
 B783705

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INVOICE INFORMATION:

Company Name: #9197 Stantec Consulting Ltd
 Contact Name: Accounts Payable
 Address: 300 Hagey Blvd Suite 100
 Waterloo ON N2L 0A4
 Phone: (519) 579-4410 x Fax: (519) 579-6733 x
 Email: accounts.payable.invoices@stantec.com

REPORT INFORMATION (if differs from invoice):

Company Name: #18379 Stantec Consulting Ltd
 Contact Name: Report - 1609-00764
 Address: ON
 Phone: Fax:
 Email: aaron.warkentin@stantec.com, brant.gill@stantec.com

PROJECT INFORMATION:

Quotation #: B48218
 Task #:
 Project #: 160900764
 Profit Centre: 1609
 Site #: Clarington TS - Surface Water
 Sampled By: Ryan Day

Use Only:

Bottle Order #: 607236
 Project Manager: Deepthi Shaji
 COC #: C6907236-01-01

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)

Table 1 Res/Park Medium/Fine
 Table 2 Ind/Comm Coarse
 Table 3 Agri/Other For RSC
 Table

Other Regulations

CCME Sanitary Sewer Bylaw
 Reg 558 Storm Sewer Bylaw
 MISA Municipality
 PWQO
 Other

Special Instructions

ANALYSIS REQUESTED (PLEASE BE SPECIFIC):

Field Filtered (please circle) Metals (Hg, Cr, V)	Acidity	Cr(VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	IDS & TSS	BCAP - Surface Water (No field filter) Total metals	Reg 153 PCBs	Reg 153 VOCs & E1+4	SVOCs
--	---------	------------------	----------------------	---------------	-----------	--	--------------	---------------------	-------

Turnaround Time (TAT) Required
 Please provide advance notice for rush projects

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 Working days for most tests
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission)
 Date Required: Time Required:
 Rush Confirmation Number: (call lab for #)

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle) Metals (Hg, Cr, V)	Acidity	Cr(VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	IDS & TSS	BCAP - Surface Water (No field filter) Total metals	Reg 153 PCBs	Reg 153 VOCs & E1+4	SVOCs	# of Bottles	Comments
1	WS-160900764-20170425-KR-101	Apr-25/17	14:44	SW	Y	X	X	X	X	X	X	X	X	X	17	
2	WS-160900764-20170425-KR-102	↓	15:29	SW	Y	X	X	X	X	X	X	X	X	X	↓	
3	WS-160900764-20170425-KR-103	↓	15:29	SW	Y	X	X	X	X	X	X	X	X	X	↓	
4	WS-160900764-2017042			SW	X											
5	WS-160900764-2017042			SW	X											
6	WS-160900764-2017042			SW	X											
7																
8																
9																
10																

RELINQUISHED BY: (Signature/Print)
 Ryan Day

Date: (YY/MM/DD) 17/04/25
 Time: 13:00

RECEIVED BY: (Signature/Print)
 Deepthi Shaji
 Date: (YY/MM/DD) 17/04/26
 Time: 08:30

Laboratory Use Only

jars used and not submitted

Time Sensitive: Temperature (°C) on Receipt: REFER TO ACTP
 Custody Seal: Present Intact
 White: Maxxa Yellow: Client

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

Refer to ACTP

Your Project #: 160900764
 Site Location: CLARINGTON TS -MONITORING WELL
 Your C.O.C. #: 607199-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/05
 Report #: R4450629
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782020

Received: 2017/04/25, 08:30

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	5	N/A	2017/04/28	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	6	N/A	2017/05/04	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	3	2017/04/27	2017/04/27	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	2	2017/04/27	2017/04/28	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	5	2017/04/27	2017/05/03	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	1	2017/04/29	2017/05/03	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	1	2017/04/29	2017/05/04	CAM SOP-00301	EPA 8270 m
Acidity as CaCO ₃ in liquid (1, 2)	5	N/A	2017/05/01	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	4	N/A	2017/04/27	CAM SOP-00448	SM 22 2320 B m
Alkalinity	1	N/A	2017/05/02	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	5	N/A	2017/04/28	CAM SOP-00102	APHA 4500-CO ₂ D
1,3-Dichloropropene Sum	5	N/A	2017/04/28		EPA 8260C m
Chloride by Automated Colourimetry	4	N/A	2017/04/28	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2017/05/02	CAM SOP-00463	EPA 325.2 m
Conductivity	5	N/A	2017/04/27	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	5	N/A	2017/04/27	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	5	N/A	2017/04/29	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (3)	2	N/A	2017/04/26	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2017/04/27	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2017/04/28	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2017/04/29	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (4)	5	2017/04/29	2017/05/01	CAM SOP-00316	CCME PHC-CWS m
Fluoride	5	2017/04/26	2017/04/27	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO ₃)	1	N/A	2017/04/28	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	2	N/A	2017/04/29	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	2	N/A	2017/04/30	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	5	2017/04/29	2017/05/01	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	3	N/A	2017/04/28	CAM SOP-00447	EPA 6020B m

Your Project #: 160900764
 Site Location: CLARINGTON TS -MONITORING WELL
 Your C.O.C. #: 607199-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/05
 Report #: R4450629
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782020

Received: 2017/04/25, 08:30

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Dissolved Metals by ICPMS	2	N/A	2017/04/29	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2017/04/28		
Ion Balance (% Difference)	2	N/A	2017/04/29		
Ion Balance (% Difference)	2	N/A	2017/04/30		
Anion and Cation Sum	1	N/A	2017/04/28		
Anion and Cation Sum	2	N/A	2017/04/29		
Anion and Cation Sum	2	N/A	2017/04/30		
Total Ammonia-N	5	N/A	2017/04/29	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	4	N/A	2017/04/27	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (5)	1	N/A	2017/04/28	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	5	2017/04/26	2017/04/27	CAM SOP-00309	EPA 8082A m
pH	5	N/A	2017/04/27	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	5	N/A	2017/04/28	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2017/04/28		
Sat. pH and Langelier Index (@ 20C)	2	N/A	2017/04/29		
Sat. pH and Langelier Index (@ 20C)	2	N/A	2017/04/30		
Sat. pH and Langelier Index (@ 4C)	1	N/A	2017/04/28		
Sat. pH and Langelier Index (@ 4C)	2	N/A	2017/04/29		
Sat. pH and Langelier Index (@ 4C)	2	N/A	2017/04/30		
Sulphate by Automated Colourimetry	4	N/A	2017/04/28	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2017/05/02	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	1	N/A	2017/04/28		
Total Dissolved Solids (TDS calc)	2	N/A	2017/04/29		
Total Dissolved Solids (TDS calc)	2	N/A	2017/04/30		
Total Dissolved Solids	5	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (6)	5	N/A	2017/04/29	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	5	2017/04/27	2017/04/27	CAM SOP-00428	SM 22 2540D m
Turbidity	3	N/A	2017/04/26	CAM SOP-00417	SM 22 2130 B m
Turbidity	2	N/A	2017/04/27	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	4	N/A	2017/04/27	CAM SOP-00230	EPA 8260C m

Your Project #: 160900764
 Site Location: CLARINGTON TS -MONITORING WELL
 Your C.O.C. #: 607199-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/05
 Report #: R4450629
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782020

Received: 2017/04/25, 08:30

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Volatile Organic Compounds and F1 PHCs	1	N/A	2017/04/28	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (6) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Your Project #: 160900764
Site Location: CLARINGTON TS -MONITORING WELL
Your C.O.C. #: 607199-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/05/05
Report #: R4450629
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782020
Received: 2017/04/25, 08:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP546		EGP548	EGP548		
Sampling Date		2017/04/24 10:45		2017/04/24 11:29	2017/04/24 11:29		
COC Number		607199-01-01		607199-01-01	607199-01-01		
	UNITS	WG-160900764-20170424-KR-01	QC Batch	WG-160900764-20170424-KR-02	WG-160900764-20170424-KR-02 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	2.42	4954638	7.12		N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	91	4953527	250		1.0	4953527
Calculated TDS	mg/L	130	4954642	380		1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.9	4953527	1.7		1.0	4953527
Cation Sum	me/L	2.12	4954638	6.54		N/A	4954638
Hardness (CaCO3)	mg/L	16	4954441	310		1.0	4954441
Ion Balance (% Difference)	%	NC	4954053	4.22		N/A	4954053
Langelier Index (@ 20C)	N/A	-0.420	4954640	0.839			4954640
Langelier Index (@ 4C)	N/A	-0.671	4954641	0.591			4954641
Saturation pH (@ 20C)	N/A	8.77	4954640	7.03			4954640
Saturation pH (@ 4C)	N/A	9.02	4954641	7.28			4954641
Inorganics							
Total Ammonia-N	mg/L	<0.050	4959274	<0.050		0.050	4959274
Conductivity	umho/cm	230	4957062	730		1.0	4957062
Dissolved Organic Carbon	mg/L	0.96	4956429	0.87		0.20	4956483
Orthophosphate (P)	mg/L	0.015	4958502	<0.010	<0.010	0.010	4958502
pH	pH	8.35	4957067	7.87			4957067
Dissolved Sulphate (SO4)	mg/L	19	4958494	21	21	1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	93	4957054	250		1.0	4957054
Dissolved Chloride (Cl)	mg/L	2.7	4958488	47	46	1.0	4958488
Nitrite (N)	mg/L	<0.010	4956948	<0.010	<0.010	0.010	4956948
Nitrate (N)	mg/L	<0.10	4956948	5.26	5.24	0.10	4956948
Nitrate + Nitrite (N)	mg/L	<0.10	4956948	5.26	5.24	0.10	4956948
Metals							
Dissolved Aluminum (Al)	mg/L	0.073	4957415	<0.0050		0.0050	4957415
Dissolved Antimony (Sb)	mg/L	<0.00050	4957415	<0.00050		0.00050	4957415
Dissolved Arsenic (As)	mg/L	0.0026	4957415	<0.0010		0.0010	4957415
Dissolved Barium (Ba)	mg/L	0.0070	4957415	0.030		0.0020	4957415
Dissolved Beryllium (Be)	mg/L	<0.00050	4957415	<0.00050		0.00050	4957415
Dissolved Boron (B)	mg/L	0.22	4957415	<0.010		0.010	4957415

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP546		EGP548	EGP548		
Sampling Date		2017/04/24 10:45		2017/04/24 11:29	2017/04/24 11:29		
COC Number		607199-01-01		607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	QC Batch	WG-160900764- 20170424-KR-02	WG-160900764- 20170424-KR-02 Lab-Dup	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	4957415	<0.00010		0.00010	4957415
Dissolved Calcium (Ca)	mg/L	4.2	4957415	110		0.20	4957415
Dissolved Chromium (Cr)	mg/L	<0.0050	4957415	<0.0050		0.0050	4957415
Dissolved Cobalt (Co)	mg/L	<0.00050	4957415	<0.00050		0.00050	4957415
Dissolved Copper (Cu)	mg/L	<0.0010	4957415	<0.0010		0.0010	4957415
Dissolved Iron (Fe)	mg/L	<0.10	4957415	<0.10		0.10	4957415
Dissolved Lead (Pb)	mg/L	<0.00050	4957415	<0.00050		0.00050	4957415
Dissolved Magnesium (Mg)	mg/L	1.2	4957415	9.9		0.050	4957415
Dissolved Manganese (Mn)	mg/L	<0.0020	4957415	<0.0020		0.0020	4957415
Dissolved Molybdenum (Mo)	mg/L	0.0090	4957415	0.00093		0.00050	4957415
Dissolved Nickel (Ni)	mg/L	<0.0010	4957415	<0.0010		0.0010	4957415
Dissolved Phosphorus (P)	mg/L	<0.10	4957415	<0.10		0.10	4957415
Dissolved Potassium (K)	mg/L	0.54	4957415	1.1		0.20	4957415
Dissolved Selenium (Se)	mg/L	<0.0020	4957415	<0.0020		0.0020	4957415
Dissolved Silicon (Si)	mg/L	2.7	4957415	4.4		0.050	4957415
Dissolved Silver (Ag)	mg/L	<0.00010	4957415	<0.00010		0.00010	4957415
Dissolved Sodium (Na)	mg/L	41	4957415	6.2		0.10	4957415
Dissolved Strontium (Sr)	mg/L	0.081	4957415	0.22		0.0010	4957415
Dissolved Thallium (Tl)	mg/L	<0.000050	4957415	<0.000050		0.000050	4957415
Dissolved Titanium (Ti)	mg/L	<0.0050	4957415	<0.0050		0.0050	4957415
Dissolved Uranium (U)	mg/L	0.00089	4957415	0.0013		0.00010	4957415
Dissolved Vanadium (V)	mg/L	0.0017	4957415	<0.00050		0.00050	4957415
Dissolved Zinc (Zn)	mg/L	<0.0050	4957415	<0.0050		0.0050	4957415
Dissolved Zirconium (Zr)	mg/L	<0.0010	4957415	<0.0010		0.0010	4957415

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP550		EGP552	EGP552		
Sampling Date		2017/04/24 13:00		2017/04/24 13:00	2017/04/24 13:00		
COC Number		607199-01-01		607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03	QC Batch	WG-160900764- 20170424-KR-04	WG-160900764- 20170424-KR-04 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	9.52	4954638	9.51		N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	270	4953527	260		1.0	4953527
Calculated TDS	mg/L	530	4954642	530		1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.5	4953527	1.4		1.0	4953527
Cation Sum	me/L	9.55	4954638	9.18		N/A	4954638
Hardness (CaCO3)	mg/L	430	4954441	420		1.0	4954441
Ion Balance (% Difference)	%	0.150	4954053	1.76		N/A	4954053
Langelier Index (@ 20C)	N/A	0.884	4954640	0.837			4954640
Langelier Index (@ 4C)	N/A	0.637	4954641	0.590			4954641
Saturation pH (@ 20C)	N/A	6.88	4954640	6.90			4954640
Saturation pH (@ 4C)	N/A	7.13	4954641	7.15			4954641
Inorganics							
Total Ammonia-N	mg/L	<0.050	4959274	<0.050		0.050	4959274
Conductivity	umho/cm	960	4957062	960		1.0	4957062
Dissolved Organic Carbon	mg/L	1.1	4956483	1.1		0.20	4961551
Orthophosphate (P)	mg/L	<0.010	4958502	0.011		0.010	4958502
pH	pH	7.76	4957067	7.74			4957067
Dissolved Sulphate (SO4)	mg/L	40	4958494	39		1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	270	4957054	270		1.0	4957054
Dissolved Chloride (Cl)	mg/L	94	4958488	95		1.0	4958488
Nitrite (N)	mg/L	<0.010	4956948	<0.010	<0.010	0.010	4956955
Nitrate (N)	mg/L	9.78	4956948	9.76	9.54	0.50	4956955
Nitrate + Nitrite (N)	mg/L	9.78	4956948	9.76	9.54	0.50	4956955
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0050	4957399	<0.0050	<0.0050	0.0050	4957394
Dissolved Antimony (Sb)	mg/L	<0.00050	4957399	<0.00050	<0.00050	0.00050	4957394
Dissolved Arsenic (As)	mg/L	<0.0010	4957399	<0.0010	<0.0010	0.0010	4957394
Dissolved Barium (Ba)	mg/L	0.062	4957399	0.061	0.063	0.0020	4957394
Dissolved Beryllium (Be)	mg/L	<0.00050	4957399	<0.00050	<0.00050	0.00050	4957394
Dissolved Boron (B)	mg/L	<0.010	4957399	<0.010	<0.010	0.010	4957394

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP550		EGP552	EGP552		
Sampling Date		2017/04/24 13:00		2017/04/24 13:00	2017/04/24 13:00		
COC Number		607199-01-01		607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03	QC Batch	WG-160900764- 20170424-KR-04	WG-160900764- 20170424-KR-04 Lab-Dup	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	4957399	<0.00010	<0.00010	0.00010	4957394
Dissolved Calcium (Ca)	mg/L	160	4957399	150	150	0.20	4957394
Dissolved Chromium (Cr)	mg/L	<0.0050	4957399	<0.0050	<0.0050	0.0050	4957394
Dissolved Cobalt (Co)	mg/L	<0.00050	4957399	0.00054	0.00057	0.00050	4957394
Dissolved Copper (Cu)	mg/L	<0.0010	4957399	<0.0010	<0.0010	0.0010	4957394
Dissolved Iron (Fe)	mg/L	<0.10	4957399	<0.10	<0.10	0.10	4957394
Dissolved Lead (Pb)	mg/L	<0.00050	4957399	<0.00050	<0.00050	0.00050	4957394
Dissolved Magnesium (Mg)	mg/L	11	4957399	11	11	0.050	4957394
Dissolved Manganese (Mn)	mg/L	<0.0020	4957399	<0.0020	<0.0020	0.0020	4957394
Dissolved Molybdenum (Mo)	mg/L	<0.00050	4957399	<0.00050	<0.00050	0.00050	4957394
Dissolved Nickel (Ni)	mg/L	<0.0010	4957399	<0.0010	<0.0010	0.0010	4957394
Dissolved Phosphorus (P)	mg/L	<0.10	4957399	<0.10	<0.10	0.10	4957394
Dissolved Potassium (K)	mg/L	1.2	4957399	1.2	1.2	0.20	4957394
Dissolved Selenium (Se)	mg/L	<0.0020	4957399	<0.0020	<0.0020	0.0020	4957394
Dissolved Silicon (Si)	mg/L	4.4	4957399	4.3	4.3	0.050	4957394
Dissolved Silver (Ag)	mg/L	<0.00010	4957399	<0.00010	<0.00010	0.00010	4957394
Dissolved Sodium (Na)	mg/L	20	4957399	19	20	0.10	4957394
Dissolved Strontium (Sr)	mg/L	0.28	4957399	0.29	0.29	0.0010	4957394
Dissolved Thallium (Tl)	mg/L	<0.000050	4957399	<0.000050	<0.000050	0.000050	4957394
Dissolved Titanium (Ti)	mg/L	<0.0050	4957399	<0.0050	<0.0050	0.0050	4957394
Dissolved Uranium (U)	mg/L	0.00051	4957399	0.00050	0.00050	0.00010	4957394
Dissolved Vanadium (V)	mg/L	<0.00050	4957399	<0.00050	<0.00050	0.00050	4957394
Dissolved Zinc (Zn)	mg/L	<0.0050	4957399	<0.0050	<0.0050	0.0050	4957394
Dissolved Zirconium (Zr)	mg/L	<0.0010	4957399	<0.0010	<0.0010	0.0010	4957394

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP554	EGP554		
Sampling Date		2017/04/24 15:47	2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05	WG-160900764- 20170424-KR-05 Lab-Dup	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	9.42		N/A	4954638
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	380		1.0	4953527
Calculated TDS	mg/L	400		1.0	4954642
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	6.1		1.0	4953527
Cation Sum	me/L	3.94		N/A	4954638
Hardness (CaCO ₃)	mg/L	50		1.0	4954441
Ion Balance (% Difference)	%	41.1		N/A	4954053
Langelier Index (@ 20C)	N/A	0.457			4954640
Langelier Index (@ 4C)	N/A	0.208			4954641
Saturation pH (@ 20C)	N/A	7.78			4954640
Saturation pH (@ 4C)	N/A	8.02			4954641
Inorganics					
Total Ammonia-N	mg/L	<0.050		0.050	4959274
Conductivity	umho/cm	400		1.0	4957062
Dissolved Organic Carbon	mg/L	1.8		0.20	4959909
Orthophosphate (P)	mg/L	0.024		0.010	4958502
pH	pH	8.23			4957067
Dissolved Sulphate (SO ₄)	mg/L	71	70	1.0	4964286
Alkalinity (Total as CaCO ₃)	mg/L	390		1.0	4964213
Dissolved Chloride (Cl)	mg/L	3.4		1.0	4964113
Nitrite (N)	mg/L	<0.010		0.010	4956948
Nitrate (N)	mg/L	0.15		0.10	4956948
Nitrate + Nitrite (N)	mg/L	0.15		0.10	4956948
Metals					
Dissolved Aluminum (Al)	mg/L	0.022		0.0050	4957394
Dissolved Antimony (Sb)	mg/L	0.00062		0.00050	4957394
Dissolved Arsenic (As)	mg/L	0.0022		0.0010	4957394
Dissolved Barium (Ba)	mg/L	0.035		0.0020	4957394
Dissolved Beryllium (Be)	mg/L	<0.00050		0.00050	4957394
Dissolved Boron (B)	mg/L	0.23		0.010	4957394
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EGP554	EGP554		
Sampling Date		2017/04/24 15:47	2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05	WG-160900764- 20170424-KR-05 Lab-Dup	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010		0.00010	4957394
Dissolved Calcium (Ca)	mg/L	12		0.20	4957394
Dissolved Chromium (Cr)	mg/L	<0.0050		0.0050	4957394
Dissolved Cobalt (Co)	mg/L	<0.00050		0.00050	4957394
Dissolved Copper (Cu)	mg/L	<0.0010		0.0010	4957394
Dissolved Iron (Fe)	mg/L	<0.10		0.10	4957394
Dissolved Lead (Pb)	mg/L	<0.00050		0.00050	4957394
Dissolved Magnesium (Mg)	mg/L	5.1		0.050	4957394
Dissolved Manganese (Mn)	mg/L	0.0054		0.0020	4957394
Dissolved Molybdenum (Mo)	mg/L	0.056		0.00050	4957394
Dissolved Nickel (Ni)	mg/L	<0.0010		0.0010	4957394
Dissolved Phosphorus (P)	mg/L	<0.10		0.10	4957394
Dissolved Potassium (K)	mg/L	1.1		0.20	4957394
Dissolved Selenium (Se)	mg/L	<0.0020		0.0020	4957394
Dissolved Silicon (Si)	mg/L	3.3		0.050	4957394
Dissolved Silver (Ag)	mg/L	<0.00010		0.00010	4957394
Dissolved Sodium (Na)	mg/L	67		0.10	4957394
Dissolved Strontium (Sr)	mg/L	0.35		0.0010	4957394
Dissolved Thallium (Tl)	mg/L	<0.000050		0.000050	4957394
Dissolved Titanium (Ti)	mg/L	<0.0050		0.0050	4957394
Dissolved Uranium (U)	mg/L	0.0020		0.00010	4957394
Dissolved Vanadium (V)	mg/L	0.0026		0.00050	4957394
Dissolved Zinc (Zn)	mg/L	<0.0050		0.0050	4957394
Dissolved Zirconium (Zr)	mg/L	<0.0010		0.0010	4957394
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGP546	EGP548		EGP550		
Sampling Date		2017/04/24 10:45	2017/04/24 11:29		2017/04/24 13:00		
COC Number		607199-01-01	607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	WG-160900764- 20170424-KR-02	QC Batch	WG-160900764- 20170424-KR-03	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	<10	28	4958165	50	10	4958165
Total Dissolved Solids	mg/L	124	474	4957856	648	10	4957856
Fluoride (F-)	mg/L	1.4	<0.10	4957070	<0.10	0.10	4957070
Free Cyanide	ug/L	<1	<1	4961607	<1	1	4961607
Total Organic Carbon (TOC)	mg/L	0.79	0.70	4959268	1.1	0.20	4959268
Total Suspended Solids	mg/L	<10	<10	4957849	<10	10	4957849
Turbidity	NTU	1.0	4.6	4956183	1.6	0.1	4956648
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		EGP550	EGP552			EGP554		
Sampling Date		2017/04/24 13:00	2017/04/24 13:00			2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01			607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03 Lab-Dup	WG-160900764- 20170424-KR-04	RDL	QC Batch	WG-160900764- 20170424-KR-05	RDL	QC Batch

Inorganics								
Acidity as CaCO3	mg/L		50	10	4958165	<10	10	4958165
Total Dissolved Solids	mg/L		640	10	4957856	332	10	4957856
Fluoride (F-)	mg/L		<0.10	0.10	4957070	0.93	0.10	4957070
Free Cyanide	ug/L		<1	1	4961607	<1	1	4961607
Total Organic Carbon (TOC)	mg/L		0.95	0.20	4959268	4.5	0.20	4959268
Total Suspended Solids	mg/L		<10	10	4957849	1700	50	4957849
Turbidity	NTU	1.6	1.0	0.1	4956648	1500	0.5	4956183
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate								

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGP554		
Sampling Date		2017/04/24 15:47		
COC Number		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05 Lab-Dup	RDL	QC Batch
Inorganics				
Acidity as CaCO3	mg/L	<10	10	4958165
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate				

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGP546	EGP548	EGP548		
Sampling Date		2017/04/24 10:45	2017/04/24 11:29	2017/04/24 11:29		
COC Number		607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	WG-160900764- 20170424-KR-02	WG-160900764- 20170424-KR-02 Lab-Dup	RDL	QC Batch
Metals						
Chromium (VI)	ug/L	<0.50	0.63	0.62	0.50	4957539
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	0.1	4961501
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

Maxxam ID		EGP550	EGP552		EGP554		
Sampling Date		2017/04/24 13:00	2017/04/24 13:00		2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03	WG-160900764- 20170424-KR-04	QC Batch	WG-160900764- 20170424-KR-05	RDL	QC Batch
Metals							
Chromium (VI)	ug/L	1.4	1.4	4957539	<0.50	0.50	4957539
Mercury (Hg)	ug/L	<0.1	<0.1	4961496	<0.1	0.1	4961501
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

O.REG 153 PCBs (WATER)

Maxxam ID		EGP546	EGP548	EGP550	EGP552		
Sampling Date		2017/04/24 10:45	2017/04/24 11:29	2017/04/24 13:00	2017/04/24 13:00		
COC Number		607199-01-01	607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	WG-160900764- 20170424-KR-02	WG-160900764- 20170424-KR-03	WG-160900764- 20170424-KR-04	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957086
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957086
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957086
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957086
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957086

Surrogate Recovery (%)							
Decachlorobiphenyl	%	98	89	99	87		4957086

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		EGP554		
Sampling Date		2017/04/24 15:47		
COC Number		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05	RDL	QC Batch

PCBs				
Aroclor 1242	ug/L	<0.5	0.5	4957086
Aroclor 1248	ug/L	<0.5	0.5	4957086
Aroclor 1254	ug/L	<0.5	0.5	4957086
Aroclor 1260	ug/L	<0.5	0.5	4957086
Total PCB	ug/L	<0.5	0.5	4957086

Surrogate Recovery (%)				
Decachlorobiphenyl	%	97		4957086

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP546	EGP548	EGP548		
Sampling Date		2017/04/24 10:45	2017/04/24 11:29	2017/04/24 11:29		
COC Number		607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	WG-160900764- 20170424-KR-02	WG-160900764- 20170424-KR-02 Lab-Dup	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	4954777
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10		10	4955999
Benzene	ug/L	<0.20	<0.20		0.20	4955999
Bromodichloromethane	ug/L	<0.50	<0.50		0.50	4955999
Bromoform	ug/L	<1.0	<1.0		1.0	4955999
Bromomethane	ug/L	<0.50	<0.50		0.50	4955999
Carbon Tetrachloride	ug/L	<0.20	<0.20		0.20	4955999
Chlorobenzene	ug/L	<0.20	<0.20		0.20	4955999
Chloroform	ug/L	<0.20	<0.20		0.20	4955999
Dibromochloromethane	ug/L	<0.50	<0.50		0.50	4955999
1,2-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4955999
1,3-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4955999
1,4-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4955999
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0		1.0	4955999
1,1-Dichloroethane	ug/L	<0.20	<0.20		0.20	4955999
1,2-Dichloroethane	ug/L	<0.50	<0.50		0.50	4955999
1,1-Dichloroethylene	ug/L	<0.20	<0.20		0.20	4955999
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4955999
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4955999
1,2-Dichloropropane	ug/L	<0.20	<0.20		0.20	4955999
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30		0.30	4955999
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40		0.40	4955999
Ethylbenzene	ug/L	<0.20	<0.20		0.20	4955999
Ethylene Dibromide	ug/L	<0.20	<0.20		0.20	4955999
Hexane	ug/L	<1.0	<1.0		1.0	4955999
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0		2.0	4955999
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10		10	4955999
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0		5.0	4955999
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50		0.50	4955999

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP546	EGP548	EGP548		
Sampling Date		2017/04/24 10:45	2017/04/24 11:29	2017/04/24 11:29		
COC Number		607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	WG-160900764- 20170424-KR-02	WG-160900764- 20170424-KR-02 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50		0.50	4955999
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4955999
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4955999
Tetrachloroethylene	ug/L	<0.20	<0.20		0.20	4955999
Toluene	ug/L	<0.20	<0.20		0.20	4955999
1,1,1-Trichloroethane	ug/L	<0.20	<0.20		0.20	4955999
1,1,2-Trichloroethane	ug/L	<0.50	<0.50		0.50	4955999
Trichloroethylene	ug/L	<0.20	<0.20		0.20	4955999
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50		0.50	4955999
Vinyl Chloride	ug/L	<0.20	<0.20		0.20	4955999
p+m-Xylene	ug/L	<0.20	<0.20		0.20	4955999
o-Xylene	ug/L	<0.20	<0.20		0.20	4955999
Total Xylenes	ug/L	<0.20	<0.20		0.20	4955999
F1 (C6-C10)	ug/L	<25	<25		25	4955999
F1 (C6-C10) - BTEX	ug/L	<25	<25		25	4955999
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4961401
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4961401
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4961401
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4961401
Surrogate Recovery (%)						
o-Terphenyl	%	101	102	102		4961401
4-Bromofluorobenzene	%	91	90			4955999
D4-1,2-Dichloroethane	%	107	108			4955999
D8-Toluene	%	97	95			4955999
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP550	EGP552	EGP554		
Sampling Date		2017/04/24 13:00	2017/04/24 13:00	2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03	WG-160900764- 20170424-KR-04	WG-160900764- 20170424-KR-05	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4954777
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4955999
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4955999
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4955999
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4955999
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4955999
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4955999
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4955999
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4955999
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4955999
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4955999
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4955999
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4955999

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP550	EGP552	EGP554		
Sampling Date		2017/04/24 13:00	2017/04/24 13:00	2017/04/24 15:47		
COC Number		607199-01-01	607199-01-01	607199-01-01		
	UNITS	WG-160900764- 20170424-KR-03	WG-160900764- 20170424-KR-04	WG-160900764- 20170424-KR-05	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4955999
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4955999
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4955999
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4955999
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4955999
F1 (C6-C10)	ug/L	<25	<25	<25	25	4955999
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4955999
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4961401
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4961401
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4961401
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4961401
Surrogate Recovery (%)						
o-Terphenyl	%	101	103	103		4961401
4-Bromofluorobenzene	%	92	89	93		4955999
D4-1,2-Dichloroethane	%	110	106	108		4955999
D8-Toluene	%	96	96	96		4955999
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP546		EGP547		EGP548		
Sampling Date		2017/04/24 10:45		2017/04/24 10:45		2017/04/24 11:29		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	QC Batch	WG-160900764- 20170424-KR-01A	QC Batch	WG-160900764- 20170424-KR-02	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
1-Methylnaphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4,5-Trichlorophenol	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4,6-Trichlorophenol	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4-Dichlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
2,4-Dimethylphenol	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
2,4-Dinitrophenol	ug/L	<2	4957489	<2	4964850	<2	2	4957489
2,4-Dinitrotoluene	ug/L	<0.3	4957489	<0.3	4964850	<0.3	0.3	4957489
2,6-Dinitrotoluene	ug/L	<0.3	4957489	<0.3	4964850	<0.3	0.3	4957489
2-Chlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
2-Methylnaphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
3,3'-Dichlorobenzidine	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Acenaphthene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Acenaphthylene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Anthracene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(a)anthracene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(a)pyrene	ug/L	<0.01	4957489	<0.01	4964850	<0.01	0.01	4957489
Benzo(b,j)fluoranthene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(g,h,i)perylene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(k)fluoranthene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Biphenyl	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Bis(2-chloroethyl)ether	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Bis(2-chloroisopropyl)ether	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Bis(2-ethylhexyl)phthalate	ug/L	<1	4957489	<1	4964850	<1	1	4957489
Chrysene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Dibenz(a,h)anthracene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Diethyl phthalate	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Dimethyl phthalate	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Fluoranthene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Fluorene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP546		EGP547		EGP548		
Sampling Date		2017/04/24 10:45		2017/04/24 10:45		2017/04/24 11:29		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-01	QC Batch	WG-160900764- 20170424-KR-01A	QC Batch	WG-160900764- 20170424-KR-02	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Naphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
p-Chloroaniline	ug/L	<1	4957489	<1	4964850	<1	1	4957489
Pentachlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Phenanthrene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Phenol	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Pyrene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	4953586	<0.28	4953586	<0.28	0.28	4953586
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	74	4957489	75	4964850	53		4957489
2-Fluorobiphenyl	%	74	4957489	60	4964850	66		4957489
D14-Terphenyl (FS)	%	96	4957489	9.0 (1)	4964850	88		4957489
D5-Nitrobenzene	%	76	4957489	77	4964850	68		4957489
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP549		EGP550		EGP551		
Sampling Date		2017/04/24 11:29		2017/04/24 13:00		2017/04/24 13:00		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-02A	QC Batch	WG-160900764- 20170424-KR-03	QC Batch	WG-160900764- 20170424-KR-03A	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
1-Methylnaphthalene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
2,4,5-Trichlorophenol	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
2,4,6-Trichlorophenol	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
2,4-Dichlorophenol	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
2,4-Dimethylphenol	ug/L	<0.5	4964850	<0.5	4957489	<0.5	0.5	4964850
2,4-Dinitrophenol	ug/L	<2	4964850	<2	4957489	<2	2	4964850
2,4-Dinitrotoluene	ug/L	<0.3	4964850	<0.3	4957489	<0.3	0.3	4964850
2,6-Dinitrotoluene	ug/L	<0.3	4964850	<0.3	4957489	<0.3	0.3	4964850
2-Chlorophenol	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
2-Methylnaphthalene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
3,3'-Dichlorobenzidine	ug/L	<0.5	4964850	<0.5	4957489	<0.5	0.5	4964850
Acenaphthene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
Acenaphthylene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
Anthracene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Benzo(a)anthracene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Benzo(a)pyrene	ug/L	<0.01	4964850	<0.01	4957489	<0.01	0.01	4964850
Benzo(b/j)fluoranthene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Benzo(g,h,i)perylene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Benzo(k)fluoranthene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Biphenyl	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Bis(2-chloroethyl)ether	ug/L	<0.5	4964850	<0.5	4957489	<0.5	0.5	4964850
Bis(2-chloroisopropyl)ether	ug/L	<0.5	4964850	<0.5	4957489	<0.5	0.5	4964850
Bis(2-ethylhexyl)phthalate	ug/L	<1	4964850	<1	4957489	<1	1	4964850
Chrysene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Dibenz(a,h)anthracene	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Diethyl phthalate	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Dimethyl phthalate	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Fluoranthene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
Fluorene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP549		EGP550		EGP551		
Sampling Date		2017/04/24 11:29		2017/04/24 13:00		2017/04/24 13:00		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-02A	QC Batch	WG-160900764- 20170424-KR-03	QC Batch	WG-160900764- 20170424-KR-03A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Naphthalene	ug/L	<0.2	4964850	<0.2	4957489	<0.2	0.2	4964850
p-Chloroaniline	ug/L	<1	4964850	<1	4957489	<1	1	4964850
Pentachlorophenol	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Phenanthrene	ug/L	<0.1	4964850	<0.1	4957489	<0.1	0.1	4964850
Phenol	ug/L	<0.5	4964850	<0.5	4957489	<0.5	0.5	4964850
Pyrene	ug/L	<0.05	4964850	<0.05	4957489	<0.05	0.05	4964850
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	4953586	<0.28	4953586	<0.28	0.28	4953586
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	49 (1)	4964850	78	4957489	30 (1)		4964850
2-Fluorobiphenyl	%	55	4964850	86	4957489	77		4964850
D14-Terphenyl (FS)	%	7.4 (1)	4964850	97	4957489	8.0 (1)		4964850
D5-Nitrobenzene	%	70	4964850	92	4957489	98		4964850
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP552		EGP553		EGP554		
Sampling Date		2017/04/24 13:00		2017/04/24 13:00		2017/04/24 15:47		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-04	QC Batch	WG-160900764- 20170424-KR-04A	QC Batch	WG-160900764- 20170424-KR-05	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
1-Methylnaphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4,5-Trichlorophenol	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4,6-Trichlorophenol	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
2,4-Dichlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
2,4-Dimethylphenol	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
2,4-Dinitrophenol	ug/L	<2	4957489	<2	4964850	<2	2	4957489
2,4-Dinitrotoluene	ug/L	<0.3	4957489	<0.3	4964850	<0.3	0.3	4957489
2,6-Dinitrotoluene	ug/L	<0.3	4957489	<0.3	4964850	<0.3	0.3	4957489
2-Chlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
2-Methylnaphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
3,3'-Dichlorobenzidine	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Acenaphthene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Acenaphthylene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Anthracene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(a)anthracene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(a)pyrene	ug/L	<0.01	4957489	<0.01	4964850	<0.01	0.01	4957489
Benzo(b/j)fluoranthene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(g,h,i)perylene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Benzo(k)fluoranthene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Biphenyl	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Bis(2-chloroethyl)ether	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Bis(2-chloroisopropyl)ether	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Bis(2-ethylhexyl)phthalate	ug/L	<1	4957489	<1	4964850	<1	1	4957489
Chrysene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Dibenz(a,h)anthracene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Diethyl phthalate	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Dimethyl phthalate	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Fluoranthene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
Fluorene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP552		EGP553		EGP554		
Sampling Date		2017/04/24 13:00		2017/04/24 13:00		2017/04/24 15:47		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-04	QC Batch	WG-160900764- 20170424-KR-04A	QC Batch	WG-160900764- 20170424-KR-05	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Naphthalene	ug/L	<0.2	4957489	<0.2	4964850	<0.2	0.2	4957489
p-Chloroaniline	ug/L	<1	4957489	<1	4964850	<1	1	4957489
Pentachlorophenol	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Phenanthrene	ug/L	<0.1	4957489	<0.1	4964850	<0.1	0.1	4957489
Phenol	ug/L	<0.5	4957489	<0.5	4964850	<0.5	0.5	4957489
Pyrene	ug/L	<0.05	4957489	<0.05	4964850	<0.05	0.05	4957489
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	4953586	<0.28	4953586	<0.28	0.28	4953586
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	89	4957489	73	4964850	42 (1)		4957489
2-Fluorobiphenyl	%	78	4957489	75	4964850	85		4957489
D14-Terphenyl (FS)	%	97	4957489	10 (1)	4964850	93		4957489
D5-Nitrobenzene	%	80	4957489	97	4964850	84		4957489
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP555		EHA017		EHA028		
Sampling Date		2017/04/24 15:47		2017/04/24		2017/04/24		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05A	QC Batch	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	4964850	<0.1	0.1	64	1	4964850
1-Methylnaphthalene	ug/L	<0.2	4964850	<0.2	0.2	64	1	4964850
2,4,5-Trichlorophenol	ug/L	<0.2	4964850	<0.2	0.2	93	1	4964850
2,4,6-Trichlorophenol	ug/L	<0.2	4964850	<0.2	0.2	86	1	4964850
2,4-Dichlorophenol	ug/L	<0.1	4964850	<0.1	0.1	73	1	4964850
2,4-Dimethylphenol	ug/L	<0.5	4964850	<0.5	0.5	39	1	4964850
2,4-Dinitrophenol	ug/L	<2	4964850	<2	2	94	1	4964850
2,4-Dinitrotoluene	ug/L	<0.3	4964850	<0.3	0.3	110	1	4964850
2,6-Dinitrotoluene	ug/L	<0.3	4964850	<0.3	0.3	95	1	4964850
2-Chlorophenol	ug/L	<0.1	4964850	<0.1	0.1	65	1	4964850
2-Methylnaphthalene	ug/L	<0.2	4964850	<0.2	0.2	60	1	4964850
3,3'-Dichlorobenzidine	ug/L	<0.5	4964850	<0.5	0.5	81	1	4964850
Acenaphthene	ug/L	<0.2	4964850	<0.2	0.2	78	1	4964850
Acenaphthylene	ug/L	<0.2	4964850	<0.2	0.2	79	1	4964850
Anthracene	ug/L	<0.05	4964850	<0.05	0.05	44 (1)	1	4964850
Benzo(a)anthracene	ug/L	<0.05	4964850	<0.05	0.05	20 (1)	1	4964850
Benzo(a)pyrene	ug/L	<0.01	4964850	<0.01	0.01	14 (1)	1	4964850
Benzo(b/j)fluoranthene	ug/L	<0.05	4964850	<0.05	0.05	17 (1)	1	4964850
Benzo(g,h,i)perylene	ug/L	<0.05	4964850	<0.05	0.05	10 (1)	1	4964850
Benzo(k)fluoranthene	ug/L	<0.05	4964850	<0.05	0.05	15 (1)	1	4964850
Biphenyl	ug/L	<0.1	4964850	<0.1	0.1	67	1	4964850
Bis(2-chloroethyl)ether	ug/L	<0.5	4964850	<0.5	0.5	82	1	4964850
Bis(2-chloroisopropyl)ether	ug/L	<0.5	4964850	<0.5	0.5	75	1	4964850
Bis(2-ethylhexyl)phthalate	ug/L	<1	4964850	<1	1	10 (1)	1	4964850
Chrysene	ug/L	<0.05	4964850	<0.05	0.05	15 (1)	1	4964850
Dibenz(a,h)anthracene	ug/L	<0.1	4964850	<0.1	0.1	10 (1)	1	4964850
Diethyl phthalate	ug/L	<0.1	4964850	<0.1	0.1	93	1	4964850
Dimethyl phthalate	ug/L	<0.1	4964850	<0.1	0.1	58	1	4964850
Fluoranthene	ug/L	<0.2	4964850	<0.2	0.2	54	1	4964850

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP555		EHA017		EHA028		
Sampling Date		2017/04/24 15:47		2017/04/24		2017/04/24		
COC Number		607199-01-01		607199-01-01		607199-01-01		
	UNITS	WG-160900764- 20170424-KR-05A	QC Batch	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Fluorene	ug/L	<0.2	4964850	<0.2	0.2	74	1	4964850
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	4964850	<0.1	0.1	10 (1)	1	4964850
Naphthalene	ug/L	<0.2	4964850	<0.2	0.2	70	1	4964850
p-Chloroaniline	ug/L	<1	4964850	<1	1	55	1	4964850
Pentachlorophenol	ug/L	<0.1	4964850	<0.1	0.1	58	1	4964850
Phenanthrene	ug/L	<0.1	4964850	<0.1	0.1	71	1	4964850
Phenol	ug/L	<0.5	4964850	<0.5	0.5	32	1	4964850
Pyrene	ug/L	<0.05	4964850	<0.05	0.05	56	1	4964850
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	4953586	<0.28	0.28			4957722
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	85	4964850	66		87		4964850
2-Fluorobiphenyl	%	53	4964850	75		66		4964850
D14-Terphenyl (FS)	%	2.9 (2)	4964850	11 (2)		19 (2)		4964850
D5-Nitrobenzene	%	81	4964850	100		92		4964850
<p>RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. (2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.</p>								

TEST SUMMARY

Maxxam ID: EGP546
Sample ID: WG-160900764-20170424-KR-01
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/04/28	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4957489	2017/04/27	2017/04/27	Milijana Avramovic
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/04/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4956429	N/A	2017/04/26	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4961501	2017/04/29	2017/05/01	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4957415	N/A	2017/04/28	Thao Nguyen
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Ammonia-N	LACH/NH4	4959274	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957086	2017/04/26	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959268	N/A	2017/04/29	Azadeh Shahbazi
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956183	N/A	2017/04/26	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4955999	N/A	2017/04/27	Manpreet Sarao

Maxxam ID: EGP547
Sample ID: WG-160900764-20170424-KR-01A
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/27	2017/05/03	Milijana Avramovic

TEST SUMMARY

Maxxam ID: EGP548
Sample ID: WG-160900764-20170424-KR-02
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/04/28	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4957489	2017/04/27	2017/04/27	Milijana Avramovic
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/04/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4956483	N/A	2017/04/26	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4961501	2017/04/29	2017/05/01	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4957415	N/A	2017/04/28	Thao Nguyen
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Ammonia-N	LACH/NH4	4959274	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957086	2017/04/26	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li (Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959268	N/A	2017/04/29	Azadeh Shahbazi
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956183	N/A	2017/04/26	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4955999	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGP548 Dup
Sample ID: WG-160900764-20170424-KR-02
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Mercury	CV/AA	4961501	2017/04/29	2017/05/01	Ron Morrison
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu

TEST SUMMARY

Maxxam ID: EGP548 Dup
Sample ID: WG-160900764-20170424-KR-02
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu

Maxxam ID: EGP549
Sample ID: WG-160900764-20170424-KR-02A
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/27	2017/05/03	Milijana Avramovic

Maxxam ID: EGP550
Sample ID: WG-160900764-20170424-KR-03
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/04/28	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4957489	2017/04/27	2017/04/27	Milijana Avramovic
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/04/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4956483	N/A	2017/04/27	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/28	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4957399	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/28	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/28	Automated Statchk
Total Ammonia-N	LACH/NH4	4959274	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957086	2017/04/26	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/28	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/28	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/28	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959268	N/A	2017/04/29	Azadeh Shahbazi

TEST SUMMARY

Maxxam ID: EGP550
Sample ID: WG-160900764-20170424-KR-03
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4955999	N/A	2017/04/27	Manpreet Sarao

Maxxam ID: EGP550 Dup
Sample ID: WG-160900764-20170424-KR-03
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar

Maxxam ID: EGP551
Sample ID: WG-160900764-20170424-KR-03A
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/27	2017/05/03	Milijana Avramovic

Maxxam ID: EGP552
Sample ID: WG-160900764-20170424-KR-04
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/04/28	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4957489	2017/04/27	2017/04/28	Milijana Avramovic
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/04/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4961551	N/A	2017/04/29	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/30	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4957394	N/A	2017/04/29	Thao Nguyen
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/30	Automated Statchk
Total Ammonia-N	LACH/NH4	4959274	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956955	N/A	2017/04/28	Chandra Nandlal

TEST SUMMARY

Maxxam ID: EGP552
Sample ID: WG-160900764-20170424-KR-04
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Polychlorinated Biphenyl in Water	GC/ECD	4957086	2017/04/26	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959268	N/A	2017/04/29	Azadeh Shahbazi
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4955999	N/A	2017/04/27	Manpreet Sarao

Maxxam ID: EGP552 Dup
Sample ID: WG-160900764-20170424-KR-04
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	4957394	N/A	2017/04/29	Thao Nguyen
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956955	N/A	2017/04/28	Chandra Nandlal

Maxxam ID: EGP553
Sample ID: WG-160900764-20170424-KR-04A
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/27	2017/05/03	Milijana Avramovic

Maxxam ID: EGP554
Sample ID: WG-160900764-20170424-KR-05
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/04/28	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4957489	2017/04/27	2017/04/28	Milijana Avramovic
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Alkalinity	AT	4964213	N/A	2017/05/02	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/04/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	4964113	N/A	2017/05/02	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu

TEST SUMMARY

Maxxam ID: EGP554
Sample ID: WG-160900764-20170424-KR-05
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961401	2017/04/29	2017/05/01	(Kent) Maolin Li
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/30	Automated Statchk
Mercury	CV/AA	4961501	2017/04/29	2017/05/01	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4957394	N/A	2017/04/29	Thao Nguyen
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/30	Automated Statchk
Total Ammonia-N	LACH/NH4	4959274	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957086	2017/04/26	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4964286	N/A	2017/05/02	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959268	N/A	2017/04/29	Azadeh Shahbazi
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956183	N/A	2017/04/26	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4955999	N/A	2017/04/27	Manpreet Sarao

Maxxam ID: EGP554 Dup
Sample ID: WG-160900764-20170424-KR-05
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4958165	N/A	2017/05/01	Grace Sison
Sulphate by Automated Colourimetry	KONE	4964286	N/A	2017/05/02	Deonarine Ramnarine

Maxxam ID: EGP555
Sample ID: WG-160900764-20170424-KR-05A
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/27	2017/05/03	Milijana Avramovic

TEST SUMMARY

Maxxam ID: EHA017
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4957722	N/A	2017/05/04	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/29	2017/05/03	Milijana Avramovic

Maxxam ID: EHA028
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4964850	2017/04/29	2017/05/04	Milijana Avramovic

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-1.0°C
Package 2	0.3°C
Package 3	5.0°C
Package 4	2.3°C
Package 5	1.3°C

Sample EGP546 [WG-160900764-20170424-KR-01] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP548 [WG-160900764-20170424-KR-02] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP550 [WG-160900764-20170424-KR-03] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP552 [WG-160900764-20170424-KR-04] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP554 [WG-160900764-20170424-KR-05] : PCB Analysis: Due to the nature of the sample matrix, a smaller portion of the sample was extracted. DLs were adjusted accordingly. Elevated ion balance was confirmed by re-analysis. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4955999	4-Bromofluorobenzene	2017/04/27	100	70 - 130	99	70 - 130	92	%				
4955999	D4-1,2-Dichloroethane	2017/04/27	104	70 - 130	103	70 - 130	104	%				
4955999	D8-Toluene	2017/04/27	101	70 - 130	105	70 - 130	98	%				
4957086	Decachlorobiphenyl	2017/04/27	98	60 - 130	90	60 - 130	94	%				
4957489	2,4,6-Tribromophenol	2017/04/27	99	50 - 130	99	50 - 130	72	%				
4957489	2-Fluorobiphenyl	2017/04/27	78	50 - 130	77	50 - 130	78	%				
4957489	D14-Terphenyl (FS)	2017/04/27	98	50 - 130	101	50 - 130	93	%				
4957489	D5-Nitrobenzene	2017/04/27	87	50 - 130	92	50 - 130	87	%				
4961401	o-Terphenyl	2017/05/01	107	60 - 130	105	60 - 130	102	%				
4964850	2,4,6-Tribromophenol	2017/05/03	97	50 - 130	95	50 - 130	73	%				
4964850	2-Fluorobiphenyl	2017/05/03	64	50 - 130	74	50 - 130	83	%				
4964850	D14-Terphenyl (FS)	2017/05/03	105	50 - 130	108	50 - 130	102	%				
4964850	D5-Nitrobenzene	2017/05/03	80	50 - 130	100	50 - 130	100	%				
4955999	1,1,1,2-Tetrachloroethane	2017/04/27	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4955999	1,1,1-Trichloroethane	2017/04/27	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4955999	1,1,2,2-Tetrachloroethane	2017/04/27	105	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4955999	1,1,2-Trichloroethane	2017/04/27	102	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4955999	1,1-Dichloroethane	2017/04/27	101	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
4955999	1,1-Dichloroethylene	2017/04/27	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
4955999	1,2-Dichlorobenzene	2017/04/27	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4955999	1,2-Dichloroethane	2017/04/27	100	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
4955999	1,2-Dichloropropane	2017/04/27	101	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4955999	1,3-Dichlorobenzene	2017/04/27	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4955999	1,4-Dichlorobenzene	2017/04/27	102	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
4955999	Acetone (2-Propanone)	2017/04/27	102	60 - 140	84	60 - 140	<10	ug/L	NC	30		
4955999	Benzene	2017/04/27	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4955999	Bromodichloromethane	2017/04/27	102	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4955999	Bromoform	2017/04/27	100	70 - 130	96	70 - 130	<1.0	ug/L	NC	30		
4955999	Bromomethane	2017/04/27	106	60 - 140	99	60 - 140	<0.50	ug/L	NC	30		
4955999	Carbon Tetrachloride	2017/04/27	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4955999	Chlorobenzene	2017/04/27	102	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4955999	Chloroform	2017/04/27	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
4955999	cis-1,2-Dichloroethylene	2017/04/27	105	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4955999	cis-1,3-Dichloropropene	2017/04/27	100	70 - 130	93	70 - 130	<0.30	ug/L	NC	30		
4955999	Dibromochloromethane	2017/04/27	101	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4955999	Dichlorodifluoromethane (FREON 12)	2017/04/27	94	60 - 140	96	60 - 140	<1.0	ug/L	NC	30		
4955999	Ethylbenzene	2017/04/27	98	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4955999	Ethylene Dibromide	2017/04/27	105	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4955999	F1 (C6-C10) - BTEX	2017/04/27					<25	ug/L	NC	30		
4955999	F1 (C6-C10)	2017/04/27	95	60 - 140	91	60 - 140	<25	ug/L	NC	30		
4955999	Hexane	2017/04/27	101	70 - 130	100	70 - 130	<1.0	ug/L	NC	30		
4955999	Methyl Ethyl Ketone (2-Butanone)	2017/04/27	108	60 - 140	95	60 - 140	<10	ug/L	NC	30		
4955999	Methyl Isobutyl Ketone	2017/04/27	103	70 - 130	98	70 - 130	<5.0	ug/L	NC	30		
4955999	Methyl t-butyl ether (MTBE)	2017/04/27	99	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
4955999	Methylene Chloride(Dichloromethane)	2017/04/27	107	70 - 130	101	70 - 130	<2.0	ug/L	NC	30		
4955999	o-Xylene	2017/04/27	95	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
4955999	p+m-Xylene	2017/04/27	95	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4955999	Styrene	2017/04/27	95	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4955999	Tetrachloroethylene	2017/04/27	99	70 - 130	101	70 - 130	<0.20	ug/L	6.4	30		
4955999	Toluene	2017/04/27	96	70 - 130	98	70 - 130	<0.20	ug/L	2.6	30		
4955999	Total Xylenes	2017/04/27					<0.20	ug/L	NC	30		
4955999	trans-1,2-Dichloroethylene	2017/04/27	102	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4955999	trans-1,3-Dichloropropene	2017/04/27	103	70 - 130	93	70 - 130	<0.40	ug/L	NC	30		
4955999	Trichloroethylene	2017/04/27	98	70 - 130	99	70 - 130	<0.20	ug/L	1.8	30		
4955999	Trichlorofluoromethane (FREON 11)	2017/04/27	105	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
4955999	Vinyl Chloride	2017/04/27	105	70 - 130	105	70 - 130	<0.20	ug/L	NC	30		
4956183	Turbidity	2017/04/26			98	85 - 115	<0.1	NTU	11	20		
4956429	Dissolved Organic Carbon	2017/04/26	97	80 - 120	99	80 - 120	0.22, RDL=0.20	mg/L	2.2	20		
4956483	Dissolved Organic Carbon	2017/04/26	97	80 - 120	98	80 - 120	0.23, RDL=0.20	mg/L	3.2	20		
4956648	Turbidity	2017/04/27			97	85 - 115	<0.1	NTU	2.4	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4956948	Nitrate (N)	2017/04/27	NC	80 - 120	99	80 - 120	<0.10	mg/L	0.31	20		
4956948	Nitrite (N)	2017/04/27	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
4956955	Nitrate (N)	2017/04/28	NC	80 - 120	105	80 - 120	<0.10	mg/L	2.3	20		
4956955	Nitrite (N)	2017/04/28	102	80 - 120	100	80 - 120	<0.010	mg/L	NC	20		
4957054	Alkalinity (Total as CaCO3)	2017/04/27			97	85 - 115	<1.0	mg/L	1.5	20		
4957062	Conductivity	2017/04/27			100	85 - 115	<1.0	umho/cm	0.29	25		
4957067	pH	2017/04/27			101	98 - 103			0.80	N/A		
4957070	Fluoride (F-)	2017/04/27	96	80 - 120	96	80 - 120	<0.10	mg/L	6.6	20		
4957086	Aroclor 1242	2017/04/27					<0.05	ug/L	NC	30		
4957086	Aroclor 1248	2017/04/27					<0.05	ug/L	NC	30		
4957086	Aroclor 1254	2017/04/27					<0.05	ug/L	NC	30		
4957086	Aroclor 1260	2017/04/27	97	60 - 130	89	60 - 130	<0.05	ug/L	NC	30		
4957086	Total PCB	2017/04/27	97	60 - 130	89	60 - 130	<0.05	ug/L	NC	40		
4957394	Dissolved Aluminum (Al)	2017/04/29	104	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
4957394	Dissolved Antimony (Sb)	2017/04/29	107	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
4957394	Dissolved Arsenic (As)	2017/04/29	102	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
4957394	Dissolved Barium (Ba)	2017/04/29	102	80 - 120	101	80 - 120	<0.0020	mg/L	3.0	20		
4957394	Dissolved Beryllium (Be)	2017/04/29	105	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
4957394	Dissolved Boron (B)	2017/04/29	106	80 - 120	103	80 - 120	<0.010	mg/L	NC	20		
4957394	Dissolved Cadmium (Cd)	2017/04/29	105	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
4957394	Dissolved Calcium (Ca)	2017/04/29	NC	80 - 120	95	80 - 120	<0.20	mg/L	2.1	20		
4957394	Dissolved Chromium (Cr)	2017/04/29	101	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
4957394	Dissolved Cobalt (Co)	2017/04/29	99	80 - 120	98	80 - 120	<0.00050	mg/L	4.7	20		
4957394	Dissolved Copper (Cu)	2017/04/29	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
4957394	Dissolved Iron (Fe)	2017/04/29	100	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
4957394	Dissolved Lead (Pb)	2017/04/29	98	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
4957394	Dissolved Magnesium (Mg)	2017/04/29	100	80 - 120	99	80 - 120	<0.050	mg/L	0.30	20		
4957394	Dissolved Manganese (Mn)	2017/04/29	101	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4957394	Dissolved Molybdenum (Mo)	2017/04/29	108	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
4957394	Dissolved Nickel (Ni)	2017/04/29	98	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957394	Dissolved Phosphorus (P)	2017/04/29	112	80 - 120	112	80 - 120	<0.10	mg/L	NC	20		
4957394	Dissolved Potassium (K)	2017/04/29	102	80 - 120	99	80 - 120	<0.20	mg/L	0.42	20		
4957394	Dissolved Selenium (Se)	2017/04/29	103	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4957394	Dissolved Silicon (Si)	2017/04/29	104	80 - 120	99	80 - 120	<0.050	mg/L	2.0	20		
4957394	Dissolved Silver (Ag)	2017/04/29	102	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
4957394	Dissolved Sodium (Na)	2017/04/29	100	80 - 120	99	80 - 120	<0.10	mg/L	1.3	20		
4957394	Dissolved Strontium (Sr)	2017/04/29	100	80 - 120	99	80 - 120	<0.0010	mg/L	1.6	20		
4957394	Dissolved Thallium (Tl)	2017/04/29	99	80 - 120	96	80 - 120	<0.000050	mg/L	NC	20		
4957394	Dissolved Titanium (Ti)	2017/04/29	103	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
4957394	Dissolved Uranium (U)	2017/04/29	101	80 - 120	98	80 - 120	<0.00010	mg/L	1.2	20		
4957394	Dissolved Vanadium (V)	2017/04/29	101	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4957394	Dissolved Zinc (Zn)	2017/04/29	99	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
4957394	Dissolved Zirconium (Zr)	2017/04/29	108	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
4957399	Dissolved Aluminum (Al)	2017/04/28	101	80 - 120	101	80 - 120	<0.0050	mg/L				
4957399	Dissolved Antimony (Sb)	2017/04/28	102	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Arsenic (As)	2017/04/28	96	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
4957399	Dissolved Barium (Ba)	2017/04/28	95	80 - 120	98	80 - 120	<0.0020	mg/L	1.3	20		
4957399	Dissolved Beryllium (Be)	2017/04/28	99	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Boron (B)	2017/04/28	97	80 - 120	99	80 - 120	<0.010	mg/L				
4957399	Dissolved Cadmium (Cd)	2017/04/28	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
4957399	Dissolved Calcium (Ca)	2017/04/28	NC	80 - 120	97	80 - 120	<0.20	mg/L				
4957399	Dissolved Chromium (Cr)	2017/04/28	98	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
4957399	Dissolved Cobalt (Co)	2017/04/28	94	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Copper (Cu)	2017/04/28	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
4957399	Dissolved Iron (Fe)	2017/04/28	93	80 - 120	97	80 - 120	<0.10	mg/L				
4957399	Dissolved Lead (Pb)	2017/04/28	97	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Magnesium (Mg)	2017/04/28	99	80 - 120	98	80 - 120	<0.050	mg/L				
4957399	Dissolved Manganese (Mn)	2017/04/28	92	80 - 120	95	80 - 120	<0.0020	mg/L				
4957399	Dissolved Molybdenum (Mo)	2017/04/28	101	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Nickel (Ni)	2017/04/28	90	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
4957399	Dissolved Phosphorus (P)	2017/04/28	100	80 - 120	105	80 - 120	<0.10	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957399	Dissolved Potassium (K)	2017/04/28	97	80 - 120	100	80 - 120	<0.20	mg/L				
4957399	Dissolved Selenium (Se)	2017/04/28	97	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4957399	Dissolved Silicon (Si)	2017/04/28	101	80 - 120	100	80 - 120	<0.050	mg/L				
4957399	Dissolved Silver (Ag)	2017/04/28	96	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
4957399	Dissolved Sodium (Na)	2017/04/28	NC	80 - 120	97	80 - 120	<0.10	mg/L				
4957399	Dissolved Strontium (Sr)	2017/04/28	94	80 - 120	93	80 - 120	<0.0010	mg/L				
4957399	Dissolved Thallium (Tl)	2017/04/28	97	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20		
4957399	Dissolved Titanium (Ti)	2017/04/28	104	80 - 120	101	80 - 120	<0.0050	mg/L				
4957399	Dissolved Uranium (U)	2017/04/28	99	80 - 120	98	80 - 120	<0.00010	mg/L				
4957399	Dissolved Vanadium (V)	2017/04/28	98	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
4957399	Dissolved Zinc (Zn)	2017/04/28	93	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
4957399	Dissolved Zirconium (Zr)	2017/04/28	101	80 - 120	99	80 - 120	<0.0010	mg/L				
4957415	Dissolved Aluminum (Al)	2017/04/28	91	80 - 120	118	80 - 120	<0.0050	mg/L				
4957415	Dissolved Antimony (Sb)	2017/04/28	107	80 - 120	105	80 - 120	<0.00050	mg/L				
4957415	Dissolved Arsenic (As)	2017/04/28	100	80 - 120	97	80 - 120	<0.0010	mg/L				
4957415	Dissolved Barium (Ba)	2017/04/28	103	80 - 120	101	80 - 120	<0.0020	mg/L				
4957415	Dissolved Beryllium (Be)	2017/04/28	98	80 - 120	95	80 - 120	<0.00050	mg/L				
4957415	Dissolved Boron (B)	2017/04/28	97	80 - 120	95	80 - 120	<0.010	mg/L				
4957415	Dissolved Cadmium (Cd)	2017/04/28	103	80 - 120	102	80 - 120	<0.00010	mg/L				
4957415	Dissolved Calcium (Ca)	2017/04/28	NC	80 - 120	87	80 - 120	<0.20	mg/L				
4957415	Dissolved Chromium (Cr)	2017/04/28	98	80 - 120	96	80 - 120	<0.0050	mg/L				
4957415	Dissolved Cobalt (Co)	2017/04/28	97	80 - 120	96	80 - 120	<0.00050	mg/L				
4957415	Dissolved Copper (Cu)	2017/04/28	99	80 - 120	98	80 - 120	<0.0010	mg/L				
4957415	Dissolved Iron (Fe)	2017/04/28	96	80 - 120	94	80 - 120	<0.10	mg/L				
4957415	Dissolved Lead (Pb)	2017/04/28	96	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4957415	Dissolved Magnesium (Mg)	2017/04/28	96	80 - 120	96	80 - 120	<0.050	mg/L				
4957415	Dissolved Manganese (Mn)	2017/04/28	NC	80 - 120	97	80 - 120	<0.0020	mg/L				
4957415	Dissolved Molybdenum (Mo)	2017/04/28	105	80 - 120	103	80 - 120	<0.00050	mg/L				
4957415	Dissolved Nickel (Ni)	2017/04/28	96	80 - 120	96	80 - 120	<0.0010	mg/L				
4957415	Dissolved Phosphorus (P)	2017/04/28	105	80 - 120	104	80 - 120	<0.10	mg/L				
4957415	Dissolved Potassium (K)	2017/04/28	97	80 - 120	96	80 - 120	<0.20	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957415	Dissolved Selenium (Se)	2017/04/28	94	80 - 120	93	80 - 120	<0.0020	mg/L				
4957415	Dissolved Silicon (Si)	2017/04/28	92	80 - 120	90	80 - 120	<0.050	mg/L				
4957415	Dissolved Silver (Ag)	2017/04/28	103	80 - 120	101	80 - 120	<0.00010	mg/L				
4957415	Dissolved Sodium (Na)	2017/04/28	NC	80 - 120	93	80 - 120	<0.10	mg/L				
4957415	Dissolved Strontium (Sr)	2017/04/28	100	80 - 120	99	80 - 120	<0.0010	mg/L				
4957415	Dissolved Thallium (Tl)	2017/04/28	96	80 - 120	97	80 - 120	<0.000050	mg/L				
4957415	Dissolved Titanium (Ti)	2017/04/28	94	80 - 120	95	80 - 120	<0.0050	mg/L				
4957415	Dissolved Uranium (U)	2017/04/28	101	80 - 120	101	80 - 120	<0.00010	mg/L				
4957415	Dissolved Vanadium (V)	2017/04/28	98	80 - 120	95	80 - 120	<0.00050	mg/L				
4957415	Dissolved Zinc (Zn)	2017/04/28	98	80 - 120	95	80 - 120	<0.0050	mg/L				
4957415	Dissolved Zirconium (Zr)	2017/04/28	106	80 - 120	104	80 - 120	<0.0010	mg/L				
4957489	1,2,4-Trichlorobenzene	2017/04/27	73	40 - 130	71	40 - 130	<0.1	ug/L	NC	30		
4957489	1-Methylnaphthalene	2017/04/27	75	50 - 130	77	50 - 130	<0.2	ug/L				
4957489	2,4,5-Trichlorophenol	2017/04/27	96	50 - 130	100	50 - 130	<0.2	ug/L				
4957489	2,4,6-Trichlorophenol	2017/04/27	94	50 - 130	97	50 - 130	<0.2	ug/L				
4957489	2,4-Dichlorophenol	2017/04/27	88	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
4957489	2,4-Dimethylphenol	2017/04/27	75	30 - 130	70	30 - 130	<0.5	ug/L				
4957489	2,4-Dinitrophenol	2017/04/27	81	30 - 130	6.6 (1)	30 - 130	<2	ug/L				
4957489	2,4-Dinitrotoluene	2017/04/27	99	50 - 130	101	50 - 130	<0.3	ug/L				
4957489	2,6-Dinitrotoluene	2017/04/27	92	50 - 130	94	50 - 130	<0.3	ug/L				
4957489	2-Chlorophenol	2017/04/27	75	50 - 130	76	50 - 130	<0.1	ug/L				
4957489	2-Methylnaphthalene	2017/04/27	72	50 - 130	74	50 - 130	<0.2	ug/L				
4957489	3,3'-Dichlorobenzidine	2017/04/27	98	30 - 130	118	30 - 130	<0.5	ug/L				
4957489	Acenaphthene	2017/04/27	83	50 - 130	86	50 - 130	<0.2	ug/L	NC	30		
4957489	Acenaphthylene	2017/04/27	80	50 - 130	83	50 - 130	<0.2	ug/L	NC	30		
4957489	Anthracene	2017/04/27	82	50 - 130	86	50 - 130	<0.05	ug/L	NC	30		
4957489	Benzo(a)anthracene	2017/04/27	104	50 - 130	108	50 - 130	<0.05	ug/L	NC	30		
4957489	Benzo(a)pyrene	2017/04/27	98	50 - 130	101	50 - 130	<0.01	ug/L	NC	30		
4957489	Benzo(b/j)fluoranthene	2017/04/27	105	50 - 130	105	50 - 130	<0.05	ug/L	NC	30		
4957489	Benzo(g,h,i)perylene	2017/04/27	95	50 - 130	98	50 - 130	<0.05	ug/L	NC	30		
4957489	Benzo(k)fluoranthene	2017/04/27	107	50 - 130	111	50 - 130	<0.05	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957489	Biphenyl	2017/04/27	75	50 - 130	75	50 - 130	<0.1	ug/L				
4957489	Bis(2-chloroethyl)ether	2017/04/27	79	50 - 130	86	50 - 130	<0.5	ug/L				
4957489	Bis(2-chloroisopropyl)ether	2017/04/27	80	50 - 130	87	50 - 130	<0.5	ug/L				
4957489	Bis(2-ethylhexyl)phthalate	2017/04/27	97	50 - 130	99	50 - 130	<1	ug/L				
4957489	Chrysene	2017/04/27	96	50 - 130	99	50 - 130	<0.05	ug/L	NC	30		
4957489	Dibenz(a,h)anthracene	2017/04/27	102	50 - 130	104	50 - 130	<0.1	ug/L	NC	30		
4957489	Diethyl phthalate	2017/04/27	94	50 - 130	101	50 - 130	<0.1	ug/L				
4957489	Dimethyl phthalate	2017/04/27	87	50 - 130	94	50 - 130	<0.1	ug/L				
4957489	Fluoranthene	2017/04/27	94	50 - 130	98	50 - 130	<0.2	ug/L	NC	30		
4957489	Fluorene	2017/04/27	84	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4957489	Indeno(1,2,3-cd)pyrene	2017/04/27	93	50 - 130	96	50 - 130	<0.1	ug/L	NC	30		
4957489	Naphthalene	2017/04/27	73	50 - 130	75	50 - 130	<0.2	ug/L	NC	30		
4957489	p-Chloroaniline	2017/04/27	73	30 - 130	108	30 - 130	<1	ug/L				
4957489	Pentachlorophenol	2017/04/27	103	50 - 130	91	50 - 130	<0.1	ug/L				
4957489	Phenanthrene	2017/04/27	82	50 - 130	86	50 - 130	<0.1	ug/L	NC	30		
4957489	Phenol	2017/04/27	34	30 - 130	36	30 - 130	<0.5	ug/L	NC	30		
4957489	Pyrene	2017/04/27	98	50 - 130	103	50 - 130	<0.05	ug/L	15	30		
4957539	Chromium (VI)	2017/04/27	100	80 - 120	96	80 - 120	<0.50	ug/L	1.2	20		
4957849	Total Suspended Solids	2017/04/27					<10	mg/L	NC	25	95	85 - 115
4957856	Total Dissolved Solids	2017/04/28					<10	mg/L	0.94	25	99	90 - 110
4958165	Acidity as CaCO3	2017/05/01					<10	mg/L	NC	25		
4958488	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	100	80 - 120	<1.0	mg/L	0.074	20		
4958494	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	102	80 - 120	<1.0	mg/L	0.32	20		
4958502	Orthophosphate (P)	2017/04/28	102	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
4959268	Total Organic Carbon (TOC)	2017/04/29	102	80 - 120	102	80 - 120	<0.20	mg/L	0.31	20		
4959274	Total Ammonia-N	2017/04/29	96	80 - 120	99	85 - 115	<0.050	mg/L	NC	20		
4959909	Dissolved Organic Carbon	2017/04/28	103	80 - 120	105	80 - 120	<0.20	mg/L	0.75	20		
4961401	F2 (C10-C16 Hydrocarbons)	2017/05/01	104	50 - 130	99	60 - 130	<100	ug/L	NC	30		
4961401	F3 (C16-C34 Hydrocarbons)	2017/05/01	101	50 - 130	100	60 - 130	<200	ug/L	NC	30		
4961401	F4 (C34-C50 Hydrocarbons)	2017/05/01	97	50 - 130	92	60 - 130	<200	ug/L	NC	30		
4961496	Mercury (Hg)	2017/05/01	112	75 - 125	108	80 - 120	<0.1	ug/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961501	Mercury (Hg)	2017/05/01	110	75 - 125	108	80 - 120	<0.1	ug/L	NC	20		
4961551	Dissolved Organic Carbon	2017/04/29	100	80 - 120	101	80 - 120	<0.20	mg/L	1.0	20		
4961607	Free Cyanide	2017/04/29	108	80 - 120	103	80 - 120	<1	ug/L	NC	20		
4964113	Dissolved Chloride (Cl)	2017/05/02	NC	80 - 120	103	80 - 120	<1.0	mg/L	0.89	20		
4964213	Alkalinity (Total as CaCO3)	2017/05/02			97	85 - 115	<1.0	mg/L	1.1	20		
4964286	Dissolved Sulphate (SO4)	2017/05/02	NC	75 - 125	102	80 - 120	<1.0	mg/L	2.4	20		
4964850	1,2,4-Trichlorobenzene	2017/05/03	61	40 - 130	78	40 - 130	<0.1	ug/L	NC	30		
4964850	1-Methylnaphthalene	2017/05/03	61	50 - 130	75	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4,5-Trichlorophenol	2017/05/03	101	50 - 130	103	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4,6-Trichlorophenol	2017/05/03	90	50 - 130	97	50 - 130	<0.2	ug/L	NC	30		
4964850	2,4-Dichlorophenol	2017/05/03	71	50 - 130	88	50 - 130	<0.1	ug/L	NC	30		
4964850	2,4-Dimethylphenol	2017/05/03	51	30 - 130	52	30 - 130	<0.5	ug/L	NC	30		
4964850	2,4-Dinitrophenol	2017/05/03	107	30 - 130	84	30 - 130	<2	ug/L	NC	30		
4964850	2,4-Dinitrotoluene	2017/05/03	111	50 - 130	110	50 - 130	<0.3	ug/L	NC	30		
4964850	2,6-Dinitrotoluene	2017/05/03	98	50 - 130	98	50 - 130	<0.3	ug/L	NC	30		
4964850	2-Chlorophenol	2017/05/03	61	50 - 130	78	50 - 130	<0.1	ug/L	NC	30		
4964850	2-Methylnaphthalene	2017/05/03	59	50 - 130	73	50 - 130	<0.2	ug/L	NC	30		
4964850	3,3'-Dichlorobenzidine	2017/05/03	53	30 - 130	114	30 - 130	<0.5	ug/L	NC	30		
4964850	Acenaphthene	2017/05/03	81	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4964850	Acenaphthylene	2017/05/03	80	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4964850	Anthracene	2017/05/03	90	50 - 130	90	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(a)anthracene	2017/05/03	115	50 - 130	115	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(a)pyrene	2017/05/03	98	50 - 130	97	50 - 130	<0.01	ug/L	NC	30		
4964850	Benzo(b/j)fluoranthene	2017/05/03	123	50 - 130	117	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(g,h,i)perylene	2017/05/03	115	50 - 130	126	50 - 130	<0.05	ug/L	NC	30		
4964850	Benzo(k)fluoranthene	2017/05/03	126	50 - 130	115	50 - 130	<0.05	ug/L	NC	30		
4964850	Biphenyl	2017/05/03	68	50 - 130	78	50 - 130	<0.1	ug/L	NC	30		
4964850	Bis(2-chloroethyl)ether	2017/05/03	70	50 - 130	88	50 - 130	<0.5	ug/L	NC	30		
4964850	Bis(2-chloroisopropyl)ether	2017/05/03	63	50 - 130	83	50 - 130	<0.5	ug/L	NC	30		
4964850	Bis(2-ethylhexyl)phthalate	2017/05/03	108	50 - 130	111	50 - 130	<1	ug/L	23	30		
4964850	Chrysene	2017/05/03	108	50 - 130	108	50 - 130	<0.05	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4964850	Dibenz(a,h)anthracene	2017/05/03	111	50 - 130	120	50 - 130	<0.1	ug/L	NC	30		
4964850	Diethyl phthalate	2017/05/03	105	50 - 130	103	50 - 130	<0.1	ug/L	NC	30		
4964850	Dimethyl phthalate	2017/05/03	89	50 - 130	89	50 - 130	<0.1	ug/L	NC	30		
4964850	Fluoranthene	2017/05/03	105	50 - 130	104	50 - 130	<0.2	ug/L	NC	30		
4964850	Fluorene	2017/05/03	84	50 - 130	86	50 - 130	<0.2	ug/L	NC	30		
4964850	Indeno(1,2,3-cd)pyrene	2017/05/03	114	50 - 130	123	50 - 130	<0.1	ug/L	NC	30		
4964850	Naphthalene	2017/05/03	65	50 - 130	81	50 - 130	<0.2	ug/L	NC	30		
4964850	p-Chloroaniline	2017/05/03	38	30 - 130	86	30 - 130	<1	ug/L	NC	30		
4964850	Pentachlorophenol	2017/05/03	103	50 - 130	56	50 - 130	<0.1	ug/L	NC	30		
4964850	Phenanthrene	2017/05/03	90	50 - 130	90	50 - 130	<0.1	ug/L	NC	30		
4964850	Phenol	2017/05/03	31	30 - 130	40	30 - 130	<0.5	ug/L	NC	30		
4964850	Pyrene	2017/05/03	124	50 - 130	124	50 - 130	<0.05	ug/L	NC	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).




Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist




Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	-1	-2	0
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	-1	1	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	6	7	2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1	3	3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	2	2	0
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3

MAXXAM JOB#: B782020						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>				
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2	3

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>Regina Yutha</i> JACELYN GUENTHER	2017/04/25	08:30

25-Apr-17 08:30

Deepthi Shaji



B782020

Presence of Visible Particulate/Sediment

Maxxam Analytics

CAM FCD-01013/5

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When there is >1cm of visible particulate/sediment, the amount will be recorded in the field below

Bottle Types

Sample ID	All	Inorganics					Organics										Hydrocarbons							Volatiles				Other		
		Cu	CN	General	Hg	Metals (Diss.)	Organic 1 of 2	Organic 2 of 2	PCB 1 of 2	PCB 2 of 2	Pest/ Herb 1 of 2	Pest/ Herb 2 of 2	SVOC/ ABN 1 of 2	SVOC/ ABN 2 of 2	PAH 1 of 2	PAH 2 of 2	Dioxin /Furan	F1 Vial 1	F1 Vial 2	F1 Vial 3	F1 Vial 4	F2-F4 1 of 2	F2-F4 2 of 2	F3	VOC Vial 1	VOC Vial 2	VOC Vial 3		VOC Vial 4	
1 W6-160900764- 20170424-KR-05	S																													
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														

Comments: EXCEPT CHROMIUM, DISSOLVED METALS & MERCURY.

Legend:	
P	Suspended Particulate
TS	Trace Settled Sediment (just covers bottom of container or less)
S	Sediment greater than (>) Trace, but less than (<) 1 cm

Recorded By: (signature/print) Klary, Deepthi Shaji

STANT

25-Apr-17 08:30

INVOICE INFORMATION:
 Company Name: #9197 Stantec Consulting Ltd
 Contact Name: Accounts Payable
 Address: 300 Hagey Blvd Suite 100
 Waterloo ON N2L 0A4
 Phone: (519) 579-4410 x Fax: (519) 579-6733 x
 Email: accounts.payable.invoices@stantec.com

REPORT INFORMATION (if differs from invoice):
 Company Name: #18379 Stantec Consulting Ltd
 Contact Name: Report - 1609-00764
 Address: ON
 Phone: Fax:
 Email: aaron.warkentin@stantec.com, brant.gill@stantec.com

PROJECT INFORMATION:
 Quotation #: B48218
 Task #:
 Project #: 160900764
 1609
 Profit Centre: Clarington TS - Monitoring Well
 Site #:
 Sampled By: Ryan Day

Deepthi Shaji
 B782020
 KES ENV-844

Page 1 of 1
 ly:
 Bottle Order #:
 807199
 Project Manager:
 Deepthi Shaji

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)	Other Regulations	Special Instructions
<input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Table	<input type="checkbox"/> CCME <input type="checkbox"/> Reg 558 <input type="checkbox"/> MISA <input type="checkbox"/> PWDO <input type="checkbox"/> Other	<input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> Municipality

ANALYSIS REQUESTED (PLEASE BE SPECIFIC):

Field Filtered (Please circle): (Metals) (Hg) (Pb)	Acidity	Cr (VI) & Free Cr	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAP - Comprehensive Field Filter	Reg 153 PCBs	Reg 153 VOCs & FIF4	SVDGs	Lab Filtered SVDGs
Y	X	X	X	X	X	X	X	X	X	X
									X	X
Y	X	X	X	X	X	X	X	X	X	X
									X	X
Y	X	X	X	X	X	X	X	X	X	X
									X	X
Y	X	X	X	X	X	X	X	X	X	X
									X	X
Y	X	X	X	X	X	X	X	X	X	X
									X	X
Y	X	X	X	X	X	X	X	X	X	X
									X	X

Turnaround Time (TAT) Required:
 Please provide advance notice for rush projects.

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Regular (Standard) TAT

Job Specific Rush TAT (if applies to entire submission)
 Date Required: _____ Time Required: _____
 Rush Confirmation Number: _____ (call lab for #)

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix
1	WG-160900764-20170424-KR-01	Apr 24/17	10:45	GW
2	WG-160900764-20170424-KR-01A		10:45	GW
3	WG-160900764-20170424-KR-02		11:29	GW
4	WG-160900764-20170424-KR-02A		11:29	GW
5	WG-160900764-20170424-KR-03		13:00	GW
6	WG-160900764-20170424-KR-03A		13:00	GW
7	WG-160900764-20170424-KR-04		13:00	GW
8	WG-160900764-20170424-KR-04A		13:00	GW
9	WG-160900764-20170424-KR-05		15:47	GW
10	WG-160900764-20170424-KR-05A		15:47	GW

REC'D IN PORT HOPE

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# Jars used and not submitted	Laboratory Use Only
Jamila Jumeir Kach	17/04/25	20:30	Milica Tadjik Kacemi	2017/04/25	13:20		Time Sensitive: <input type="checkbox"/> Temperature (°C) on Receipt: <input type="checkbox"/> REFUSE TO ACCEPT Custody Seal Present: <input checked="" type="checkbox"/> intact: <input checked="" type="checkbox"/>

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 * IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL FAT DELAYS.
 ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

Your Project #: 160900764
 Site Location: CLARINGTON TS -MONITORING WELL
 Your C.O.C. #: 540868-18-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/09
 Report #: R4453482
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B785281

Received: 2017/04/27, 15:12

Sample Matrix: Water
 # Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	15	N/A	2017/05/08	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	8	2017/04/29	2017/05/06	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	1	2017/05/03	2017/05/05	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	7	2017/05/03	2017/05/06	CAM SOP-00301	EPA 8270 m
Acidity as CaCO3 in liquid (1, 2)	6	N/A	2017/05/08	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	5	N/A	2017/04/30	CAM SOP-00448	SM 22 2320 B m
Alkalinity	1	N/A	2017/05/05	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	6	N/A	2017/05/01	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	6	N/A	2017/05/02		EPA 8260C m
1,3-Dichloropropene Sum	2	N/A	2017/05/03		EPA 8260C m
Chloride by Automated Colourimetry	5	N/A	2017/05/01	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2017/05/05	CAM SOP-00463	EPA 325.2 m
Conductivity	6	N/A	2017/04/30	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	6	N/A	2017/05/02	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	6	N/A	2017/04/30	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (3)	5	N/A	2017/05/01	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2017/05/03	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (4)	6	2017/05/02	2017/05/03	CAM SOP-00316	CCME PHC-CWS m
Fluoride	6	2017/04/29	2017/04/30	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2017/05/01	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	1	2017/05/02	2017/05/02	CAM SOP-00453	EPA 7470A m
Mercury	5	2017/05/02	2017/05/03	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	6	N/A	2017/05/01	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	6	N/A	2017/05/01		
Anion and Cation Sum	6	N/A	2017/05/01		
Total Ammonia-N	6	N/A	2017/05/03	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	6	N/A	2017/05/01	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	6	2017/05/01	2017/05/02	CAM SOP-00309	EPA 8082A m
pH	6	N/A	2017/04/30	CAM SOP-00413	SM 4500H+ B m

Your Project #: 160900764
 Site Location: CLARINGTON TS -MONITORING WELL
 Your C.O.C. #: 540868-18-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/09
 Report #: R4453482
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B785281

Received: 2017/04/27, 15:12

Sample Matrix: Water
 # Samples Received: 16

Analyses	Date		Laboratory Method	Reference
	Quantity	Date Extracted		
Orthophosphate	6	N/A	2017/05/01 CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	6	N/A	2017/05/01	
Sat. pH and Langelier Index (@ 4C)	6	N/A	2017/05/01	
Sulphate by Automated Colourimetry	5	N/A	2017/05/01 CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2017/05/05 CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	6	N/A	2017/05/01	
Total Dissolved Solids	6	2017/05/02	2017/05/02 CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (6)	6	N/A	2017/05/03 CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	6	2017/05/02	2017/05/02 CAM SOP-00428	SM 22 2540D m
Turbidity	6	N/A	2017/04/29 CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	6	N/A	2017/05/01 CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	2	N/A	2017/05/02 CAM SOP-00228	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: 160900764
Site Location: CLARINGTON TS -MONITORING WELL
Your C.O.C. #: 540868-18-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/05/09
Report #: R4453482
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B785281

Received: 2017/04/27, 15:12

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (6) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF900			EHF902		
Sampling Date		2017/04/26 09:34			2017/04/26 09:42		
COC Number		540868-18-01			540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	RDL	QC Batch	WG-160900764- 20170426-RD-11	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	7.92	N/A	4959642	4.68	N/A	4959642
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	210	1.0	4959637	180	1.0	4959637
Calculated TDS	mg/L	460	1.0	4959645	250	1.0	4959645
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.4	1.0	4959637	2.1	1.0	4959637
Cation Sum	me/L	7.96	N/A	4959642	4.69	N/A	4959642
Hardness (CaCO3)	mg/L	380	1.0	4959639	200	1.0	4959639
Ion Balance (% Difference)	%	0.230	N/A	4959640	0.190	N/A	4959640
Langelier Index (@ 20C)	N/A	0.704		4959643	0.380		4959643
Langelier Index (@ 4C)	N/A	0.456		4959644	0.131		4959644
Saturation pH (@ 20C)	N/A	7.16		4959643	7.70		4959643
Saturation pH (@ 4C)	N/A	7.41		4959644	7.95		4959644
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	4964487	<0.050	0.050	4964260
Conductivity	umho/cm	770	1.0	4961853	440	1.0	4961853
Dissolved Organic Carbon	mg/L	0.90	0.20	4962779	0.80	0.20	4962779
Orthophosphate (P)	mg/L	<0.010	0.010	4961579	0.010	0.010	4961579
pH	pH	7.87		4961857	8.08		4961857
Dissolved Sulphate (SO4)	mg/L	100	1.0	4961576	27	1.0	4961576
Alkalinity (Total as CaCO3)	mg/L	210	1.0	4961851	180	1.0	4961851
Dissolved Chloride (Cl)	mg/L	25	1.0	4961571	16	1.0	4961571
Nitrite (N)	mg/L	0.013	0.010	4961537	<0.010	0.010	4961537
Nitrate (N)	mg/L	12.6	0.50	4961537	<0.10	0.10	4961537
Nitrate + Nitrite (N)	mg/L	12.6	0.50	4961537	<0.10	0.10	4961537
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0050	0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	4961383	0.0013	0.0010	4961383
Dissolved Barium (Ba)	mg/L	0.060	0.0020	4961383	0.11	0.0020	4961383
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Boron (B)	mg/L	0.010	0.010	4961383	0.032	0.010	4961383
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable							

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF900			EHF902		
Sampling Date		2017/04/26 09:34			2017/04/26 09:42		
COC Number		540868-18-01			540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	RDL	QC Batch	WG-160900764- 20170426-RD-11	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	4961383	<0.00010	0.00010	4961383
Dissolved Calcium (Ca)	mg/L	96	0.20	4961383	28	0.20	4961383
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	4961383	<0.0010	0.0010	4961383
Dissolved Iron (Fe)	mg/L	<0.10	0.10	4961383	0.16	0.10	4961383
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Magnesium (Mg)	mg/L	34	0.050	4961383	33	0.050	4961383
Dissolved Manganese (Mn)	mg/L	0.0027	0.0020	4961383	0.0059	0.0020	4961383
Dissolved Molybdenum (Mo)	mg/L	0.0027	0.00050	4961383	0.0019	0.00050	4961383
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	4961383	<0.0010	0.0010	4961383
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	4961383	<0.10	0.10	4961383
Dissolved Potassium (K)	mg/L	3.0	0.20	4961383	2.6	0.20	4961383
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	4961383	<0.0020	0.0020	4961383
Dissolved Silicon (Si)	mg/L	7.2	0.050	4961383	11	0.050	4961383
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	4961383	<0.00010	0.00010	4961383
Dissolved Sodium (Na)	mg/L	5.9	0.10	4961383	12	0.10	4961383
Dissolved Strontium (Sr)	mg/L	0.33	0.0010	4961383	0.58	0.0010	4961383
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	4961383	<0.000050	0.000050	4961383
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Uranium (U)	mg/L	0.0022	0.00010	4961383	<0.00010	0.00010	4961383
Dissolved Vanadium (V)	mg/L	<0.00050	0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	4961383	<0.0010	0.0010	4961383
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF904		EHF906	EHF906		
Sampling Date		2017/04/26 09:42		2017/04/26 12:15	2017/04/26 12:15		
COC Number		540868-18-01		540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	QC Batch	WG-160900764- 20170426-KR-14	WG-160900764- 20170426-KR-14 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	4.70	4959642	5.30		N/A	4959642
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	4959637	190		1.0	4959637
Calculated TDS	mg/L	250	4959645	280		1.0	4959645
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	4959637	2.0		1.0	4959637
Cation Sum	me/L	4.61	4959642	5.12		N/A	4959642
Hardness (CaCO3)	mg/L	200	4959639	230		1.0	4959639
Ion Balance (% Difference)	%	0.970	4959640	1.76		N/A	4959640
Langelier Index (@ 20C)	N/A	0.386	4959643	0.458			4959643
Langelier Index (@ 4C)	N/A	0.136	4959644	0.209			4959644
Saturation pH (@ 20C)	N/A	7.70	4959643	7.58			4959643
Saturation pH (@ 4C)	N/A	7.95	4959644	7.83			4959644
Inorganics							
Total Ammonia-N	mg/L	<0.050	4964260	<0.050	<0.050	0.050	4964277
Conductivity	umho/cm	450	4961853	510		1.0	4961853
Dissolved Organic Carbon	mg/L	0.76	4962779	0.94		0.20	4962779
Orthophosphate (P)	mg/L	0.012	4961579	<0.010		0.010	4961579
pH	pH	8.09	4961857	8.04			4961857
Dissolved Sulphate (SO4)	mg/L	28	4961576	38		1.0	4961576
Alkalinity (Total as CaCO3)	mg/L	180	4961851	190		1.0	4961851
Dissolved Chloride (Cl)	mg/L	16	4961571	23		1.0	4961571
Nitrite (N)	mg/L	<0.010	4961537	<0.010		0.010	4961537
Nitrate (N)	mg/L	<0.10	4961537	<0.10		0.10	4961537
Nitrate + Nitrite (N)	mg/L	<0.10	4961537	<0.10		0.10	4961537
Metals							
Dissolved Aluminum (Al)	mg/L	0.0078	4961383	0.011		0.0050	4961383
Dissolved Antimony (Sb)	mg/L	<0.00050	4961383	<0.00050		0.00050	4961383
Dissolved Arsenic (As)	mg/L	0.0013	4961383	<0.0010		0.0010	4961383
Dissolved Barium (Ba)	mg/L	0.11	4961383	0.072		0.0020	4961383
Dissolved Beryllium (Be)	mg/L	<0.00050	4961383	<0.00050		0.00050	4961383
Dissolved Boron (B)	mg/L	0.029	4961383	0.030		0.010	4961383

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF904		EHF906	EHF906		
Sampling Date		2017/04/26 09:42		2017/04/26 12:15	2017/04/26 12:15		
COC Number		540868-18-01		540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	QC Batch	WG-160900764- 20170426-KR-14	WG-160900764- 20170426-KR-14 Lab-Dup	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	4961383	<0.00010		0.00010	4961383
Dissolved Calcium (Ca)	mg/L	27	4961383	36		0.20	4961383
Dissolved Chromium (Cr)	mg/L	<0.0050	4961383	<0.0050		0.0050	4961383
Dissolved Cobalt (Co)	mg/L	<0.00050	4961383	<0.00050		0.00050	4961383
Dissolved Copper (Cu)	mg/L	<0.0010	4961383	<0.0010		0.0010	4961383
Dissolved Iron (Fe)	mg/L	0.16	4961383	<0.10		0.10	4961383
Dissolved Lead (Pb)	mg/L	<0.00050	4961383	<0.00050		0.00050	4961383
Dissolved Magnesium (Mg)	mg/L	32	4961383	34		0.050	4961383
Dissolved Manganese (Mn)	mg/L	0.0062	4961383	0.013		0.0020	4961383
Dissolved Molybdenum (Mo)	mg/L	0.0019	4961383	0.0037		0.00050	4961383
Dissolved Nickel (Ni)	mg/L	<0.0010	4961383	<0.0010		0.0010	4961383
Dissolved Phosphorus (P)	mg/L	<0.10	4961383	<0.10		0.10	4961383
Dissolved Potassium (K)	mg/L	2.6	4961383	3.3		0.20	4961383
Dissolved Selenium (Se)	mg/L	<0.0020	4961383	<0.0020		0.0020	4961383
Dissolved Silicon (Si)	mg/L	11	4961383	9.0		0.050	4961383
Dissolved Silver (Ag)	mg/L	<0.00010	4961383	<0.00010		0.00010	4961383
Dissolved Sodium (Na)	mg/L	12	4961383	11		0.10	4961383
Dissolved Strontium (Sr)	mg/L	0.57	4961383	0.56		0.0010	4961383
Dissolved Thallium (Tl)	mg/L	<0.000050	4961383	<0.000050		0.000050	4961383
Dissolved Titanium (Ti)	mg/L	<0.0050	4961383	<0.0050		0.0050	4961383
Dissolved Uranium (U)	mg/L	<0.00010	4961383	0.0014		0.00010	4961383
Dissolved Vanadium (V)	mg/L	<0.00050	4961383	<0.00050		0.00050	4961383
Dissolved Zinc (Zn)	mg/L	<0.0050	4961383	<0.0050		0.0050	4961383
Dissolved Zirconium (Zr)	mg/L	<0.0010	4961383	<0.0010		0.0010	4961383

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF908		EHF910		
Sampling Date		2017/04/26 12:10		2017/04/27 12:34		
COC Number		540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170426-RD-15	QC Batch	WG-160900764- 20170427-KR-16	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	5.45	4959642	4.29	N/A	4959642
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	170	4959637	180	1.0	4959637
Calculated TDS	mg/L	300	4959645	200	1.0	4959645
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	4959637	5.6	1.0	4959637
Cation Sum	me/L	5.43	4959642	2.53	N/A	4959642
Hardness (CaCO3)	mg/L	250	4959639	23	1.0	4959639
Ion Balance (% Difference)	%	0.180	4959640	25.8	N/A	4959640
Langelier Index (@ 20C)	N/A	0.459	4959643	0.117		4959643
Langelier Index (@ 4C)	N/A	0.211	4959644	-0.133		4959644
Saturation pH (@ 20C)	N/A	7.53	4959643	8.41		4959643
Saturation pH (@ 4C)	N/A	7.78	4959644	8.66		4959644
Inorganics						
Total Ammonia-N	mg/L	<0.050	4964260	<0.050	0.050	4964260
Conductivity	umho/cm	540	4961853	250	1.0	4961853
Dissolved Organic Carbon	mg/L	0.81	4962779	1.2	0.20	4966174
Orthophosphate (P)	mg/L	0.011	4961579	0.011	0.010	4961579
pH	pH	7.99	4961857	8.53		4961857
Dissolved Sulphate (SO4)	mg/L	52	4961576	25	1.0	4969515
Alkalinity (Total as CaCO3)	mg/L	180	4961851	180	1.0	4970385
Dissolved Chloride (Cl)	mg/L	29	4961571	2.1	1.0	4969514
Nitrite (N)	mg/L	<0.010	4961537	<0.010	0.010	4961537
Nitrate (N)	mg/L	0.48	4961537	<0.10	0.10	4961537
Nitrate + Nitrite (N)	mg/L	0.48	4961537	<0.10	0.10	4961537
Metals						
Dissolved Aluminum (Al)	mg/L	0.015	4961383	0.028	0.0050	4961383
Dissolved Antimony (Sb)	mg/L	<0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Arsenic (As)	mg/L	<0.0010	4961383	0.0016	0.0010	4961383
Dissolved Barium (Ba)	mg/L	0.094	4961383	0.0057	0.0020	4961383
Dissolved Beryllium (Be)	mg/L	<0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Boron (B)	mg/L	0.015	4961383	0.22	0.010	4961383
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		EHF908		EHF910		
Sampling Date		2017/04/26 12:10		2017/04/27 12:34		
COC Number		540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170426-RD-15	QC Batch	WG-160900764- 20170427-KR-16	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	4961383	<0.00010	0.00010	4961383
Dissolved Calcium (Ca)	mg/L	45	4961383	5.4	0.20	4961383
Dissolved Chromium (Cr)	mg/L	<0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Cobalt (Co)	mg/L	<0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Copper (Cu)	mg/L	<0.0010	4961383	<0.0010	0.0010	4961383
Dissolved Iron (Fe)	mg/L	<0.10	4961383	<0.10	0.10	4961383
Dissolved Lead (Pb)	mg/L	<0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Magnesium (Mg)	mg/L	33	4961383	2.2	0.050	4961383
Dissolved Manganese (Mn)	mg/L	0.013	4961383	0.0024	0.0020	4961383
Dissolved Molybdenum (Mo)	mg/L	0.0022	4961383	0.0051	0.00050	4961383
Dissolved Nickel (Ni)	mg/L	<0.0010	4961383	<0.0010	0.0010	4961383
Dissolved Phosphorus (P)	mg/L	<0.10	4961383	<0.10	0.10	4961383
Dissolved Potassium (K)	mg/L	2.7	4961383	0.49	0.20	4961383
Dissolved Selenium (Se)	mg/L	<0.0020	4961383	<0.0020	0.0020	4961383
Dissolved Silicon (Si)	mg/L	9.7	4961383	3.4	0.050	4961383
Dissolved Silver (Ag)	mg/L	<0.00010	4961383	<0.00010	0.00010	4961383
Dissolved Sodium (Na)	mg/L	9.6	4961383	47	0.10	4961383
Dissolved Strontium (Sr)	mg/L	0.40	4961383	0.11	0.0010	4961383
Dissolved Thallium (Tl)	mg/L	<0.000050	4961383	<0.000050	0.000050	4961383
Dissolved Titanium (Ti)	mg/L	<0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Uranium (U)	mg/L	0.0012	4961383	0.00044	0.00010	4961383
Dissolved Vanadium (V)	mg/L	<0.00050	4961383	<0.00050	0.00050	4961383
Dissolved Zinc (Zn)	mg/L	<0.0050	4961383	<0.0050	0.0050	4961383
Dissolved Zirconium (Zr)	mg/L	<0.0010	4961383	<0.0010	0.0010	4961383
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RESULTS OF ANALYSES OF WATER

Maxxam ID		EHF900	EHF900		EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:34		2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-12 Lab-Dup	QC Batch	WG-160900764- 20170426-RD-11	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	18		4962828	<10	10	4962828
Total Dissolved Solids	mg/L	468	466	4964039	260	10	4964039
Fluoride (F-)	mg/L	0.11		4961850	0.27	0.10	4961850
Free Cyanide	ug/L	<1		4961997	<1	1	4961997
Total Organic Carbon (TOC)	mg/L	1.0		4964270	0.50	0.20	4964386
Total Suspended Solids	mg/L	<10		4964038	<10	10	4964038
Turbidity	NTU	1.3		4961123	1.9	0.1	4961123
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EHF904		EHF906		EHF908		
Sampling Date		2017/04/26 09:42		2017/04/26 12:15		2017/04/26 12:10		
COC Number		540868-18-01		540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	QC Batch	WG-160900764- 20170426-KR-14	QC Batch	WG-160900764- 20170426-RD-15	RDL	QC Batch

Inorganics								
Acidity as CaCO3	mg/L	<10	4962828	10	4962828	10	10	4962828
Total Dissolved Solids	mg/L	252	4964039	290	4964039	334	10	4964039
Fluoride (F-)	mg/L	0.27	4961850	0.27	4961850	0.19	0.10	4961850
Free Cyanide	ug/L	<1	4961997	<1	4961997	<1	1	4961997
Total Organic Carbon (TOC)	mg/L	0.52	4964386	1.1	4964270	0.66	0.20	4964386
Total Suspended Solids	mg/L	<10	4964038	10	4964038	<10	10	4964038
Turbidity	NTU	2.2	4961123	3.2	4961123	0.4	0.1	4961123
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								

RESULTS OF ANALYSES OF WATER

Maxxam ID		EHF910	EHF910		
Sampling Date		2017/04/27 12:34	2017/04/27 12:34		
COC Number		540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16	WG-160900764- 20170427-KR-16 Lab-Dup	RDL	QC Batch
Inorganics					
Acidity as CaCO3	mg/L	ND	<10	10	4962828
Total Dissolved Solids	mg/L	264		10	4964039
Fluoride (F-)	mg/L	1.3		0.10	4961850
Free Cyanide	ug/L	<1		1	4961997
Total Organic Carbon (TOC)	mg/L	2.9		0.20	4964386
Total Suspended Solids	mg/L	74		10	4964038
Turbidity	NTU	260		0.1	4961123
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate ND = Not detected					

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EHF900	EHF900		EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:34		2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-12 Lab-Dup	QC Batch	WG-160900764- 20170426-RD-11	RDL	QC Batch
Metals							
Chromium (VI)	ug/L	0.69	0.70	4964326	<0.50	0.50	4964326
Mercury (Hg)	ug/L	<0.1		4963880	<0.1	0.1	4964149
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EHF904	EHF906	EHF908	EHF910		
Sampling Date		2017/04/26 09:42	2017/04/26 12:15	2017/04/26 12:10	2017/04/27 12:34		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-14	WG-160900764- 20170426-RD-15	WG-160900764- 20170427-KR-16	RDL	QC Batch
Metals							
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4964326
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4964149
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		EHF910		
Sampling Date		2017/04/27 12:34		
COC Number		540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16 Lab-Dup	RDL	QC Batch
Metals				
Mercury (Hg)	ug/L	<0.1	0.1	4964149
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate				

O.REG 153 PCBs (WATER)

Maxxam ID		EHF900	EHF902	EHF904	EHF906		
Sampling Date		2017/04/26 09:34	2017/04/26 09:42	2017/04/26 09:42	2017/04/26 12:15		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-11	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-14	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4963303
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4963303
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4963303
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4963303
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4963303

Surrogate Recovery (%)							
Decachlorobiphenyl	%	84	84	84	82		4963303

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		EHF908	EHF910		
Sampling Date		2017/04/26 12:10	2017/04/27 12:34		
COC Number		540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-15	WG-160900764- 20170427-KR-16	RDL	QC Batch

PCBs					
Aroclor 1242	ug/L	<0.05	<0.05	0.05	4963303
Aroclor 1248	ug/L	<0.05	<0.05	0.05	4963303
Aroclor 1254	ug/L	<0.05	<0.05	0.05	4963303
Aroclor 1260	ug/L	<0.05	<0.05	0.05	4963303
Total PCB	ug/L	<0.05	<0.05	0.05	4963303

Surrogate Recovery (%)					
Decachlorobiphenyl	%	85	85		4963303

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF900	EHF902	EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:42	2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-11	WG-160900764- 20170426-RD-11 Lab-Dup	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	4959740
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10		10	4961395
Benzene	ug/L	<0.20	<0.20		0.20	4961395
Bromodichloromethane	ug/L	<0.50	<0.50		0.50	4961395
Bromoform	ug/L	<1.0	<1.0		1.0	4961395
Bromomethane	ug/L	<0.50	<0.50		0.50	4961395
Carbon Tetrachloride	ug/L	<0.20	<0.20		0.20	4961395
Chlorobenzene	ug/L	<0.20	<0.20		0.20	4961395
Chloroform	ug/L	<0.20	<0.20		0.20	4961395
Dibromochloromethane	ug/L	<0.50	<0.50		0.50	4961395
1,2-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4961395
1,3-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4961395
1,4-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4961395
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0		1.0	4961395
1,1-Dichloroethane	ug/L	<0.20	<0.20		0.20	4961395
1,2-Dichloroethane	ug/L	<0.50	<0.50		0.50	4961395
1,1-Dichloroethylene	ug/L	<0.20	<0.20		0.20	4961395
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4961395
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4961395
1,2-Dichloropropane	ug/L	<0.20	<0.20		0.20	4961395
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30		0.30	4961395
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40		0.40	4961395
Ethylbenzene	ug/L	<0.20	<0.20		0.20	4961395
Ethylene Dibromide	ug/L	<0.20	<0.20		0.20	4961395
Hexane	ug/L	<1.0	<1.0		1.0	4961395
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0		2.0	4961395
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10		10	4961395
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0		5.0	4961395
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50		0.50	4961395

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF900	EHF902	EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:42	2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-11	WG-160900764- 20170426-RD-11 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50		0.50	4961395
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4961395
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4961395
Tetrachloroethylene	ug/L	<0.20	<0.20		0.20	4961395
Toluene	ug/L	<0.20	<0.20		0.20	4961395
1,1,1-Trichloroethane	ug/L	<0.20	<0.20		0.20	4961395
1,1,2-Trichloroethane	ug/L	<0.50	<0.50		0.50	4961395
Trichloroethylene	ug/L	<0.20	<0.20		0.20	4961395
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50		0.50	4961395
Vinyl Chloride	ug/L	<0.20	<0.20		0.20	4961395
p+m-Xylene	ug/L	<0.20	<0.20		0.20	4961395
o-Xylene	ug/L	<0.20	<0.20		0.20	4961395
Total Xylenes	ug/L	<0.20	<0.20		0.20	4961395
F1 (C6-C10)	ug/L	<25	<25		25	4961395
F1 (C6-C10) - BTEX	ug/L	<25	<25		25	4961395
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4964624
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4964624
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4964624
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4964624
Surrogate Recovery (%)						
o-Terphenyl	%	102	100	102		4964624
4-Bromofluorobenzene	%	90	90			4961395
D4-1,2-Dichloroethane	%	109	109			4961395
D8-Toluene	%	95	95			4961395
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF904	EHF906	EHF908		
Sampling Date		2017/04/26 09:42	2017/04/26 12:15	2017/04/26 12:10		
COC Number		540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-14	WG-160900764- 20170426-RD-15	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4959740
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4961395
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4961395
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4961395
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4961395
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4961395
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4961395
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4961395
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4961395
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4961395
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4961395
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4961395
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4961395

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF904	EHF906	EHF908		
Sampling Date		2017/04/26 09:42	2017/04/26 12:15	2017/04/26 12:10		
COC Number		540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-14	WG-160900764- 20170426-RD-15	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4961395
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4961395
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4961395
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4961395
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4961395
F1 (C6-C10)	ug/L	<25	<25	<25	25	4961395
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4961395
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4964624
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4964624
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4964624
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4964624
Surrogate Recovery (%)						
o-Terphenyl	%	103	101	100		4964624
4-Bromofluorobenzene	%	90	90	88		4961395
D4-1,2-Dichloroethane	%	109	109	110		4961395
D8-Toluene	%	95	95	94		4961395
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF910		
Sampling Date		2017/04/27 12:34		
COC Number		540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	4959740
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	4961395
Benzene	ug/L	<0.20	0.20	4961395
Bromodichloromethane	ug/L	<0.50	0.50	4961395
Bromoform	ug/L	<1.0	1.0	4961395
Bromomethane	ug/L	<0.50	0.50	4961395
Carbon Tetrachloride	ug/L	<0.20	0.20	4961395
Chlorobenzene	ug/L	<0.20	0.20	4961395
Chloroform	ug/L	<0.20	0.20	4961395
Dibromochloromethane	ug/L	<0.50	0.50	4961395
1,2-Dichlorobenzene	ug/L	<0.50	0.50	4961395
1,3-Dichlorobenzene	ug/L	<0.50	0.50	4961395
1,4-Dichlorobenzene	ug/L	<0.50	0.50	4961395
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	4961395
1,1-Dichloroethane	ug/L	<0.20	0.20	4961395
1,2-Dichloroethane	ug/L	<0.50	0.50	4961395
1,1-Dichloroethylene	ug/L	<0.20	0.20	4961395
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	4961395
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	4961395
1,2-Dichloropropane	ug/L	<0.20	0.20	4961395
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	4961395
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	4961395
Ethylbenzene	ug/L	<0.20	0.20	4961395
Ethylene Dibromide	ug/L	<0.20	0.20	4961395
Hexane	ug/L	<1.0	1.0	4961395
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	4961395
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	4961395
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	4961395
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	4961395
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EHF910		
Sampling Date		2017/04/27 12:34		
COC Number		540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16	RDL	QC Batch
Styrene	ug/L	<0.50	0.50	4961395
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	4961395
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	4961395
Tetrachloroethylene	ug/L	<0.20	0.20	4961395
Toluene	ug/L	<0.20	0.20	4961395
1,1,1-Trichloroethane	ug/L	<0.20	0.20	4961395
1,1,2-Trichloroethane	ug/L	<0.50	0.50	4961395
Trichloroethylene	ug/L	<0.20	0.20	4961395
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	4961395
Vinyl Chloride	ug/L	<0.20	0.20	4961395
p+m-Xylene	ug/L	<0.20	0.20	4961395
o-Xylene	ug/L	<0.20	0.20	4961395
Total Xylenes	ug/L	<0.20	0.20	4961395
F1 (C6-C10)	ug/L	<25	25	4961395
F1 (C6-C10) - BTEX	ug/L	<25	25	4961395
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	4964624
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	4964624
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	4964624
Reached Baseline at C50	ug/L	Yes		4964624
Surrogate Recovery (%)				
o-Terphenyl	%	102		4964624
4-Bromofluorobenzene	%	89		4961395
D4-1,2-Dichloroethane	%	110		4961395
D8-Toluene	%	95		4961395
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF900	EHF901	EHF902	EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:34	2017/04/26 09:42	2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-12A	WG-160900764- 20170426-RD-11	WG-160900764- 20170426-RD-11 Lab-Dup	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966787
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966787
Benzo(b,j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	4966787
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF900	EHF901	EHF902	EHF902		
Sampling Date		2017/04/26 09:34	2017/04/26 09:34	2017/04/26 09:42	2017/04/26 09:42		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-12	WG-160900764- 20170426-RD-12A	WG-160900764- 20170426-RD-11	WG-160900764- 20170426-RD-11 Lab-Dup	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966787
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28		0.28	4959873
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	45 (1)	52	8.8 (1)	44 (1)		4966787
2-Fluorobiphenyl	%	68	67	63	66		4966787
D14-Terphenyl (FS)	%	102	9.4 (1)	103	102		4966787
D5-Nitrobenzene	%	98	85	90	92		4966787
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF903	EHF904	EHF905	EHF906		
Sampling Date		2017/04/26 09:42	2017/04/26 09:42	2017/04/26 09:42	2017/04/26 12:15		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-11A	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-13A	WG-160900764- 20170426-KR-14	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966787
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966787
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	4966787
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF903	EHF904	EHF905	EHF906		
Sampling Date		2017/04/26 09:42	2017/04/26 09:42	2017/04/26 09:42	2017/04/26 12:15		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-RD-11A	WG-160900764- 20170426-KR-13	WG-160900764- 20170426-KR-13A	WG-160900764- 20170426-KR-14	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966787
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4959873
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	45 (1)	49 (1)	70	49 (1)		4966787
2-Fluorobiphenyl	%	74	69	75	82		4966787
D14-Terphenyl (FS)	%	12 (1)	103	9.1 (1)	104		4966787
D5-Nitrobenzene	%	95	93	95	96		4966787
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF907	EHF908	EHF909	EHF910		
Sampling Date		2017/04/26 12:15	2017/04/26 12:10	2017/04/26 12:10	2017/04/27 12:34		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-14A	WG-160900764- 20170426-RD-15	WG-160900764- 20170426-RD-15A	WG-160900764- 20170427-KR-16	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966787
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966787
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966787
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	4966787
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF907	EHF908	EHF909	EHF910		
Sampling Date		2017/04/26 12:15	2017/04/26 12:10	2017/04/26 12:10	2017/04/27 12:34		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		
	UNITS	WG-160900764- 20170426-KR-14A	WG-160900764- 20170426-RD-15	WG-160900764- 20170426-RD-15A	WG-160900764- 20170427-KR-16	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966787
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966787
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966787
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966787
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966787
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4959873
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	45 (1)	33 (1)	38 (1)	7.0 (1)		4966787
2-Fluorobiphenyl	%	68	63	67	71		4966787
D14-Terphenyl (FS)	%	9.8 (1)	100	8.9 (1)	103		4966787
D5-Nitrobenzene	%	88	86	86	104		4966787
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF911	EHF912	EHF913	EHG389		EHG390		
Sampling Date		2017/04/27 12:34	2017/04/27	2017/04/27 09:30	2017/04/27		2017/04/27		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16A	TRIP BLANK	FIELD BLANK	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch

Semivolatile Organics									
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	66	1	4966787
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	63	1	4966787
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	96	1	4966787
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	91	1	4966787
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	74	1	4966787
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	26 (1)	1	4966787
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	100	1	4966787
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	110	1	4966787
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	99	1	4966787
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	64	1	4966787
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	60	1	4966787
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	100	1	4966787
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	79	1	4966787
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	79	1	4966787
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	42 (1)	1	4966787
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	22 (1)	1	4966787
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	14 (1)	1	4966787
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	19 (1)	1	4966787
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	8 (1)	1	4966787
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	16 (1)	1	4966787
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	66	1	4966787
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	81	1	4966787
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	72	1	4966787
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	17 (1)	1	4966787
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	17 (1)	1	4966787
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	8 (1)	1	4966787
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	100	1	4966787
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	78	1	4966787
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	51	1	4966787

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EHF911	EHF912	EHF913	EHG389		EHG390		
Sampling Date		2017/04/27 12:34	2017/04/27	2017/04/27 09:30	2017/04/27		2017/04/27		
COC Number		540868-18-01	540868-18-01	540868-18-01	540868-18-01		540868-18-01		
	UNITS	WG-160900764- 20170427-KR-16A	TRIP BLANK	FIELD BLANK	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	73	1	4966787
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	8 (1)	1	4966787
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	69	1	4966787
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	54	1	4966787
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	69	1	4966787
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	65	1	4966787
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	29 (1)	1	4966787
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	55	1	4966787
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28			4959873
Surrogate Recovery (%)									
2,4,6-Tribromophenol	%	21 (2)	19 (2)	49 (2)	40 (2)		94		4966787
2-Fluorobiphenyl	%	57	64	60	76		65		4966787
D14-Terphenyl (FS)	%	10 (2)	104	104	9.1 (2)		31 (2)		4966787
D5-Nitrobenzene	%	93	86	83	96		88		4966787
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. (2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.									

O.REG 153 VOCs BY HS (WATER)

Maxxam ID		EHF912	EHF913		
Sampling Date		2017/04/27	2017/04/27 09:30		
COC Number		540868-18-01	540868-18-01		
	UNITS	TRIP BLANK	FIELD BLANK	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	4959740
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	4961441
Benzene	ug/L	<0.20	<0.20	0.20	4961441
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	4961441
Bromoform	ug/L	<1.0	<1.0	1.0	4961441
Bromomethane	ug/L	<0.50	<0.50	0.50	4961441
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	4961441
Chlorobenzene	ug/L	<0.20	<0.20	0.20	4961441
Chloroform	ug/L	<0.20	<0.20	0.20	4961441
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	4961441
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4961441
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4961441
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4961441
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	4961441
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	4961441
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	4961441
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	4961441
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	4961441
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	4961441
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	4961441
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	4961441
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	4961441
Ethylbenzene	ug/L	<0.20	<0.20	0.20	4961441
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	4961441
Hexane	ug/L	<1.0	<1.0	1.0	4961441
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	4961441
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	4961441
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	4961441
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	4961441
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

O.REG 153 VOCs BY HS (WATER)

Maxxam ID		EHF912	EHF913		
Sampling Date		2017/04/27	2017/04/27 09:30		
COC Number		540868-18-01	540868-18-01		
	UNITS	TRIP BLANK	FIELD BLANK	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	0.50	4961441
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	4961441
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	4961441
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	4961441
Toluene	ug/L	<0.20	<0.20	0.20	4961441
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	4961441
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	4961441
Trichloroethylene	ug/L	<0.20	<0.20	0.20	4961441
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	4961441
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	4961441
p+m-Xylene	ug/L	<0.20	<0.20	0.20	4961441
o-Xylene	ug/L	<0.20	<0.20	0.20	4961441
Total Xylenes	ug/L	<0.20	<0.20	0.20	4961441
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	97	96		4961441
D4-1,2-Dichloroethane	%	100	102		4961441
D8-Toluene	%	99	99		4961441
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

TEST SUMMARY

Maxxam ID: EHF900
Sample ID: WG-160900764-20170426-RD-12
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4961851	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4961571	N/A	2017/05/01	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4962779	N/A	2017/05/01	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4963880	2017/05/02	2017/05/02	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964487	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4961576	N/A	2017/05/01	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4964270	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

Maxxam ID: EHF900 Dup
Sample ID: WG-160900764-20170426-RD-12
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)

TEST SUMMARY

Maxxam ID: EHF901
Sample ID: WG-160900764-20170426-RD-12A
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF902
Sample ID: WG-160900764-20170426-RD-11
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/05	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4961851	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4961571	N/A	2017/05/01	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4962779	N/A	2017/05/01	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964260	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4961576	N/A	2017/05/01	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4964386	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

TEST SUMMARY

Maxxam ID: EHF902 Dup
Sample ID: WG-160900764-20170426-RD-11
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa

Maxxam ID: EHF903
Sample ID: WG-160900764-20170426-RD-11A
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF904
Sample ID: WG-160900764-20170426-KR-13
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4961851	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4961571	N/A	2017/05/01	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4962779	N/A	2017/05/01	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964260	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4961576	N/A	2017/05/01	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)

TEST SUMMARY

Maxxam ID: EHF904
Sample ID: WG-160900764-20170426-KR-13
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Organic Carbon (TOC)	TOCV/NDIR	4964386	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

Maxxam ID: EHF905
Sample ID: WG-160900764-20170426-KR-13A
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF906
Sample ID: WG-160900764-20170426-KR-14
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4961851	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4961571	N/A	2017/05/01	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4962779	N/A	2017/05/01	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964277	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4961576	N/A	2017/05/01	Alina Dobreanu

TEST SUMMARY

Maxxam ID: EHF906
Sample ID: WG-160900764-20170426-KR-14
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4964270	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

Maxxam ID: EHF906 Dup
Sample ID: WG-160900764-20170426-KR-14
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	4964277	N/A	2017/05/03	Charles Opoku-Ware

Maxxam ID: EHF907
Sample ID: WG-160900764-20170426-KR-14A
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF908
Sample ID: WG-160900764-20170426-RD-15
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4961851	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4961571	N/A	2017/05/01	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4962779	N/A	2017/05/01	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk

TEST SUMMARY

Maxxam ID: EHF908
Sample ID: WG-160900764-20170426-RD-15
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964260	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4961576	N/A	2017/05/01	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4964386	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

Maxxam ID: EHF909
Sample ID: WG-160900764-20170426-RD-15A
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF910
Sample ID: WG-160900764-20170427-KR-16
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4970385	N/A	2017/05/05	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4959637	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	4969514	N/A	2017/05/05	Deonarine Ramnarine
Conductivity	AT	4961853	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4964326	N/A	2017/05/02	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961997	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4966174	N/A	2017/05/03	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4964624	2017/05/02	2017/05/03	Dorina Popa
Fluoride	ISE	4961850	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4959639	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison

TEST SUMMARY

Maxxam ID: EHF910
Sample ID: WG-160900764-20170427-KR-16
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	4961383	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4959640	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4959642	N/A	2017/05/01	Automated Statchk
Total Ammonia-N	LACH/NH4	4964260	N/A	2017/05/03	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4961537	N/A	2017/05/01	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4963303	2017/05/01	2017/05/02	Dawn Alarie
pH	AT	4961857	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4961579	N/A	2017/05/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4959643	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4959644	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4969515	N/A	2017/05/05	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4959645	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4964039	2017/05/02	2017/05/02	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4964386	N/A	2017/05/03	Anastasia Hamanov
Total Suspended Solids	BAL	4964038	2017/05/02	2017/05/02	Lu Wang(Alice)
Turbidity	AT	4961123	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4961395	N/A	2017/05/01	Denis Reid

Maxxam ID: EHF910 Dup
Sample ID: WG-160900764-20170427-KR-16
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4962828	N/A	2017/05/08	Grace Sison
Mercury	CV/AA	4964149	2017/05/02	2017/05/03	Ron Morrison

Maxxam ID: EHF911
Sample ID: WG-160900764-20170427-KR-16A
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHF912
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/03	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	4961441	N/A	2017/05/02	Xueming Jiang

TEST SUMMARY

Maxxam ID: EHF913
Sample ID: FIELD BLANK
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/05/03	2017/05/06	Milijana Avramovic
1,3-Dichloropropene Sum	CALC	4959740	N/A	2017/05/03	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	4961441	N/A	2017/05/02	Xueming Jiang

Maxxam ID: EHG389
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4959873	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

Maxxam ID: EHG390
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2017/04/27
Shipped:
Received: 2017/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4966787	2017/04/29	2017/05/06	Milijana Avramovic

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.3°C
Package 2	5.3°C
Package 3	6.0°C
Package 4	1.0°C
Package 5	5.0°C

Sample EHF900 [WG-160900764-20170426-RD-12] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EHF902 [WG-160900764-20170426-RD-11] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EHF904 [WG-160900764-20170426-KR-13] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EHF908 [WG-160900764-20170426-RD-15] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EHF910 [WG-160900764-20170427-KR-16] : Elevated ion balance was confirmed by re-analysis. ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Acidity Test: Sample initial pH was (>8.3), therefore acidity was not detected (ND).

Sample EHG390 [FILTERED SPIKE] : ABN analysis: Data are reported as percentage recoveries.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961395	4-Bromofluorobenzene	2017/05/01	97	70 - 130	96	70 - 130	92	%				
4961395	D4-1,2-Dichloroethane	2017/05/01	102	70 - 130	99	70 - 130	100	%				
4961395	D8-Toluene	2017/05/01	101	70 - 130	102	70 - 130	98	%				
4961441	4-Bromofluorobenzene	2017/05/02	98	70 - 130	99	70 - 130	98	%				
4961441	D4-1,2-Dichloroethane	2017/05/02	99	70 - 130	98	70 - 130	96	%				
4961441	D8-Toluene	2017/05/02	100	70 - 130	100	70 - 130	100	%				
4963303	Decachlorobiphenyl	2017/05/02	93	60 - 130	85	60 - 130	87	%				
4964624	o-Terphenyl	2017/05/03	104	60 - 130	106	60 - 130	103	%				
4966787	2,4,6-Tribromophenol	2017/05/05	96	50 - 130	102	50 - 130	80	%				
4966787	2-Fluorobiphenyl	2017/05/05	68	50 - 130	67	50 - 130	79	%				
4966787	D14-Terphenyl (FS)	2017/05/05	107	50 - 130	116	50 - 130	112	%				
4966787	D5-Nitrobenzene	2017/05/05	94	50 - 130	99	50 - 130	99	%				
4961123	Turbidity	2017/04/29			100	85 - 115	<0.1	NTU	5.5	20		
4961383	Dissolved Aluminum (Al)	2017/05/01	104	80 - 120	100	80 - 120	<0.0050	mg/L				
4961383	Dissolved Antimony (Sb)	2017/05/01	110	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20		
4961383	Dissolved Arsenic (As)	2017/05/01	103	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
4961383	Dissolved Barium (Ba)	2017/05/01	105	80 - 120	101	80 - 120	<0.0020	mg/L	1.9	20		
4961383	Dissolved Beryllium (Be)	2017/05/01	113	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20		
4961383	Dissolved Boron (B)	2017/05/01	111	80 - 120	104	80 - 120	<0.010	mg/L	7.3	20		
4961383	Dissolved Cadmium (Cd)	2017/05/01	106	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
4961383	Dissolved Calcium (Ca)	2017/05/01	NC	80 - 120	93	80 - 120	<0.20	mg/L				
4961383	Dissolved Chromium (Cr)	2017/05/01	106	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
4961383	Dissolved Cobalt (Co)	2017/05/01	102	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
4961383	Dissolved Copper (Cu)	2017/05/01	103	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
4961383	Dissolved Iron (Fe)	2017/05/01	103	80 - 120	100	80 - 120	<0.10	mg/L				
4961383	Dissolved Lead (Pb)	2017/05/01	100	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
4961383	Dissolved Magnesium (Mg)	2017/05/01	104	80 - 120	101	80 - 120	<0.050	mg/L				
4961383	Dissolved Manganese (Mn)	2017/05/01	104	80 - 120	101	80 - 120	<0.0020	mg/L				
4961383	Dissolved Molybdenum (Mo)	2017/05/01	110	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20		
4961383	Dissolved Nickel (Ni)	2017/05/01	98	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
4961383	Dissolved Phosphorus (P)	2017/05/01	116	80 - 120	108	80 - 120	<0.10	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961383	Dissolved Potassium (K)	2017/05/01	107	80 - 120	101	80 - 120	<0.20	mg/L				
4961383	Dissolved Selenium (Se)	2017/05/01	100	80 - 120	96	80 - 120	<0.0020	mg/L	NC	20		
4961383	Dissolved Silicon (Si)	2017/05/01	104	80 - 120	97	80 - 120	<0.050	mg/L				
4961383	Dissolved Silver (Ag)	2017/05/01	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
4961383	Dissolved Sodium (Na)	2017/05/01	NC	80 - 120	101	80 - 120	<0.10	mg/L	0.87	20		
4961383	Dissolved Strontium (Sr)	2017/05/01	NC	80 - 120	98	80 - 120	<0.0010	mg/L				
4961383	Dissolved Thallium (Tl)	2017/05/01	100	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20		
4961383	Dissolved Titanium (Ti)	2017/05/01	106	80 - 120	99	80 - 120	<0.0050	mg/L				
4961383	Dissolved Uranium (U)	2017/05/01	100	80 - 120	97	80 - 120	<0.00010	mg/L	0.11	20		
4961383	Dissolved Vanadium (V)	2017/05/01	105	80 - 120	100	80 - 120	<0.00050	mg/L	3.4	20		
4961383	Dissolved Zinc (Zn)	2017/05/01	103	80 - 120	100	80 - 120	<0.0050	mg/L	11	20		
4961383	Dissolved Zirconium (Zr)	2017/05/01	109	80 - 120	104	80 - 120	<0.0010	mg/L				
4961395	1,1,1,2-Tetrachloroethane	2017/05/01	102	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
4961395	1,1,1-Trichloroethane	2017/05/01	98	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
4961395	1,1,2,2-Tetrachloroethane	2017/05/01	101	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4961395	1,1,2-Trichloroethane	2017/05/01	100	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4961395	1,1-Dichloroethane	2017/05/01	103	70 - 130	107	70 - 130	<0.20	ug/L	NC	30		
4961395	1,1-Dichloroethylene	2017/05/01	107	70 - 130	114	70 - 130	<0.20	ug/L	NC	30		
4961395	1,2-Dichlorobenzene	2017/05/01	97	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4961395	1,2-Dichloroethane	2017/05/01	95	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
4961395	1,2-Dichloropropane	2017/05/01	99	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
4961395	1,3-Dichlorobenzene	2017/05/01	99	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4961395	1,4-Dichlorobenzene	2017/05/01	97	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4961395	Acetone (2-Propanone)	2017/05/01	91	60 - 140	93	60 - 140	<10	ug/L	NC	30		
4961395	Benzene	2017/05/01	100	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
4961395	Bromodichloromethane	2017/05/01	123	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
4961395	Bromoform	2017/05/01	95	70 - 130	97	70 - 130	<1.0	ug/L	NC	30		
4961395	Bromomethane	2017/05/01	102	60 - 140	108	60 - 140	<0.50	ug/L	NC	30		
4961395	Carbon Tetrachloride	2017/05/01	102	70 - 130	107	70 - 130	<0.20	ug/L	NC	30		
4961395	Chlorobenzene	2017/05/01	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4961395	Chloroform	2017/05/01	100	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961395	cis-1,2-Dichloroethylene	2017/05/01	103	70 - 130	107	70 - 130	<0.50	ug/L	NC	30		
4961395	cis-1,3-Dichloropropene	2017/05/01	96	70 - 130	96	70 - 130	<0.30	ug/L	NC	30		
4961395	Dibromochloromethane	2017/05/01	99	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4961395	Dichlorodifluoromethane (FREON 12)	2017/05/01	72	60 - 140	103	60 - 140	<1.0	ug/L	NC	30		
4961395	Ethylbenzene	2017/05/01	95	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4961395	Ethylene Dibromide	2017/05/01	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4961395	F1 (C6-C10) - BTEX	2017/05/01					<25	ug/L	NC	30		
4961395	F1 (C6-C10)	2017/05/01	95	60 - 140	98	60 - 140	<25	ug/L	NC	30		
4961395	Hexane	2017/05/01	103	70 - 130	111	70 - 130	<1.0	ug/L	NC	30		
4961395	Methyl Ethyl Ketone (2-Butanone)	2017/05/01	96	60 - 140	97	60 - 140	<10	ug/L	NC	30		
4961395	Methyl Isobutyl Ketone	2017/05/01	94	70 - 130	96	70 - 130	<5.0	ug/L	NC	30		
4961395	Methyl t-butyl ether (MTBE)	2017/05/01	94	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
4961395	Methylene Chloride(Dichloromethane)	2017/05/01	105	70 - 130	108	70 - 130	<2.0	ug/L	NC	30		
4961395	o-Xylene	2017/05/01	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4961395	p+m-Xylene	2017/05/01	89	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
4961395	Styrene	2017/05/01	92	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4961395	Tetrachloroethylene	2017/05/01	99	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
4961395	Toluene	2017/05/01	96	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4961395	Total Xylenes	2017/05/01					<0.20	ug/L	NC	30		
4961395	trans-1,2-Dichloroethylene	2017/05/01	103	70 - 130	108	70 - 130	<0.50	ug/L	NC	30		
4961395	trans-1,3-Dichloropropene	2017/05/01	99	70 - 130	96	70 - 130	<0.40	ug/L	NC	30		
4961395	Trichloroethylene	2017/05/01	98	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
4961395	Trichlorofluoromethane (FREON 11)	2017/05/01	104	70 - 130	112	70 - 130	<0.50	ug/L	NC	30		
4961395	Vinyl Chloride	2017/05/01	101	70 - 130	113	70 - 130	<0.20	ug/L	NC	30		
4961441	1,1,1,2-Tetrachloroethane	2017/05/02	97	70 - 130	88	70 - 130	<0.50	ug/L	NC	30		
4961441	1,1,1-Trichloroethane	2017/05/02	93	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
4961441	1,1,2,2-Tetrachloroethane	2017/05/02	106	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4961441	1,1,2-Trichloroethane	2017/05/02	105	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
4961441	1,1-Dichloroethane	2017/05/02	98	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
4961441	1,1-Dichloroethylene	2017/05/02	99	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
4961441	1,2-Dichlorobenzene	2017/05/02	102	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961441	1,2-Dichloroethane	2017/05/02	100	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
4961441	1,2-Dichloropropane	2017/05/02	99	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
4961441	1,3-Dichlorobenzene	2017/05/02	98	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
4961441	1,4-Dichlorobenzene	2017/05/02	98	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
4961441	Acetone (2-Propanone)	2017/05/02	104	60 - 140	101	60 - 140	<10	ug/L	NC	30		
4961441	Benzene	2017/05/02	97	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
4961441	Bromodichloromethane	2017/05/02	99	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
4961441	Bromoform	2017/05/02	104	70 - 130	92	70 - 130	<1.0	ug/L	NC	30		
4961441	Bromomethane	2017/05/02	97	60 - 140	86	60 - 140	<0.50	ug/L	NC	30		
4961441	Carbon Tetrachloride	2017/05/02	94	70 - 130	86	70 - 130	<0.20	ug/L	NC	30		
4961441	Chlorobenzene	2017/05/02	104	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4961441	Chloroform	2017/05/02	96	70 - 130	87	70 - 130	<0.20	ug/L	NC	30		
4961441	cis-1,2-Dichloroethylene	2017/05/02	101	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
4961441	cis-1,3-Dichloropropene	2017/05/02	84	70 - 130	75	70 - 130	<0.30	ug/L	NC	30		
4961441	Dibromochloromethane	2017/05/02	103	70 - 130	91	70 - 130	<0.50	ug/L	NC	30		
4961441	Dichlorodifluoromethane (FREON 12)	2017/05/02	84	60 - 140	76	60 - 140	<1.0	ug/L	NC	30		
4961441	Ethylbenzene	2017/05/02	99	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
4961441	Ethylene Dibromide	2017/05/02	102	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
4961441	Hexane	2017/05/02	100	70 - 130	93	70 - 130	<1.0	ug/L	NC	30		
4961441	Methyl Ethyl Ketone (2-Butanone)	2017/05/02	110	60 - 140	104	60 - 140	<10	ug/L	NC	30		
4961441	Methyl Isobutyl Ketone	2017/05/02	107	70 - 130	98	70 - 130	<5.0	ug/L	NC	30		
4961441	Methyl t-butyl ether (MTBE)	2017/05/02	99	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
4961441	Methylene Chloride(Dichloromethane)	2017/05/02	93	70 - 130	83	70 - 130	<2.0	ug/L	NC	30		
4961441	o-Xylene	2017/05/02	97	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
4961441	p+m-Xylene	2017/05/02	95	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
4961441	Styrene	2017/05/02	98	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
4961441	Tetrachloroethylene	2017/05/02	96	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
4961441	Toluene	2017/05/02	94	70 - 130	86	70 - 130	<0.20	ug/L	NC	30		
4961441	Total Xylenes	2017/05/02					<0.20	ug/L	NC	30		
4961441	trans-1,2-Dichloroethylene	2017/05/02	94	70 - 130	86	70 - 130	<0.50	ug/L	NC	30		
4961441	trans-1,3-Dichloropropene	2017/05/02	82	70 - 130	71	70 - 130	<0.40	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961441	Trichloroethylene	2017/05/02	93	70 - 130	86	70 - 130	<0.20	ug/L	NC	30		
4961441	Trichlorofluoromethane (FREON 11)	2017/05/02	101	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
4961441	Vinyl Chloride	2017/05/02	98	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
4961537	Nitrate (N)	2017/05/01	88	80 - 120	94	80 - 120	<0.10	mg/L	0.042	20		
4961537	Nitrite (N)	2017/05/01	96	80 - 120	97	80 - 120	<0.010	mg/L	2.5	20		
4961571	Dissolved Chloride (Cl)	2017/05/01	112	80 - 120	101	80 - 120	<1.0	mg/L	1.5	20		
4961576	Dissolved Sulphate (SO4)	2017/05/01	93	75 - 125	103	80 - 120	<1.0	mg/L	NC	20		
4961579	Orthophosphate (P)	2017/05/01	107	75 - 125	101	80 - 120	<0.010	mg/L	1.5	25		
4961850	Fluoride (F-)	2017/04/30	96	80 - 120	103	80 - 120	<0.10	mg/L	3.3	20		
4961851	Alkalinity (Total as CaCO3)	2017/04/30			96	85 - 115	<1.0	mg/L	0.59	20		
4961853	Conductivity	2017/04/30			102	85 - 115	<1.0	umho/cm	0	25		
4961857	pH	2017/04/30			102	98 - 103			0.22	N/A		
4961997	Free Cyanide	2017/04/30	99	80 - 120	99	80 - 120	<1	ug/L	NC	20		
4962779	Dissolved Organic Carbon	2017/05/01	103	80 - 120	98	80 - 120	<0.20	mg/L	2.3	20		
4962828	Acidity as CaCO3	2017/05/08					<10	mg/L	NC	25		
4963303	Aroclor 1242	2017/05/02					<0.05	ug/L	NC	30		
4963303	Aroclor 1248	2017/05/02					<0.05	ug/L	NC	30		
4963303	Aroclor 1254	2017/05/02					<0.05	ug/L	NC	30		
4963303	Aroclor 1260	2017/05/02	91	60 - 130	78	60 - 130	<0.05	ug/L	NC	30		
4963303	Total PCB	2017/05/02	91	60 - 130	78	60 - 130	<0.05	ug/L	NC	40		
4963880	Mercury (Hg)	2017/05/02	104	75 - 125	103	80 - 120	<0.1	ug/L	NC	20		
4964038	Total Suspended Solids	2017/05/02					<10	mg/L	7.4	25	96	85 - 115
4964039	Total Dissolved Solids	2017/05/02					<10	mg/L	0.43	25	99	90 - 110
4964149	Mercury (Hg)	2017/05/03	105	75 - 125	104	80 - 120	<0.1	ug/L	NC	20		
4964260	Total Ammonia-N	2017/05/03	NC	80 - 120	100	85 - 115	<0.050	mg/L	3.6	20		
4964270	Total Organic Carbon (TOC)	2017/05/03	101	80 - 120	100	80 - 120	<0.20	mg/L	1.8	20		
4964277	Total Ammonia-N	2017/05/03	101	80 - 120	101	85 - 115	<0.050	mg/L	NC	20		
4964326	Chromium (VI)	2017/05/02	103	80 - 120	103	80 - 120	<0.50	ug/L	2.2	20		
4964386	Total Organic Carbon (TOC)	2017/05/03	103	80 - 120	102	80 - 120	<0.20	mg/L	NC	20		
4964487	Total Ammonia-N	2017/05/03	99	80 - 120	100	85 - 115	<0.050	mg/L	2.3	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4964624	F2 (C10-C16 Hydrocarbons)	2017/05/03	100	50 - 130	85	60 - 130	<100	ug/L	NC	30		
4964624	F3 (C16-C34 Hydrocarbons)	2017/05/03	98	50 - 130	101	60 - 130	<200	ug/L	NC	30		
4964624	F4 (C34-C50 Hydrocarbons)	2017/05/03	100	50 - 130	101	60 - 130	<200	ug/L	NC	30		
4966174	Dissolved Organic Carbon	2017/05/03	103	80 - 120	106	80 - 120	0.22, RDL=0.20	mg/L	2.1	20		
4966787	1,2,4-Trichlorobenzene	2017/05/06	63	40 - 130	57	40 - 130	<0.1	ug/L	NC	30		
4966787	1-Methylnaphthalene	2017/05/06	69	50 - 130	69	50 - 130	<0.2	ug/L	NC	30		
4966787	2,4,5-Trichlorophenol	2017/05/06	103	50 - 130	107	50 - 130	<0.2	ug/L	NC	30		
4966787	2,4,6-Trichlorophenol	2017/05/06	98	50 - 130	103	50 - 130	<0.2	ug/L	NC	30		
4966787	2,4-Dichlorophenol	2017/05/06	95	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
4966787	2,4-Dimethylphenol	2017/05/06	29 (1)	30 - 130	38	30 - 130	<0.5	ug/L	NC	30		
4966787	2,4-Dinitrophenol	2017/05/06	126	30 - 130	62	30 - 130	<2	ug/L	NC	30		
4966787	2,4-Dinitrotoluene	2017/05/06	113	50 - 130	120	50 - 130	<0.3	ug/L	NC	30		
4966787	2,6-Dinitrotoluene	2017/05/06	100	50 - 130	101	50 - 130	<0.3	ug/L	NC	30		
4966787	2-Chlorophenol	2017/05/06	73	50 - 130	78	50 - 130	<0.1	ug/L	NC	30		
4966787	2-Methylnaphthalene	2017/05/06	66	50 - 130	66	50 - 130	<0.2	ug/L	NC	30		
4966787	3,3'-Dichlorobenzidine	2017/05/06	102	30 - 130	127	30 - 130	<0.5	ug/L	NC	30		
4966787	Acenaphthene	2017/05/06	86	50 - 130	90	50 - 130	<0.2	ug/L	NC	30		
4966787	Acenaphthylene	2017/05/06	85	50 - 130	88	50 - 130	<0.2	ug/L	NC	30		
4966787	Anthracene	2017/05/06	88	50 - 130	94	50 - 130	<0.05	ug/L	NC	30		
4966787	Benzo(a)anthracene	2017/05/06	115	50 - 130	126	50 - 130	<0.05	ug/L	NC	30		
4966787	Benzo(a)pyrene	2017/05/06	99	50 - 130	106	50 - 130	<0.01	ug/L	NC	30		
4966787	Benzo(b/j)fluoranthene	2017/05/06	125	50 - 130	125	50 - 130	<0.05	ug/L	NC	30		
4966787	Benzo(g,h,i)perylene	2017/05/06	95	50 - 130	128	50 - 130	<0.05	ug/L	NC	30		
4966787	Benzo(k)fluoranthene	2017/05/06	124	50 - 130	129	50 - 130	<0.05	ug/L	NC	30		
4966787	Biphenyl	2017/05/06	74	50 - 130	77	50 - 130	<0.1	ug/L	NC	30		
4966787	Bis(2-chloroethyl)ether	2017/05/06	86	50 - 130	91	50 - 130	<0.5	ug/L	NC	30		
4966787	Bis(2-chloroisopropyl)ether	2017/05/06	77	50 - 130	82	50 - 130	<0.5	ug/L	NC	30		
4966787	Bis(2-ethylhexyl)phthalate	2017/05/06	113	50 - 130	125	50 - 130	<1	ug/L	NC	30		
4966787	Chrysene	2017/05/06	108	50 - 130	119	50 - 130	<0.05	ug/L	NC	30		
4966787	Dibenz(a,h)anthracene	2017/05/06	95	50 - 130	126	50 - 130	<0.1	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4966787	Diethyl phthalate	2017/05/06	108	50 - 130	115	50 - 130	<0.1	ug/L	NC	30		
4966787	Dimethyl phthalate	2017/05/06	92	50 - 130	98	50 - 130	<0.1	ug/L	NC	30		
4966787	Fluoranthene	2017/05/06	104	50 - 130	113	50 - 130	<0.2	ug/L	NC	30		
4966787	Fluorene	2017/05/06	86	50 - 130	90	50 - 130	<0.2	ug/L	NC	30		
4966787	Indeno(1,2,3-cd)pyrene	2017/05/06	98	50 - 130	129	50 - 130	<0.1	ug/L	NC	30		
4966787	Naphthalene	2017/05/06	71	50 - 130	73	50 - 130	<0.2	ug/L	NC	30		
4966787	p-Chloroaniline	2017/05/06	65	30 - 130	93	30 - 130	<1	ug/L	NC	30		
4966787	Pentachlorophenol	2017/05/06	71	50 - 130	63	50 - 130	<0.1	ug/L	NC	30		
4966787	Phenanthrene	2017/05/06	89	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
4966787	Phenol	2017/05/06	34	30 - 130	35	30 - 130	<0.5	ug/L	NC	30		
4966787	Pyrene	2017/05/06	125	50 - 130	129	50 - 130	<0.05	ug/L	NC	30		
4969514	Dissolved Chloride (Cl)	2017/05/05	NC	80 - 120	103	80 - 120	<1.0	mg/L	2.5	20		
4969515	Dissolved Sulphate (SO4)	2017/05/05	NC	75 - 125	100	80 - 120	<1.0	mg/L	0.79	20		
4970385	Alkalinity (Total as CaCO3)	2017/05/05			95	85 - 115	<1.0	mg/L	1.4	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).




Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist




Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page 1 of 2	C# 540868-18-d
Page 2 of 2	C# 607199-02-01
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COOLER OBSERVATIONS:				MAXXAM JOB#: B785281			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP 7 6 6	INTACT			TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>			ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP 5 6 5	INTACT			TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>			ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP 6 6 6	INTACT			TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>			ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP 0 2 1	INTACT			TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>			ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP 7 5 3	INTACT			TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>			ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP	INTACT			TEMP
ICE PRESENT				ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP	INTACT			TEMP
ICE PRESENT				ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT				PRESENT			
INTACT			TEMP	INTACT			TEMP
ICE PRESENT				ICE PRESENT			

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>Ryan</i> KLARLEESMAN	2011/04/27	15:12



Maxxam Analytics International Corporation o/a Maxxam Analytics
 6740-Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

INVOICE TO:

Company Name: #2301 Dillon Consulting Limited
 Attention: Cole Martin
 Address: 235 Yorkland Blvd Suite 200
 Toronto, ON M2L 4Y8
 Tel: (416) 223-2246 Fax: (416) 223-4602
 Email: cole.martin@dillon.ca

REPORT TO:

Company Name: #18379 Stantec
 Attention: Rupert Kopsch
 Address: ON
 Tel: brant.gill@stantec.com
 Email: carla.walker@stantec.com

PROJECT INFORMATION:

Quotation #: B48218
 P.O. #: Hamilton Solar 16090714
 Project: Hamilton Solar
 Project Name: Clarington B- Monitoring
 Site #: Clarington B- Monitoring
 Sampled By: [Signature]

Laboratory Use Only:

Maxxam Job #: [Blank]
 Bottle Order #: 540868
 COC #: [Blank]
 Project Manager: Sara Singh
 Turnaround Time (TAT) Required: [Blank]
 Please provide advance notice for rush projects

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)		Other Regulations		Special Instructions
<input checked="" type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw	
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> MISA	Municipality	
<input type="checkbox"/> Table	<input type="checkbox"/> For RSC	<input type="checkbox"/> PWQC		
		<input type="checkbox"/> Other		

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle): Metals (Cr, W)
 Turbidity
 Chloride
 SR (U) + Free CN
 Fluoride + Turbidity
 Hg + TDC
 TDS + TSS
 Lead (Lead)
 Reg 153 PCBs
 Reg 153 VOCs FI-F4
 SVOC
 Lab filtered study

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified):
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
 Date Required: _____ Time Required: _____
 Rush Confirmation Number: _____ (call lab for #)

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle)	Turbidity	Chloride	SR (U) + Free CN	Fluoride + Turbidity	Hg + TDC	TDS + TSS	Lead (Lead)	Reg 153 PCBs	Reg 153 VOCs FI-F4	SVOC	Lab filtered study	# of Bottles	Comments
	WR-16090714-20170426-RP-12	Apr 18/17	9:34	GW	Y	X	X	X	X	X	X	X	X	X	X	X	18	Analysis as per quote B48218 Monitoring wells.
	RD-12A		9:34													X	2	
	RD-11		9:42		Y	X	X	X	X	X	X	X	X	X	X	X	18	
	RD-11A		9:42													X	2	
	KR-13		9:42		Y	X	X	X	X	X	X	X	X	X	X	X	18	
	KR-13A		9:42													X	2	
	KR-14		12:15		Y	X	X	X	X	X	X	X	X	X	X	X	18	
	KR-14A		12:15													X	2	
	RD-15		12:10		Y	X	X	X	X	X	X	X	X	X	X	X	18	
	RD-15A		12:10													X	2	

RELINQUISHED BY: (Signature/Print) [Signature] Date: (YY/MM/DD) 17/04/17 Time: 07:12

RECEIVED BY: (Signature/Print) [Signature] Date: (YY/MM/DD) 20/04/17 Time: 15:12

Jars used and not submitted: [Blank]

Laboratory Use Only

Time Sensitive: [Blank] Temperature (°C) on Receipt: Refer to ACT
 Custody Seal: Present [Blank] Intact [Blank]
 Yes [Blank] No [Checked]

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM. White: Maxxam Yellow: Client



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STANTEC CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #9197 Stantec Consulting Ltd	Contact Name: Accounts Payable	Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com	Company Name: #18379 Stantec Consulting Ltd	Contact Name: Report - 1609-00764	Address: ON	Phone: Fax: Email: aaron.warkentin@stantec.com, brant.gill@stantec.com
Quotation #: B48218	Task #: 160900764	Project #: 1609	Profit Centre: Clarington TS -Monitoring Well	Site #: [Signature]	Sampled By: [Signature]	Maxxam Job #: [Barcode]	Bottle Order #: 507199
COC #: [Barcode]						Project Manager: Deepthi Shaj	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY				ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required				
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle)	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCCP - Comprehensive Field Filter	Reg 153 PCBs	Reg 153 VOCs & F1 F4	SVOCS	Lab Filtered SVOCS	# of Bottles	Comments
<input checked="" type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw												18		
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 538	<input type="checkbox"/> Storm Sewer Bylaw												2		
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality														
<input type="checkbox"/> Table			<input type="checkbox"/> PWQO															
<input type="checkbox"/> Other			<input type="checkbox"/> Other															
Include Criteria on Certificate of Analysis (Y/N)?																		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCCP - Comprehensive Field Filter	Reg 153 PCBs	Reg 153 VOCs & F1 F4	SVOCS	Lab Filtered SVOCS	# of Bottles	Comments	
1	WG-160900764-20170427-KR-16	Apr. 12/17	12:34	GW	Y	X	X	X	X	X	X	X	X	X	X	18		
2	WG-160900764-20170427-KR-16A	↓	12:34	GW	-										X	2		
3	WG-160900764-20170427			GW														
4	WG-160900764-20170427			GW														
5	WG-160900764-20170427			GW														
6	WG-160900764-20170427			GW														
7	TRIP BLANK	-	-	-	-							X	X			3	* Analysis for BTEX, VOC + SVOCS	
8	Field Blank	Apr 12/17	9:30	-	-							X	X			5	" " " " "	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only						
[Signature]	17/04/17	15:12	[Signature]	17/04/17	15:12		Time Sensitive	Temperature (°C) on Receipt	Custody Seal Present	Yes	No		
								Defective	Intact				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

White: Maxxa Yellow: Client

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 607238-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/02
 Report #: R4445878
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B781996

Received: 2017/04/25, 08:30

Sample Matrix: Water
 # Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	9	N/A	2017/05/01	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	1	2017/04/27	2017/04/29	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	2	2017/04/29	2017/04/29	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	6	2017/04/29	2017/04/30	CAM SOP-00301	EPA 8270 m
Acidity as CaCO3 in liquid (1, 2)	9	N/A	2017/04/30	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	9	N/A	2017/04/27	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2017/04/28	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	9	N/A	2017/05/01		EPA 8260C m
Chloride by Automated Colourimetry	9	N/A	2017/04/28	CAM SOP-00463	EPA 325.2 m
Conductivity	9	N/A	2017/04/27	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	9	N/A	2017/04/27	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	9	N/A	2017/04/29	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (3)	4	N/A	2017/04/27	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	5	N/A	2017/04/29	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (4)	9	2017/04/29	2017/04/30	CAM SOP-00316	CCME PHC-CWS m
Fluoride	9	2017/04/26	2017/04/27	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2017/04/29	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	5	N/A	2017/05/01	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	5	2017/04/28	2017/05/01	CAM SOP-00453	EPA 7470A m
Mercury	4	2017/04/29	2017/05/01	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (5)	4	2017/04/27	2017/04/28	CAM SOP-00447	EPA 6020B m
Metals Analysis by ICPMS (as received) (5)	5	2017/04/27	2017/04/30	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	4	N/A	2017/04/29		
Ion Balance (% Difference)	5	N/A	2017/05/01		
Anion and Cation Sum	4	N/A	2017/04/29		
Anion and Cation Sum	5	N/A	2017/05/01		
Total Coliforms/ E. coli, CFU/100mL	9	N/A	2017/04/25	CAM SOP-00551	MOE E3407
Total Ammonia-N	9	N/A	2017/04/29	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (6)	9	N/A	2017/04/27	CAM SOP-00440	SM 22 4500-NO3I/NO2B

Your Project #: 160900764
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 Your C.O.C. #: 607238-01-01

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Report Date: 2017/05/02
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B781996

Received: 2017/04/25, 08:30

Sample Matrix: Water
 # Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Polychlorinated Biphenyl in Water	9	2017/04/27	2017/04/27	CAM SOP-00309	EPA 8082A m
pH	9	N/A	2017/04/27	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	9	N/A	2017/04/28	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	4	N/A	2017/04/29		
Sat. pH and Langelier Index (@ 20C)	5	N/A	2017/05/01		
Sat. pH and Langelier Index (@ 4C)	4	N/A	2017/04/29		
Sat. pH and Langelier Index (@ 4C)	5	N/A	2017/05/01		
Sulphate by Automated Colourimetry	9	N/A	2017/04/28	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	4	N/A	2017/04/29		
Total Dissolved Solids (TDS calc)	5	N/A	2017/05/01		
Total Dissolved Solids	9	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (7)	9	N/A	2017/04/28	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	4	2017/04/27	2017/04/27	CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	5	2017/04/27	2017/05/05	CAM SOP-00428	SM 22 2540D m
Turbidity	9	N/A	2017/04/27	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	9	N/A	2017/04/29	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your C.O.C. #: 607238-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/05/02
Report #: R4445878
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B781996

Received: 2017/04/25, 08:30

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) Metals analysis was performed on the sample 'as received'.
- (6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (7) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Deepthi Shaji, Project Manager

Email: dshaji@maxxam.ca

Phone# (905)817-5700 Ext:5807

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP443			EGP444		
Sampling Date		2017/04/24 10:25			2017/04/24 11:03		
COC Number		607238-01-01			607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	RDL	QC Batch	WG-160900764- 20170424-JK2	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	12.2	N/A	4954638	12.5	N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	350	1.0	4953527	340	1.0	4953527
Calculated TDS	mg/L	680	1.0	4954642	680	1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	4953527	2.1	1.0	4953527
Cation Sum	me/L	12.1	N/A	4954638	12.5	N/A	4954638
Hardness (CaCO3)	mg/L	460	1.0	4954441	450	1.0	4954441
Ion Balance (% Difference)	%	0.480	N/A	4954053	0.160	N/A	4954053
Langelier Index (@ 20C)	N/A	1.01		4954640	1.02		4954640
Langelier Index (@ 4C)	N/A	0.762		4954641	0.775		4954641
Saturation pH (@ 20C)	N/A	6.72		4954640	6.79		4954640
Saturation pH (@ 4C)	N/A	6.97		4954641	7.04		4954641
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	4960272	<0.050	0.050	4959787
Conductivity	umho/cm	1200	1.0	4957062	1300	1.0	4957062
Dissolved Organic Carbon	mg/L	2.3	0.20	4957725	1.6	0.20	4957725
Orthophosphate (P)	mg/L	<0.010	0.010	4958502	<0.010	0.010	4958502
pH	pH	7.73		4957067	7.81		4957067
Dissolved Sulphate (SO4)	mg/L	85	1.0	4958494	37	1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	350	1.0	4957054	340	1.0	4957054
Dissolved Chloride (Cl)	mg/L	96	1.0	4958488	180	2.0	4958488
Nitrite (N)	mg/L	<0.010	0.010	4956948	<0.010	0.010	4956948
Nitrate (N)	mg/L	8.82	0.20	4956948	0.39	0.10	4956948
Metals							
. Aluminum (Al)	mg/L	0.0077	0.0050	4957428	<0.0050	0.0050	4957428
. Antimony (Sb)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Arsenic (As)	mg/L	<0.0010	0.0010	4957428	<0.0010	0.0010	4957428
. Barium (Ba)	mg/L	0.083	0.0020	4957428	0.063	0.0020	4957428
. Beryllium (Be)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Boron (B)	mg/L	0.018	0.010	4957428	<0.010	0.010	4957428
. Cadmium (Cd)	mg/L	<0.00010	0.00010	4957428	<0.00010	0.00010	4957428
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP443			EGP444		
Sampling Date		2017/04/24 10:25			2017/04/24 11:03		
COC Number		607238-01-01			607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	RDL	QC Batch	WG-160900764- 20170424-JK2	RDL	QC Batch
. Calcium (Ca)	mg/L	160	0.20	4957428	160	0.20	4957428
. Chromium (Cr)	mg/L	<0.0050	0.0050	4957428	<0.0050	0.0050	4957428
. Cobalt (Co)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Copper (Cu)	mg/L	0.035	0.0010	4957428	0.021	0.0010	4957428
. Iron (Fe)	mg/L	<0.10	0.10	4957428	<0.10	0.10	4957428
. Lead (Pb)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Magnesium (Mg)	mg/L	15	0.050	4957428	14	0.050	4957428
. Manganese (Mn)	mg/L	<0.0020	0.0020	4957428	<0.0020	0.0020	4957428
. Molybdenum (Mo)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Nickel (Ni)	mg/L	<0.0010	0.0010	4957428	<0.0010	0.0010	4957428
. Phosphorus (P)	mg/L	<0.10	0.10	4957428	<0.10	0.10	4957428
. Potassium (K)	mg/L	1.1	0.20	4957428	0.44	0.20	4957428
. Selenium (Se)	mg/L	<0.0020	0.0020	4957428	<0.0020	0.0020	4957428
. Silicon (Si)	mg/L	3.9	0.050	4957428	5.0	0.050	4957428
. Silver (Ag)	mg/L	<0.00010	0.00010	4957428	<0.00010	0.00010	4957428
. Sodium (Na)	mg/L	65	0.10	4957428	79	0.10	4957428
. Strontium (Sr)	mg/L	0.30	0.0010	4957428	0.34	0.0010	4957428
. Thallium (Tl)	mg/L	<0.000050	0.000050	4957428	<0.000050	0.000050	4957428
. Titanium (Ti)	mg/L	<0.0050	0.0050	4957428	<0.0050	0.0050	4957428
. Uranium (U)	mg/L	0.00081	0.00010	4957428	0.00059	0.00010	4957428
. Vanadium (V)	mg/L	<0.00050	0.00050	4957428	<0.00050	0.00050	4957428
. Zinc (Zn)	mg/L	0.021	0.0050	4957428	0.066	0.0050	4957428
. Zirconium (Zr)	mg/L	<0.0010	0.0010	4957428	<0.0010	0.0010	4957428
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP445		EGP446		
Sampling Date		2017/04/24 11:36		2017/04/24 12:38		
COC Number		607238-01-01		607238-01-01		
	UNITS	WG-160900764- 20170424-JK3	RDL	WG-160900764- 20170424-JK4	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	3.12	N/A	15.7	N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	140	1.0	240	1.0	4953527
Calculated TDS	mg/L	170	1.0	890	1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	1.0	1.7	1.0	4953527
Cation Sum	me/L	3.01	N/A	16.0	N/A	4954638
Hardness (CaCO3)	mg/L	120	1.0	380	1.0	4954441
Ion Balance (% Difference)	%	1.75	N/A	1.00	N/A	4954053
Langelier Index (@ 20C)	N/A	0.280		0.858		4954640
Langelier Index (@ 4C)	N/A	0.0300		0.612		4954641
Saturation pH (@ 20C)	N/A	7.89		7.03		4954640
Saturation pH (@ 4C)	N/A	8.14		7.28		4954641
Inorganics						
Total Ammonia-N	mg/L	0.21	0.050	<0.050	0.050	4959787
Conductivity	umho/cm	280	1.0	1700	1.0	4957062
Dissolved Organic Carbon	mg/L	0.58	0.20	5.0	0.20	4957725
Orthophosphate (P)	mg/L	0.016	0.010	<0.010	0.010	4958502
pH	pH	8.17		7.89		4957067
Dissolved Sulphate (SO4)	mg/L	8.2	1.0	31	1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	140	1.0	240	1.0	4957054
Dissolved Chloride (Cl)	mg/L	1.8	1.0	360	4.0	4958488
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	4956948
Nitrate (N)	mg/L	<0.10	0.10	2.26	0.10	4956948
Metals						
. Aluminum (Al)	mg/L	<0.0050	0.0050	0.0063	0.0050	4957428
. Antimony (Sb)	mg/L	<0.00050	0.00050	<0.00050	0.00050	4957428
. Arsenic (As)	mg/L	<0.0010	0.0010	<0.0010	0.0010	4957428
. Barium (Ba)	mg/L	0.096	0.0020	0.071	0.0020	4957428
. Beryllium (Be)	mg/L	<0.00050	0.00050	<0.00050	0.00050	4957428
. Boron (B)	mg/L	0.047	0.010	<0.010	0.010	4957428
. Cadmium (Cd)	mg/L	<0.00010	0.00010	<0.00010	0.00010	4957428
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP445		EGP446		
Sampling Date		2017/04/24 11:36		2017/04/24 12:38		
COC Number		607238-01-01		607238-01-01		
	UNITS	WG-160900764- 20170424-JK3	RDL	WG-160900764- 20170424-JK4	RDL	QC Batch
. Calcium (Ca)	mg/L	21	0.20	140	0.20	4957428
. Chromium (Cr)	mg/L	<0.0050	0.0050	<0.0050	0.0050	4957428
. Cobalt (Co)	mg/L	<0.00050	0.00050	<0.00050	0.00050	4957428
. Copper (Cu)	mg/L	0.0017	0.0010	0.0079	0.0010	4957428
. Iron (Fe)	mg/L	0.43	0.10	<0.10	0.10	4957428
. Lead (Pb)	mg/L	<0.00050	0.00050	0.00051	0.00050	4957428
. Magnesium (Mg)	mg/L	16	0.050	8.2	0.050	4957428
. Manganese (Mn)	mg/L	0.0093	0.0020	<0.0020	0.0020	4957428
. Molybdenum (Mo)	mg/L	0.00073	0.00050	<0.00050	0.00050	4957428
. Nickel (Ni)	mg/L	<0.0010	0.0010	<0.0010	0.0010	4957428
. Phosphorus (P)	mg/L	<0.10	0.10	<0.10	0.10	4957428
. Potassium (K)	mg/L	0.56	0.20	0.91	0.20	4957428
. Selenium (Se)	mg/L	<0.0020	0.0020	<0.0020	0.0020	4957428
. Silicon (Si)	mg/L	7.7	0.050	2.8	0.050	4957428
. Silver (Ag)	mg/L	<0.00010	0.00010	<0.00010	0.00010	4957428
. Sodium (Na)	mg/L	15	0.10	190	0.10	4957428
. Strontium (Sr)	mg/L	0.35	0.0010	0.27	0.0010	4957428
. Thallium (Tl)	mg/L	<0.000050	0.000050	<0.000050	0.000050	4957428
. Titanium (Ti)	mg/L	<0.0050	0.0050	<0.0050	0.0050	4957428
. Uranium (U)	mg/L	<0.00010	0.00010	0.00051	0.00010	4957428
. Vanadium (V)	mg/L	<0.00050	0.00050	<0.00050	0.00050	4957428
. Zinc (Zn)	mg/L	<0.0050	0.0050	<0.0050	0.0050	4957428
. Zirconium (Zr)	mg/L	<0.0010	0.0010	<0.0010	0.0010	4957428
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP447		EGP448	EGP449		
Sampling Date		2017/04/24 13:18		2017/04/24 14:05	2017/04/24 14:57		
COC Number		607238-01-01		607238-01-01	607238-01-01		
	UNITS	WG-160900764-20170424-JK5	QC Batch	WG-160900764-20170424-JK6	WG-160900764-20170424-JK7	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	6.62	4954638	5.59	5.78	N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	260	4953527	210	210	1.0	4953527
Calculated TDS	mg/L	360	4954642	300	310	1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	4953527	2.0	2.2	1.0	4953527
Cation Sum	me/L	6.57	4954638	5.70	5.86	N/A	4954638
Hardness (CaCO3)	mg/L	320	4954441	270	280	1.0	4954441
Ion Balance (% Difference)	%	0.330	4954053	0.910	0.710	N/A	4954053
Langelier Index (@ 20C)	N/A	0.920	4954640	0.797	0.828		4954640
Langelier Index (@ 4C)	N/A	0.671	4954641	0.548	0.579		4954641
Saturation pH (@ 20C)	N/A	6.98	4954640	7.22	7.22		4954640
Saturation pH (@ 4C)	N/A	7.23	4954641	7.47	7.47		4954641

Inorganics							
Total Ammonia-N	mg/L	<0.050	4959787	<0.050	<0.050	0.050	4959787
Conductivity	umho/cm	640	4957062	540	560	1.0	4957062
Dissolved Organic Carbon	mg/L	1.3	4961551	0.58	0.80	0.20	4959892
Orthophosphate (P)	mg/L	<0.010	4958502	<0.010	<0.010	0.010	4958502
pH	pH	7.90	4957067	8.01	8.04		4957067
Dissolved Sulphate (SO4)	mg/L	21	4958494	51	51	1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	270	4957054	210	220	1.0	4957054
Dissolved Chloride (Cl)	mg/L	14	4958488	12	14	1.0	4958488
Nitrite (N)	mg/L	<0.010	4956948	<0.010	<0.010	0.010	4956948
Nitrate (N)	mg/L	6.38	4956948	<0.10	<0.10	0.10	4956948

Metals							
. Aluminum (Al)	mg/L	<0.0050	4958446	<0.0050	0.0081	0.0050	4958446
. Antimony (Sb)	mg/L	<0.00050	4958446	<0.00050	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L	<0.0010	4958446	<0.0010	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L	0.040	4958446	0.082	0.042	0.0020	4958446
. Beryllium (Be)	mg/L	<0.00050	4958446	<0.00050	<0.00050	0.00050	4958446
. Boron (B)	mg/L	<0.010	4958446	<0.010	<0.010	0.010	4958446
. Cadmium (Cd)	mg/L	<0.00010	4958446	<0.00010	<0.00010	0.00010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP447		EGP448	EGP449		
Sampling Date		2017/04/24 13:18		2017/04/24 14:05	2017/04/24 14:57		
COC Number		607238-01-01		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK5	QC Batch	WG-160900764- 20170424-JK6	WG-160900764- 20170424-JK7	RDL	QC Batch
. Calcium (Ca)	mg/L	110	4958446	76	76	0.20	4958446
. Chromium (Cr)	mg/L	<0.0050	4958446	<0.0050	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L	<0.00050	4958446	<0.00050	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L	0.0061	4958446	0.0029	0.0018	0.0010	4958446
. Iron (Fe)	mg/L	<0.10	4958446	1.7	3.4	0.10	4958446
. Lead (Pb)	mg/L	<0.00050	4958446	<0.00050	0.00080	0.00050	4958446
. Magnesium (Mg)	mg/L	12	4958446	19	21	0.050	4958446
. Manganese (Mn)	mg/L	<0.0020	4958446	0.028	0.031	0.0020	4958446
. Molybdenum (Mo)	mg/L	<0.00050	4958446	0.0011	0.0021	0.00050	4958446
. Nickel (Ni)	mg/L	<0.0010	4958446	<0.0010	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L	<0.10	4958446	<0.10	<0.10	0.10	4958446
. Potassium (K)	mg/L	0.81	4958446	1.1	1.1	0.20	4958446
. Selenium (Se)	mg/L	<0.0020	4958446	<0.0020	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L	5.7	4958446	5.0	5.4	0.050	4958446
. Silver (Ag)	mg/L	<0.00010	4958446	<0.00010	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L	5.5	4958446	4.9	4.4	0.10	4958446
. Strontium (Sr)	mg/L	0.18	4958446	0.22	0.25	0.0010	4958446
. Thallium (Tl)	mg/L	<0.000050	4958446	<0.000050	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L	<0.0050	4958446	<0.0050	<0.0050	0.0050	4958446
. Uranium (U)	mg/L	0.00055	4958446	<0.00010	0.00079	0.00010	4958446
. Vanadium (V)	mg/L	<0.00050	4958446	<0.00050	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L	0.014	4958446	0.013	0.020	0.0050	4958446
. Zirconium (Zr)	mg/L	<0.0010	4958446	<0.0010	<0.0010	0.0010	4958446

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP450			EGP451		
Sampling Date		2017/04/24 15:45			2017/04/24 16:20		
COC Number		607238-01-01			607238-01-01		
	UNITS	WG-160900764- 20170424-JK8	RDL	QC Batch	WG-160900764- 20170424-JK9	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	7.12	N/A	4954638	10.1	N/A	4954638
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	310	1.0	4953527	270	1.0	4953527
Calculated TDS	mg/L	380	1.0	4954642	550	1.0	4954642
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	1.0	4953527	1.9	1.0	4953527
Cation Sum	me/L	7.03	N/A	4954638	10.1	N/A	4954638
Hardness (CaCO3)	mg/L	340	1.0	4954441	330	1.0	4954441
Ion Balance (% Difference)	%	0.680	N/A	4954053	0.0900	N/A	4954053
Langelier Index (@ 20C)	N/A	0.958		4954640	0.907		4954640
Langelier Index (@ 4C)	N/A	0.710		4954641	0.660		4954641
Saturation pH (@ 20C)	N/A	6.88		4954640	6.98		4954640
Saturation pH (@ 4C)	N/A	7.13		4954641	7.23		4954641
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	4959787	<0.050	0.050	4959787
Conductivity	umho/cm	670	1.0	4957062	1100	1.0	4957062
Dissolved Organic Carbon	mg/L	0.89	0.20	4959892	1.5	0.20	4959892
Orthophosphate (P)	mg/L	<0.010	0.010	4958502	<0.010	0.010	4958502
pH	pH	7.84		4957067	7.89		4957067
Dissolved Sulphate (SO4)	mg/L	16	1.0	4958494	13	1.0	4958494
Alkalinity (Total as CaCO3)	mg/L	310	1.0	4957054	270	1.0	4957054
Dissolved Chloride (Cl)	mg/L	12	1.0	4958488	160	2.0	4958488
Nitrite (N)	mg/L	<0.010	0.010	4956948	<0.010	0.010	4956948
Nitrate (N)	mg/L	3.59	0.10	4956948	0.26	0.10	4956948
Metals							
. Aluminum (Al)	mg/L	<0.0050	0.0050	4958446	<0.0050	0.0050	4957442
. Antimony (Sb)	mg/L	<0.00050	0.00050	4958446	<0.00050	0.00050	4957442
. Arsenic (As)	mg/L	<0.0010	0.0010	4958446	<0.0010	0.0010	4957442
. Barium (Ba)	mg/L	0.042	0.0020	4958446	0.033	0.0020	4957442
. Beryllium (Be)	mg/L	<0.00050	0.00050	4958446	<0.00050	0.00050	4957442
. Boron (B)	mg/L	<0.010	0.010	4958446	0.012	0.010	4957442
. Cadmium (Cd)	mg/L	<0.00010	0.00010	4958446	<0.00010	0.00010	4957442
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGP450			EGP451		
Sampling Date		2017/04/24 15:45			2017/04/24 16:20		
COC Number		607238-01-01			607238-01-01		
	UNITS	WG-160900764- 20170424-JK8	RDL	QC Batch	WG-160900764- 20170424-JK9	RDL	QC Batch
. Calcium (Ca)	mg/L	120	0.20	4958446	120	0.20	4957442
. Chromium (Cr)	mg/L	<0.0050	0.0050	4958446	<0.0050	0.0050	4957442
. Cobalt (Co)	mg/L	<0.00050	0.00050	4958446	<0.00050	0.00050	4957442
. Copper (Cu)	mg/L	0.0067	0.0010	4958446	0.028	0.0010	4957442
. Iron (Fe)	mg/L	<0.10	0.10	4958446	<0.10	0.10	4957442
. Lead (Pb)	mg/L	<0.00050	0.00050	4958446	0.0013	0.00050	4957442
. Magnesium (Mg)	mg/L	11	0.050	4958446	7.2	0.050	4957442
. Manganese (Mn)	mg/L	<0.0020	0.0020	4958446	<0.0020	0.0020	4957442
. Molybdenum (Mo)	mg/L	<0.00050	0.00050	4958446	<0.00050	0.00050	4957442
. Nickel (Ni)	mg/L	<0.0010	0.0010	4958446	<0.0010	0.0010	4957442
. Phosphorus (P)	mg/L	<0.10	0.10	4958446	<0.10	0.10	4957442
. Potassium (K)	mg/L	0.93	0.20	4958446	0.27	0.20	4957442
. Selenium (Se)	mg/L	<0.0020	0.0020	4958446	<0.0020	0.0020	4957442
. Silicon (Si)	mg/L	5.6	0.050	4958446	3.4	0.050	4957442
. Silver (Ag)	mg/L	<0.00010	0.00010	4958446	<0.00010	0.00010	4957442
. Sodium (Na)	mg/L	6.1	0.10	4958446	79	0.10	4957442
. Strontium (Sr)	mg/L	0.20	0.0010	4958446	0.25	0.0010	4957442
. Thallium (Tl)	mg/L	<0.000050	0.000050	4958446	<0.000050	0.000050	4957442
. Titanium (Ti)	mg/L	<0.0050	0.0050	4958446	<0.0050	0.0050	4957442
. Uranium (U)	mg/L	0.00061	0.00010	4958446	0.00026	0.00010	4957442
. Vanadium (V)	mg/L	<0.00050	0.00050	4958446	<0.00050	0.00050	4957442
. Zinc (Zn)	mg/L	<0.0050	0.0050	4958446	0.025	0.0050	4957442
. Zirconium (Zr)	mg/L	<0.0010	0.0010	4958446	<0.0010	0.0010	4957442
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGP443	EGP443		EGP444		
Sampling Date		2017/04/24 10:25	2017/04/24 10:25		2017/04/24 11:03		
COC Number		607238-01-01	607238-01-01		607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK1 Lab-Dup	QC Batch	WG-160900764- 20170424-JK2	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	61		4958159	52	10	4958159
Total Dissolved Solids	mg/L	518	510	4958448	774	10	4957856
Fluoride (F-)	mg/L	<0.10		4957070	<0.10	0.10	4957070
Free Cyanide	ug/L	<1		4961607	<1	1	4961607
Total Organic Carbon (TOC)	mg/L	2.5		4959977	1.6	0.20	4958621
Total Suspended Solids	mg/L	19		4958445	<10	10	4957849
Turbidity	NTU	<0.1		4956648	<0.1	0.1	4956648
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EGP445		EGP446		EGP447		
Sampling Date		2017/04/24 11:36		2017/04/24 12:38		2017/04/24 13:18		
COC Number		607238-01-01		607238-01-01		607238-01-01		
	UNITS	WG-160900764- 20170424-JK3	QC Batch	WG-160900764- 20170424-JK4	QC Batch	WG-160900764- 20170424-JK5	RDL	QC Batch

Inorganics								
Acidity as CaCO3	mg/L	<10	4958159	28	4958159	36	10	4958159
Total Dissolved Solids	mg/L	144	4958448	1020	4957856	372	10	4958448
Fluoride (F-)	mg/L	0.21	4957070	<0.10	4957070	<0.10	0.10	4957070
Free Cyanide	ug/L	<1	4961607	<1	4961607	<1	1	4961607
Total Organic Carbon (TOC)	mg/L	0.56	4958621	5.1	4958621	0.98	0.20	4958621
Total Suspended Solids	mg/L	<10	4958445	<10	4957849	<10	10	4958445
Turbidity	NTU	1.4	4956648	<0.1	4956648	<0.1	0.1	4956648
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGP448		EGP449	EGP449		
Sampling Date		2017/04/24 14:05		2017/04/24 14:57	2017/04/24 14:57		
COC Number		607238-01-01		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK6	QC Batch	WG-160900764- 20170424-JK7	WG-160900764- 20170424-JK7 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	18	4958159	18		10	4958159
Total Dissolved Solids	mg/L	300	4957856	340		10	4958448
Fluoride (F-)	mg/L	<0.10	4957070	<0.10		0.10	4957070
Free Cyanide	ug/L	<1	4961607	<1		1	4961607
Total Organic Carbon (TOC)	mg/L	0.41	4958621	0.63		0.20	4958621
Total Suspended Solids	mg/L	<10	4957849	<10	<10	10	4958445
Turbidity	NTU	18	4956648	17		0.1	4956648

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		EGP450		EGP451	EGP451		
Sampling Date		2017/04/24 15:45		2017/04/24 16:20	2017/04/24 16:20		
COC Number		607238-01-01		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK8	QC Batch	WG-160900764- 20170424-JK9	WG-160900764- 20170424-JK9 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	48	4958159	24	24	10	4958159
Total Dissolved Solids	mg/L	372	4958448	632	638	10	4957856
Fluoride (F-)	mg/L	<0.10	4957070	<0.10		0.10	4957070
Free Cyanide	ug/L	<1	4961607	<1		1	4961607
Total Organic Carbon (TOC)	mg/L	0.77	4958621	1.4		0.20	4958621
Total Suspended Solids	mg/L	<10	4958445	<10	<10	10	4957849
Turbidity	NTU	<0.1	4956648	0.3		0.1	4956648

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGP443	EGP444	EGP445	EGP446		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:36	2017/04/24 12:38		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764-20170424-JK1	WG-160900764-20170424-JK2	WG-160900764-20170424-JK3	WG-160900764-20170424-JK4	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4957539
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961496
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		EGP447	EGP447	EGP448	EGP449		
Sampling Date		2017/04/24 13:18	2017/04/24 13:18	2017/04/24 14:05	2017/04/24 14:57		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764-20170424-JK5	WG-160900764-20170424-JK5 Lab-Dup	WG-160900764-20170424-JK6	WG-160900764-20170424-JK7	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	0.58	0.63	<0.50	<0.50	0.50	4957630
Mercury (Hg)	ug/L	<0.1		<0.1	<0.1	0.1	4959935
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EGP450	EGP451	EGP451		
Sampling Date		2017/04/24 15:45	2017/04/24 16:20	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764-20170424-JK8	WG-160900764-20170424-JK9	WG-160900764-20170424-JK9 Lab-Dup	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	0.51	<0.50		0.50	4957630	
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	0.1	4959935	
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

MICROBIOLOGY (WATER)

Maxxam ID		EGP443	EGP444	EGP445	EGP446	
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:36	2017/04/24 12:38	
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01	
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK3	WG-160900764- 20170424-JK4	QC Batch

Microbiological						
Background	CFU/100mL	82	0	0	0	4955040
Total Coliforms	CFU/100mL	59	0	0	0	4955040
Escherichia coli	CFU/100mL	0	0	0	0	4955040
QC Batch = Quality Control Batch						

Maxxam ID		EGP447	EGP448	EGP449	EGP450	
Sampling Date		2017/04/24 13:18	2017/04/24 14:05	2017/04/24 14:57	2017/04/24 15:45	
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01	
	UNITS	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	WG-160900764- 20170424-JK7	WG-160900764- 20170424-JK8	QC Batch

Microbiological						
Background	CFU/100mL	0	0	0	39	4955040
Total Coliforms	CFU/100mL	0	0	0	0	4955040
Escherichia coli	CFU/100mL	0	0	0	0	4955040
QC Batch = Quality Control Batch						

Maxxam ID		EGP451	
Sampling Date		2017/04/24 16:20	
COC Number		607238-01-01	
	UNITS	WG-160900764- 20170424-JK9	QC Batch

Microbiological			
Background	CFU/100mL	35	4955040
Total Coliforms	CFU/100mL	0	4955040
Escherichia coli	CFU/100mL	0	4955040
QC Batch = Quality Control Batch			

O.REG 153 PCBs (WATER)

Maxxam ID		EGP443	EGP444	EGP445	EGP446		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:36	2017/04/24 12:38		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK3	WG-160900764- 20170424-JK4	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452

Surrogate Recovery (%)							
Decachlorobiphenyl	%	98	88	95	104		4957452

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		EGP447	EGP448	EGP449	EGP450		
Sampling Date		2017/04/24 13:18	2017/04/24 14:05	2017/04/24 14:57	2017/04/24 15:45		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	WG-160900764- 20170424-JK7	WG-160900764- 20170424-JK8	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957452

Surrogate Recovery (%)							
Decachlorobiphenyl	%	91	90	95	94		4957452

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 PCBs (WATER)

Maxxam ID		EGP451	EGP451		
Sampling Date		2017/04/24 16:20	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK9	WG-160900764- 20170424-JK9 Lab-Dup	RDL	QC Batch
PCBs					
Aroclor 1242	ug/L	<0.05	<0.05	0.05	4957452
Aroclor 1248	ug/L	<0.05	<0.05	0.05	4957452
Aroclor 1254	ug/L	<0.05	<0.05	0.05	4957452
Aroclor 1260	ug/L	<0.05	<0.05	0.05	4957452
Total PCB	ug/L	<0.05	<0.05	0.05	4957452
Surrogate Recovery (%)					
Decachlorobiphenyl	%	96	92		4957452
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP443	EGP444	EGP445		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:36		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK3	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4954777
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957345
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957345
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957345
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957345
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957345
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957345
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957345
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957345

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP443	EGP444	EGP445		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:36		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK3	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957345
F1 (C6-C10)	ug/L	<25	<25	<25	25	4957345
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4957345
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4961389
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4961389
Surrogate Recovery (%)						
o-Terphenyl	%	99	99	96		4961389
4-Bromofluorobenzene	%	97	90	86		4957345
D4-1,2-Dichloroethane	%	112	110	107		4957345
D8-Toluene	%	93	93	97		4957345
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP446	EGP447	EGP448		
Sampling Date		2017/04/24 12:38	2017/04/24 13:18	2017/04/24 14:05		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK4	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4954777
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957345
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Bromodichloromethane	ug/L	12	<0.50	<0.50	0.50	4957345
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chloroform	ug/L	62	<0.20	<0.20	0.20	4957345
Dibromochloromethane	ug/L	1.5	<0.50	<0.50	0.50	4957345
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957345
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957345
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957345
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957345
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957345
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957345
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957345

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP446	EGP447	EGP448		
Sampling Date		2017/04/24 12:38	2017/04/24 13:18	2017/04/24 14:05		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK4	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957345
F1 (C6-C10)	ug/L	<25	<25	<25	25	4957345
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4957345
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4961389
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4961389
Surrogate Recovery (%)						
o-Terphenyl	%	100	98	99		4961389
4-Bromofluorobenzene	%	90	94	93		4957345
D4-1,2-Dichloroethane	%	111	110	111		4957345
D8-Toluene	%	94	94	93		4957345
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP449	EGP450	EGP451		
Sampling Date		2017/04/24 14:57	2017/04/24 15:45	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK7	WG-160900764- 20170424-JK8	WG-160900764- 20170424-JK9	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4954777
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957345
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957345
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957345
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957345
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957345
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957345
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957345
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957345
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957345

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGP449	EGP450	EGP451		
Sampling Date		2017/04/24 14:57	2017/04/24 15:45	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK7	WG-160900764- 20170424-JK8	WG-160900764- 20170424-JK9	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957345
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957345
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957345
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957345
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957345
F1 (C6-C10)	ug/L	<25	<25	<25	25	4957345
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4957345
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4961389
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4961389
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4961389
Surrogate Recovery (%)						
o-Terphenyl	%	100	101	101		4961389
4-Bromofluorobenzene	%	89	88	89		4957345
D4-1,2-Dichloroethane	%	110	110	111		4957345
D8-Toluene	%	95	94	94		4957345
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP443	EGP444	EGP444	EGP445		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:03	2017/04/24 11:36		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK2 Lab-Dup	WG-160900764- 20170424-JK3	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4961356
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4961356
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4961356
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4961356
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	4961356
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP443	EGP444	EGP444	EGP445		
Sampling Date		2017/04/24 10:25	2017/04/24 11:03	2017/04/24 11:03	2017/04/24 11:36		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK1	WG-160900764- 20170424-JK2	WG-160900764- 20170424-JK2 Lab-Dup	WG-160900764- 20170424-JK3	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4961356
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28		<0.28	0.28	4953586
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	74	71	61	56		4961356
2-Fluorobiphenyl	%	59	74	92	78		4961356
D14-Terphenyl (FS)	%	104	96	105	105		4961356
D5-Nitrobenzene	%	73	74	88	90		4961356
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP446	EGP447	EGP448	EGP449		
Sampling Date		2017/04/24 12:38	2017/04/24 13:18	2017/04/24 14:05	2017/04/24 14:57		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK4	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	WG-160900764- 20170424-JK7	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4961356
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4961356
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4961356
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4961356
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-ethylhexyl)phthalate	ug/L	<1	4	2	3	1	4961356
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP446	EGP447	EGP448	EGP449		
Sampling Date		2017/04/24 12:38	2017/04/24 13:18	2017/04/24 14:05	2017/04/24 14:57		
COC Number		607238-01-01	607238-01-01	607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK4	WG-160900764- 20170424-JK5	WG-160900764- 20170424-JK6	WG-160900764- 20170424-JK7	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4961356
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4961356
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4961356
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4961356
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4961356
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4953586
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	46 (1)	39 (1)	6.6 (1)	16 (1)		4961356
2-Fluorobiphenyl	%	45 (1)	89	87	87		4961356
D14-Terphenyl (FS)	%	101	93	105	102		4961356
D5-Nitrobenzene	%	56	91	96	91		4961356
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP450	EGP451		
Sampling Date		2017/04/24 15:45	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK8	WG-160900764- 20170424-JK9	RDL	QC Batch
Semivolatile Organics					
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	0.1	4961356
1-Methylnaphthalene	ug/L	<0.2	<0.2	0.2	4961356
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	0.2	4961356
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	0.2	4961356
2,4-Dichlorophenol	ug/L	<0.1	<0.1	0.1	4961356
2,4-Dimethylphenol	ug/L	<0.5	<0.5	0.5	4961356
2,4-Dinitrophenol	ug/L	<2	<2	2	4961356
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	0.3	4961356
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	0.3	4961356
2-Chlorophenol	ug/L	<0.1	<0.1	0.1	4961356
2-Methylnaphthalene	ug/L	<0.2	<0.2	0.2	4961356
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	0.5	4961356
Acenaphthene	ug/L	<0.2	<0.2	0.2	4961356
Acenaphthylene	ug/L	<0.2	<0.2	0.2	4961356
Anthracene	ug/L	<0.05	<0.05	0.05	4961356
Benzo(a)anthracene	ug/L	<0.05	<0.05	0.05	4961356
Benzo(a)pyrene	ug/L	<0.01	<0.01	0.01	4961356
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	0.05	4961356
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	0.05	4961356
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	0.05	4961356
Biphenyl	ug/L	<0.1	<0.1	0.1	4961356
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	0.5	4961356
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	0.5	4961356
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	1	4961356
Chrysene	ug/L	<0.05	<0.05	0.05	4961356
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	0.1	4961356
Diethyl phthalate	ug/L	<0.1	<0.1	0.1	4961356
Dimethyl phthalate	ug/L	<0.1	<0.1	0.1	4961356
Fluoranthene	ug/L	<0.2	<0.2	0.2	4961356
Fluorene	ug/L	<0.2	<0.2	0.2	4961356
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGP450	EGP451		
Sampling Date		2017/04/24 15:45	2017/04/24 16:20		
COC Number		607238-01-01	607238-01-01		
	UNITS	WG-160900764- 20170424-JK8	WG-160900764- 20170424-JK9	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	0.1	4961356
Naphthalene	ug/L	<0.2	<0.2	0.2	4961356
p-Chloroaniline	ug/L	<1	<1	1	4961356
Pentachlorophenol	ug/L	<0.1	<0.1	0.1	4961356
Phenanthrene	ug/L	<0.1	<0.1	0.1	4961356
Phenol	ug/L	<0.5	<0.5	0.5	4961356
Pyrene	ug/L	<0.05	<0.05	0.05	4961356
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	0.28	4954856
Surrogate Recovery (%)					
2,4,6-Tribromophenol	%	31 (1)	12 (1)		4961356
2-Fluorobiphenyl	%	86	54		4961356
D14-Terphenyl (FS)	%	102	102		4961356
D5-Nitrobenzene	%	88	53		4961356
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.					

TEST SUMMARY

Maxxam ID: EGP443
Sample ID: WG-160900764-20170424-JK1
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/27	2017/04/29	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4957725	N/A	2017/04/27	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4957428	2017/04/27	2017/04/30	Kevin Comerford
Ion Balance (% Difference)	CALC	4954053	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4960272	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4959977	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP443 Dup
Sample ID: WG-160900764-20170424-JK1
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)

TEST SUMMARY

Maxxam ID: EGP444
Sample ID: WG-160900764-20170424-JK2
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/29	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4957725	N/A	2017/04/27	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4957428	2017/04/27	2017/04/30	Kevin Comerford
Ion Balance (% Difference)	CALC	4954053	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP444 Dup
Sample ID: WG-160900764-20170424-JK2
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/29	Milijana Avramovic

TEST SUMMARY

Maxxam ID: EGP445
Sample ID: WG-160900764-20170424-JK3
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/29	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4957725	N/A	2017/04/27	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4957428	2017/04/27	2017/04/30	Kevin Comerford
Ion Balance (% Difference)	CALC	4954053	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li (Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP446
Sample ID: WG-160900764-20170424-JK4
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk

TEST SUMMARY

Maxxam ID: EGP446
Sample ID: WG-160900764-20170424-JK4
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957539	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4957725	N/A	2017/04/27	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4961496	2017/04/29	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4957428	2017/04/27	2017/04/30	Kevin Comerford
Ion Balance (% Difference)	CALC	4954053	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP447
Sample ID: WG-160900764-20170424-JK5
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu

TEST SUMMARY

Maxxam ID: EGP447
Sample ID: WG-160900764-20170424-JK5
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4961551	N/A	2017/04/29	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	2017/04/27	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP447 Dup
Sample ID: WG-160900764-20170424-JK5
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le

Maxxam ID: EGP448
Sample ID: WG-160900764-20170424-JK6
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai

TEST SUMMARY

Maxxam ID: EGP448
Sample ID: WG-160900764-20170424-JK6
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	2017/04/27	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP449
Sample ID: WG-160900764-20170424-JK7
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4953586	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai

TEST SUMMARY

Maxxam ID: EGP449
Sample ID: WG-160900764-20170424-JK7
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO ₃)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	2017/04/27	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP449 Dup
Sample ID: WG-160900764-20170424-JK7
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray

Maxxam ID: EGP450
Sample ID: WG-160900764-20170424-JK8
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4954856	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO ₃ in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi

TEST SUMMARY

Maxxam ID: EGP450
Sample ID: WG-160900764-20170424-JK8
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	2017/04/27	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4954053	N/A	2017/04/29	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/04/29	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/04/29	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/04/29	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/04/29	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP451
Sample ID: WG-160900764-20170424-JK9
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4954856	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4958159	N/A	2017/04/30	Grace Sison
Alkalinity	AT	4957054	N/A	2017/04/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4953527	N/A	2017/04/28	Automated Statchk
1,3-Dichloropropene Sum	CALC	4954777	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4958488	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4957062	N/A	2017/04/27	Surinder Rai
Chromium (VI) in Water	IC	4957630	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961607	N/A	2017/04/29	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4961389	2017/04/29	2017/04/30	Margaret Kulczyk-Stanko
Fluoride	ISE	4957070	2017/04/26	2017/04/27	Surinder Rai
Hardness (calculated as CaCO3)		4954441	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4957442	2017/04/27	2017/04/30	Kevin Comerford

TEST SUMMARY

Maxxam ID: EGP451
Sample ID: WG-160900764-20170424-JK9
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Ion Balance (% Difference)	CALC	4954053	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4954638	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4955040	N/A	2017/04/25	Ranju Chaudhari
Total Ammonia-N	LACH/NH4	4959787	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4956948	N/A	2017/04/27	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
pH	AT	4957067	N/A	2017/04/27	Surinder Rai
Orthophosphate	KONE	4958502	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4954640	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4954641	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4958494	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4954642	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4958621	N/A	2017/04/28	Anastasia Hamanov
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur
Turbidity	AT	4956648	N/A	2017/04/27	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957345	N/A	2017/04/29	Karen Hughes

Maxxam ID: EGP451 Dup
Sample ID: WG-160900764-20170424-JK9
Matrix: Water

Collected: 2017/04/24
Shipped:
Received: 2017/04/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4958159	N/A		Grace Sison
Mercury	CV/AA	4959935	2017/04/28	2017/05/01	Ron Morrison
Polychlorinated Biphenyl in Water	GC/ECD	4957452	2017/04/27	2017/04/27	Li Peng
Total Dissolved Solids	BAL	4957856	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Suspended Solids	BAL	4957849	2017/04/27	2017/04/27	Gurpreet Kaur

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.7°C
Package 2	4.0°C
Package 3	5.3°C
Package 4	2.3°C
Package 5	5.3°C
Package 6	4.0°C
Package 7	1.0°C
Package 8	3.3°C
Package 9	2.3°C

Sample EGP444 [WG-160900764-20170424-JK2] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP445 [WG-160900764-20170424-JK3] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.
ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP447 [WG-160900764-20170424-JK5] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP448 [WG-160900764-20170424-JK6] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP449 [WG-160900764-20170424-JK7] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP450 [WG-160900764-20170424-JK8] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent. TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGP451 [WG-160900764-20170424-JK9] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957345	4-Bromofluorobenzene	2017/04/28	104	70 - 130	102	70 - 130	90	%				
4957345	D4-1,2-Dichloroethane	2017/04/28	105	70 - 130	102	70 - 130	104	%				
4957345	D8-Toluene	2017/04/28	101	70 - 130	104	70 - 130	96	%				
4957452	Decachlorobiphenyl	2017/04/27	102	60 - 130	94	60 - 130	99	%				
4961356	2,4,6-Tribromophenol	2017/04/29	74	50 - 130	101	50 - 130	74	%				
4961356	2-Fluorobiphenyl	2017/04/29	81	50 - 130	74	50 - 130	77	%				
4961356	D14-Terphenyl (FS)	2017/04/29	111	50 - 130	108	50 - 130	104	%				
4961356	D5-Nitrobenzene	2017/04/29	88	50 - 130	97	50 - 130	84	%				
4961389	o-Terphenyl	2017/04/30	101	60 - 130	100	60 - 130	100	%				
4956648	Turbidity	2017/04/27			97	85 - 115	<0.1	NTU	2.4	20		
4956948	Nitrate (N)	2017/04/27	NC	80 - 120	99	80 - 120	<0.10	mg/L	0.31	20		
4956948	Nitrite (N)	2017/04/27	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
4957054	Alkalinity (Total as CaCO3)	2017/04/27			97	85 - 115	<1.0	mg/L	1.5	20		
4957062	Conductivity	2017/04/27			100	85 - 115	<1.0	umho/cm	0.29	25		
4957067	pH	2017/04/27			101	98 - 103			0.80	N/A		
4957070	Fluoride (F-)	2017/04/27	96	80 - 120	96	80 - 120	<0.10	mg/L	6.6	20		
4957345	1,1,1,2-Tetrachloroethane	2017/04/29	105	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
4957345	1,1,1-Trichloroethane	2017/04/29	102	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4957345	1,1,2,2-Tetrachloroethane	2017/04/29	109	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4957345	1,1,2-Trichloroethane	2017/04/29	102	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4957345	1,1-Dichloroethane	2017/04/29	106	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4957345	1,1-Dichloroethylene	2017/04/29	104	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4957345	1,2-Dichlorobenzene	2017/04/29	101	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4957345	1,2-Dichloroethane	2017/04/29	102	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
4957345	1,2-Dichloropropane	2017/04/29	103	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4957345	1,3-Dichlorobenzene	2017/04/29	98	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4957345	1,4-Dichlorobenzene	2017/04/29	100	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
4957345	Acetone (2-Propanone)	2017/04/29	98	60 - 140	80	60 - 140	<10	ug/L	NC	30		
4957345	Benzene	2017/04/29	103	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4957345	Bromodichloromethane	2017/04/29	106	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957345	Bromoform	2017/04/29	109	70 - 130	100	70 - 130	<1.0	ug/L	NC	30		
4957345	Bromomethane	2017/04/29	109	60 - 140	101	60 - 140	<0.50	ug/L	NC	30		
4957345	Carbon Tetrachloride	2017/04/29	105	70 - 130	106	70 - 130	<0.20	ug/L	NC	30		
4957345	Chlorobenzene	2017/04/29	104	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
4957345	Chloroform	2017/04/29	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
4957345	cis-1,2-Dichloroethylene	2017/04/29	109	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
4957345	cis-1,3-Dichloropropene	2017/04/29	94	70 - 130	86	70 - 130	<0.30	ug/L	NC	30		
4957345	Dibromochloromethane	2017/04/29	105	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4957345	Dichlorodifluoromethane (FREON 12)	2017/04/29	90	60 - 140	90	60 - 140	<1.0	ug/L	NC	30		
4957345	Ethylbenzene	2017/04/29	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4957345	Ethylene Dibromide	2017/04/29	107	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4957345	F1 (C6-C10) - BTEX	2017/04/29					<25	ug/L	NC	30		
4957345	F1 (C6-C10)	2017/04/29	94	60 - 140	99	60 - 140	<25	ug/L	NC	30		
4957345	Hexane	2017/04/29	104	70 - 130	101	70 - 130	<1.0	ug/L	NC	30		
4957345	Methyl Ethyl Ketone (2-Butanone)	2017/04/29	100	60 - 140	87	60 - 140	<10	ug/L	25	30		
4957345	Methyl Isobutyl Ketone	2017/04/29	99	70 - 130	90	70 - 130	<5.0	ug/L	NC	30		
4957345	Methyl t-butyl ether (MTBE)	2017/04/29	104	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
4957345	Methylene Chloride(Dichloromethane)	2017/04/29	115	70 - 130	106	70 - 130	<2.0	ug/L	NC	30		
4957345	o-Xylene	2017/04/29	98	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4957345	p+m-Xylene	2017/04/29	93	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
4957345	Styrene	2017/04/29	99	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
4957345	Tetrachloroethylene	2017/04/29	104	70 - 130	106	70 - 130	<0.20	ug/L	NC	30		
4957345	Toluene	2017/04/29	97	70 - 130	99	70 - 130	<0.20	ug/L	0.63	30		
4957345	Total Xylenes	2017/04/29					<0.20	ug/L	NC	30		
4957345	trans-1,2-Dichloroethylene	2017/04/29	109	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
4957345	trans-1,3-Dichloropropene	2017/04/29	93	70 - 130	85	70 - 130	<0.40	ug/L	NC	30		
4957345	Trichloroethylene	2017/04/29	104	70 - 130	104	70 - 130	<0.20	ug/L	1.9	30		
4957345	Trichlorofluoromethane (FREON 11)	2017/04/29	111	70 - 130	109	70 - 130	<0.50	ug/L	NC	30		
4957345	Vinyl Chloride	2017/04/29	109	70 - 130	106	70 - 130	<0.20	ug/L	NC	30		
4957428	. Aluminum (Al)	2017/04/30	103	80 - 120	96	80 - 120	<0.0050	mg/L				
4957428	. Antimony (Sb)	2017/04/30	107	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957428	. Arsenic (As)	2017/04/30	104	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
4957428	. Barium (Ba)	2017/04/30	105	80 - 120	99	80 - 120	<0.0020	mg/L	4.3	20		
4957428	. Beryllium (Be)	2017/04/30	107	80 - 120	102	80 - 120	<0.00050	mg/L				
4957428	. Boron (B)	2017/04/30	107	80 - 120	101	80 - 120	<0.010	mg/L	4.5	20		
4957428	. Cadmium (Cd)	2017/04/30	104	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
4957428	. Calcium (Ca)	2017/04/30	NC	80 - 120	92	80 - 120	<0.20	mg/L	1.1	20		
4957428	. Chromium (Cr)	2017/04/30	103	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
4957428	. Cobalt (Co)	2017/04/30	102	80 - 120	97	80 - 120	<0.00050	mg/L				
4957428	. Copper (Cu)	2017/04/30	104	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
4957428	. Iron (Fe)	2017/04/30	103	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
4957428	. Lead (Pb)	2017/04/30	99	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
4957428	. Magnesium (Mg)	2017/04/30	103	80 - 120	100	80 - 120	<0.050	mg/L	2.0	20		
4957428	. Manganese (Mn)	2017/04/30	102	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4957428	. Molybdenum (Mo)	2017/04/30	107	80 - 120	101	80 - 120	<0.00050	mg/L				
4957428	. Nickel (Ni)	2017/04/30	101	80 - 120	98	80 - 120	<0.0010	mg/L				
4957428	. Phosphorus (P)	2017/04/30	111	80 - 120	105	80 - 120	<0.10	mg/L				
4957428	. Potassium (K)	2017/04/30	104	80 - 120	99	80 - 120	<0.20	mg/L	2.1	20		
4957428	. Selenium (Se)	2017/04/30	101	80 - 120	94	80 - 120	<0.0020	mg/L	NC	20		
4957428	. Silicon (Si)	2017/04/30	104	80 - 120	94	80 - 120	<0.050	mg/L				
4957428	. Silver (Ag)	2017/04/30	101	80 - 120	98	80 - 120	<0.00010	mg/L				
4957428	. Sodium (Na)	2017/04/30	NC	80 - 120	100	80 - 120	<0.10	mg/L	2.1 (1)	20		
4957428	. Strontium (Sr)	2017/04/30	101	80 - 120	96	80 - 120	<0.0010	mg/L				
4957428	. Thallium (Tl)	2017/04/30	99	80 - 120	95	80 - 120	<0.000050	mg/L				
4957428	. Titanium (Ti)	2017/04/30	102	80 - 120	94	80 - 120	<0.0050	mg/L				
4957428	. Uranium (U)	2017/04/30	103	80 - 120	98	80 - 120	<0.00010	mg/L	5.0	20		
4957428	. Vanadium (V)	2017/04/30	103	80 - 120	98	80 - 120	<0.00050	mg/L				
4957428	. Zinc (Zn)	2017/04/30	101	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
4957428	. Zirconium (Zr)	2017/04/30	107	80 - 120	102	80 - 120	<0.0010	mg/L				
4957442	. Aluminum (Al)	2017/04/30	101	80 - 120	97	80 - 120	<0.0050	mg/L				
4957442	. Antimony (Sb)	2017/04/30	110	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
4957442	. Arsenic (As)	2017/04/30	105	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957442	. Barium (Ba)	2017/04/30	103	80 - 120	97	80 - 120	<0.0020	mg/L	2.5	20		
4957442	. Beryllium (Be)	2017/04/30	106	80 - 120	101	80 - 120	<0.00050	mg/L				
4957442	. Boron (B)	2017/04/30	107	80 - 120	102	80 - 120	<0.010	mg/L	1.5	20		
4957442	. Cadmium (Cd)	2017/04/30	104	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
4957442	. Calcium (Ca)	2017/04/30	NC	80 - 120	93	80 - 120	<0.20	mg/L	0.78	20		
4957442	. Chromium (Cr)	2017/04/30	103	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4957442	. Cobalt (Co)	2017/04/30	101	80 - 120	97	80 - 120	<0.00050	mg/L				
4957442	. Copper (Cu)	2017/04/30	104	80 - 120	99	80 - 120	<0.0010	mg/L	5.4	20		
4957442	. Iron (Fe)	2017/04/30	104	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
4957442	. Lead (Pb)	2017/04/30	99	80 - 120	94	80 - 120	<0.00050	mg/L	NC	20		
4957442	. Magnesium (Mg)	2017/04/30	105	80 - 120	99	80 - 120	<0.050	mg/L	2.3	20		
4957442	. Manganese (Mn)	2017/04/30	102	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20		
4957442	. Molybdenum (Mo)	2017/04/30	108	80 - 120	101	80 - 120	<0.00050	mg/L				
4957442	. Nickel (Ni)	2017/04/30	101	80 - 120	97	80 - 120	<0.0010	mg/L				
4957442	. Phosphorus (P)	2017/04/30	113	80 - 120	104	80 - 120	<0.10	mg/L				
4957442	. Potassium (K)	2017/04/30	104	80 - 120	98	80 - 120	<0.20	mg/L	0.69	20		
4957442	. Selenium (Se)	2017/04/30	100	80 - 120	95	80 - 120	<0.0020	mg/L	NC	20		
4957442	. Silicon (Si)	2017/04/30	101	80 - 120	95	80 - 120	<0.050	mg/L				
4957442	. Silver (Ag)	2017/04/30	103	80 - 120	97	80 - 120	<0.00010	mg/L				
4957442	. Sodium (Na)	2017/04/30	104	80 - 120	99	80 - 120	<0.10	mg/L	1.5	20		
4957442	. Strontium (Sr)	2017/04/30	103	80 - 120	96	80 - 120	<0.0010	mg/L				
4957442	. Thallium (Tl)	2017/04/30	99	80 - 120	94	80 - 120	<0.000050	mg/L				
4957442	. Titanium (Ti)	2017/04/30	102	80 - 120	95	80 - 120	<0.0050	mg/L				
4957442	. Uranium (U)	2017/04/30	102	80 - 120	97	80 - 120	<0.00010	mg/L	0.71	20		
4957442	. Vanadium (V)	2017/04/30	103	80 - 120	96	80 - 120	<0.00050	mg/L				
4957442	. Zinc (Zn)	2017/04/30	102	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
4957442	. Zirconium (Zr)	2017/04/30	108	80 - 120	100	80 - 120	<0.0010	mg/L				
4957452	Aroclor 1242	2017/04/27					<0.05	ug/L	NC	30		
4957452	Aroclor 1248	2017/04/27					<0.05	ug/L	NC	30		
4957452	Aroclor 1254	2017/04/27					<0.05	ug/L	NC	30		
4957452	Aroclor 1260	2017/04/27	100	60 - 130	89	60 - 130	<0.05	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957452	Total PCB	2017/04/27	100	60 - 130	89	60 - 130	<0.05	ug/L	NC	40		
4957539	Chromium (VI)	2017/04/27	100	80 - 120	96	80 - 120	<0.50	ug/L	1.2	20		
4957630	Chromium (VI)	2017/04/27	95	80 - 120	95	80 - 120	<0.50	ug/L	7.9	20		
4957725	Dissolved Organic Carbon	2017/04/27	101	80 - 120	103	80 - 120	<0.20	mg/L	7.5	20		
4957849	Total Suspended Solids	2017/04/27					<10	mg/L	NC	25	95	85 - 115
4957856	Total Dissolved Solids	2017/04/28					<10	mg/L	0.94	25	99	90 - 110
4958159	Acidity as CaCO3						<10	mg/L	NC	25		
4958445	Total Suspended Solids	2017/05/05					<10	mg/L	NC	25	97	85 - 115
4958446	. Aluminum (Al)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Antimony (Sb)	2017/04/28	103	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Arsenic (As)	2017/04/28	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Barium (Ba)	2017/04/28	99	80 - 120	95	80 - 120	<0.0020	mg/L	1.7	20		
4958446	. Beryllium (Be)	2017/04/28	100	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Boron (B)	2017/04/28	96	80 - 120	92	80 - 120	<0.010	mg/L	0.16	20		
4958446	. Cadmium (Cd)	2017/04/28	101	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
4958446	. Calcium (Ca)	2017/04/28	NC	80 - 120	95	80 - 120	<0.20	mg/L	1.4	20		
4958446	. Chromium (Cr)	2017/04/28	102	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Cobalt (Co)	2017/04/28	98	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Copper (Cu)	2017/04/28	104	80 - 120	97	80 - 120	<0.0010	mg/L	6.4	20		
4958446	. Iron (Fe)	2017/04/28	96	80 - 120	95	80 - 120	<0.10	mg/L	0.64	20		
4958446	. Lead (Pb)	2017/04/28	101	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Magnesium (Mg)	2017/04/28	97	80 - 120	99	80 - 120	<0.050	mg/L	1.0	20		
4958446	. Manganese (Mn)	2017/04/28	96	80 - 120	92	80 - 120	<0.0020	mg/L	1.2	20		
4958446	. Molybdenum (Mo)	2017/04/28	105	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Nickel (Ni)	2017/04/28	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Phosphorus (P)	2017/04/28	104	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
4958446	. Potassium (K)	2017/04/28	99	80 - 120	97	80 - 120	<0.20	mg/L	0.73	20		
4958446	. Selenium (Se)	2017/04/28	102	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4958446	. Silicon (Si)	2017/04/28	101	80 - 120	97	80 - 120	<0.050	mg/L	1.9	20		
4958446	. Silver (Ag)	2017/04/28	100	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958446	. Sodium (Na)	2017/04/28	NC	80 - 120	99	80 - 120	0.15, RDL=0.10	mg/L	1.5	20		
4958446	. Strontium (Sr)	2017/04/28	96	80 - 120	89	80 - 120	<0.0010	mg/L	1.7	20		
4958446	. Thallium (Tl)	2017/04/28	102	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
4958446	. Titanium (Ti)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Uranium (U)	2017/04/28	104	80 - 120	97	80 - 120	<0.00010	mg/L	2.6	20		
4958446	. Vanadium (V)	2017/04/28	101	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Zinc (Zn)	2017/04/28	98	80 - 120	95	80 - 120	<0.0050	mg/L	4.5	20		
4958446	. Zirconium (Zr)	2017/04/28	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958448	Total Dissolved Solids	2017/04/28					<10	mg/L	1.6	25	99	90 - 110
4958488	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	100	80 - 120	<1.0	mg/L	0.074	20		
4958494	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	102	80 - 120	<1.0	mg/L	0.32	20		
4958502	Orthophosphate (P)	2017/04/28	102	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
4958621	Total Organic Carbon (TOC)	2017/04/28	NC	80 - 120	102	80 - 120	<0.20	mg/L	0.58	20		
4959787	Total Ammonia-N	2017/04/29	95	80 - 120	99	85 - 115	<0.050	mg/L	NC	20		
4959892	Dissolved Organic Carbon	2017/04/29	101	80 - 120	102	80 - 120	<0.20	mg/L	3.6	20		
4959935	Mercury (Hg)	2017/05/01	111	75 - 125	104	80 - 120	<0.1	ug/L	NC	20		
4959977	Total Organic Carbon (TOC)	2017/04/28	104	80 - 120	104	80 - 120	<0.20	mg/L	0.19	20		
4960272	Total Ammonia-N	2017/04/29	96	80 - 120	97	85 - 115	<0.050	mg/L	NC	20		
4961356	1,2,4-Trichlorobenzene	2017/04/29	84	40 - 130	80	40 - 130	<0.1	ug/L	NC	30		
4961356	1-Methylnaphthalene	2017/04/29	78	50 - 130	72	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4,5-Trichlorophenol	2017/04/29	109	50 - 130	108	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4,6-Trichlorophenol	2017/04/29	100	50 - 130	104	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4-Dichlorophenol	2017/04/29	94	50 - 130	108	50 - 130	<0.1	ug/L	NC	30		
4961356	2,4-Dimethylphenol	2017/04/29	28 (2)	30 - 130	61	30 - 130	<0.5	ug/L	NC	30		
4961356	2,4-Dinitrophenol	2017/04/29	119	30 - 130	96	30 - 130	<2	ug/L	NC	30		
4961356	2,4-Dinitrotoluene	2017/04/29	108	50 - 130	110	50 - 130	<0.3	ug/L	NC	30		
4961356	2,6-Dinitrotoluene	2017/04/29	96	50 - 130	98	50 - 130	<0.3	ug/L	NC	30		
4961356	2-Chlorophenol	2017/04/29	80	50 - 130	83	50 - 130	<0.1	ug/L	NC	30		
4961356	2-Methylnaphthalene	2017/04/29	75	50 - 130	69	50 - 130	<0.2	ug/L	NC	30		
4961356	3,3'-Dichlorobenzidine	2017/04/29	76	30 - 130	119	30 - 130	<0.5	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961356	Acenaphthene	2017/04/29	92	50 - 130	90	50 - 130	<0.2	ug/L	NC	30		
4961356	Acenaphthylene	2017/04/29	91	50 - 130	89	50 - 130	<0.2	ug/L	NC	30		
4961356	Anthracene	2017/04/29	93	50 - 130	88	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(a)anthracene	2017/04/29	114	50 - 130	109	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(a)pyrene	2017/04/29	109	50 - 130	102	50 - 130	<0.01	ug/L	NC	30		
4961356	Benzo(b,j)fluoranthene	2017/04/29	112	50 - 130	104	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(g,h,i)perylene	2017/04/29	117	50 - 130	127	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(k)fluoranthene	2017/04/29	112	50 - 130	100	50 - 130	<0.05	ug/L	NC	30		
4961356	Biphenyl	2017/04/29	80	50 - 130	79	50 - 130	<0.1	ug/L	NC	30		
4961356	Bis(2-chloroethyl)ether	2017/04/29	84	50 - 130	87	50 - 130	<0.5	ug/L	NC	30		
4961356	Bis(2-chloroisopropyl)ether	2017/04/29	86	50 - 130	91	50 - 130	<0.5	ug/L	NC	30		
4961356	Bis(2-ethylhexyl)phthalate	2017/04/29	109	50 - 130	102	50 - 130	<1	ug/L	NC	30		
4961356	Chrysene	2017/04/29	108	50 - 130	102	50 - 130	<0.05	ug/L	NC	30		
4961356	Dibenz(a,h)anthracene	2017/04/29	112	50 - 130	127	50 - 130	<0.1	ug/L	NC	30		
4961356	Diethyl phthalate	2017/04/29	111	50 - 130	108	50 - 130	<0.1	ug/L	NC	30		
4961356	Dimethyl phthalate	2017/04/29	99	50 - 130	98	50 - 130	<0.1	ug/L	NC	30		
4961356	Fluoranthene	2017/04/29	108	50 - 130	107	50 - 130	<0.2	ug/L	NC	30		
4961356	Fluorene	2017/04/29	93	50 - 130	91	50 - 130	<0.2	ug/L	NC	30		
4961356	Indeno(1,2,3-cd)pyrene	2017/04/29	114	50 - 130	128	50 - 130	<0.1	ug/L	NC	30		
4961356	Naphthalene	2017/04/29	82	50 - 130	81	50 - 130	<0.2	ug/L	NC	30		
4961356	p-Chloroaniline	2017/04/29	49	30 - 130	100	30 - 130	<1	ug/L	NC	30		
4961356	Pentachlorophenol	2017/04/29	83	50 - 130	77	50 - 130	<0.1	ug/L	NC	30		
4961356	Phenanthrene	2017/04/29	93	50 - 130	88	50 - 130	<0.1	ug/L	NC	30		
4961356	Phenol	2017/04/29	35	30 - 130	38	30 - 130	<0.5	ug/L	NC	30		
4961356	Pyrene	2017/04/29	123	50 - 130	114	50 - 130	<0.05	ug/L	NC	30		
4961389	F2 (C10-C16 Hydrocarbons)	2017/04/30	104	50 - 130	102	60 - 130	<100	ug/L	NC	30		
4961389	F3 (C16-C34 Hydrocarbons)	2017/04/30	93	50 - 130	95	60 - 130	<200	ug/L	NC	30		
4961389	F4 (C34-C50 Hydrocarbons)	2017/04/30	97	50 - 130	97	60 - 130	<200	ug/L	NC	30		
4961496	Mercury (Hg)	2017/05/01	112	75 - 125	108	80 - 120	<0.1	ug/L	NC	20		
4961551	Dissolved Organic Carbon	2017/04/29	100	80 - 120	101	80 - 120	<0.20	mg/L	1.0	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961607	Free Cyanide	2017/04/29	108	80 - 120	103	80 - 120	<1	ug/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) POTENTIAL EXCEEDANCE FOR PARAMETER

(2) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

VALIDATION SIGNATURE PAGE

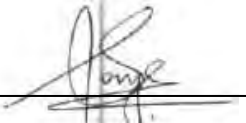
The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Brad Newman, Scientific Specialist



Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division



Sonja Elavinamannil, Analyst I

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT	<input checked="" type="checkbox"/>		TEMP	2 0 0	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	6 0 6	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	4 6 6	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	2 2 3	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	6 4 6	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	3 7 2	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	0 1 2	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	2 5 3	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP	4 1 2	
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	<input checked="" type="checkbox"/>				
INTACT	<input checked="" type="checkbox"/>		TEMP		
ICE PRESENT	<input checked="" type="checkbox"/>		1	2	3

MAXXAM JOB#:					
B781996					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT			TEMP		
ICE PRESENT			1	2	3

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	JOCELYN GUENTHER	2017/04/25	08 30



ADDITIONAL COOLER TEMPERATURE RECORD CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:				MAXXAM JOB#: 8781996			
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1974	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-1 0 -1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 2 0	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 -1 -1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-1 0 3	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-1 0 -1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 1 1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 1 0	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 -1 -1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4 of 4	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 -1 -1	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID	CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3	INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	

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 M. J. ...	2017/04/05	13:20



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25-Apr-17 08:30

Deepthi Shaji
 B781996

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INVOICE INFORMATION: Company Name: #9197 Stantec Consulting Ltd Contact Name: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com		REPORT INFORMATION (if differs from invoice): Company Name: #18379 Stantec Consulting Ltd Contact Name: Report - 1609-00764 Address: ON Phone: send Jamie Koche stantec.com Email: aaron.warkentin@stantec.com, brant.gill@stantec.com		PROJECT INFORMATION: Quotation #: B48218 Task #: 160900764 Project #: 1609 Profit Centre: Clarington IS - Private Well Site #: SEL ENV-604 Sampled By: JK		Use Only: Bottle Order #: 607238 Project Manager: Deepthi Shaji	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011) <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table	Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA <input type="checkbox"/> Municipality <input type="checkbox"/> PWQO <input type="checkbox"/> Other	Special Instructions
--	--	-----------------------------

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample Location/Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle) Metals / Hg / Cr-VI	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)												# of Bottles	Comments
						Acidity	Chloride & Free Chlorine	Fluoride & Turbidity	Mercury & TOC	Total Coliform/E. coli Background	TDS & TSS	NO ₃ -Nitrate (Drinking Water) - Nitrate Filter	Reg 153 PCBs	Reg 153 VOCs & P-FA	SVDGs				
WG-160900764-20170424-3K1		APR 24 2017	1025	GW	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19		
WG-160900764-20170424-3K2			1103	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K3			1136	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K4			1238	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K5			1318	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K6			1405	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K7			1457	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K8			1545	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424-3K9			1620	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
WG-160900764-20170424				GW															

RELINQUISHED BY: (Signature/Print) JAMIE KOCH	Date: (YY/MM/DD) 17/04/24	Time 2045	RECEIVED BY: (Signature/Print) [Signature]	Date: (YY/MM/DD) 17/04/25	Time 08:30	# jars used and not submitted	Laboratory Use Only Time Sensitive: REFER TO ACTR Temperature (°C) on Receipt: REFER TO ACTR Custody Seal Present: <input checked="" type="checkbox"/> Intact: <input checked="" type="checkbox"/>
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* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

White: Maxxa Yellow: Client

SAMPLES MUST BE KEPT COOL (= 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 607238-02-01, 607238-03-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/09
 Report #: R4453502
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B783174

Received: 2017/04/26, 08:30

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	8	N/A	2017/05/02	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	4	N/A	2017/05/08	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	12	2017/05/03	2017/05/04	CAM SOP-00301	EPA 8270 m
Acidity as CaCO3 in liquid (1, 2)	11	N/A	2017/05/05	SLA SOP-00100	APHA SM2310B (Mod)
Acidity as CaCO3 in liquid (1, 2)	1	N/A	2017/05/12	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	7	N/A	2017/04/29	CAM SOP-00448	SM 22 2320 B m
Alkalinity	5	N/A	2017/04/30	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	7	N/A	2017/04/30	CAM SOP-00102	APHA 4500-CO2 D
Carbonate, Bicarbonate and Hydroxide	5	N/A	2017/05/01	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	12	N/A	2017/04/29		EPA 8260C m
Chloride by Automated Colourimetry	8	N/A	2017/04/28	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	4	N/A	2017/04/29	CAM SOP-00463	EPA 325.2 m
Conductivity	7	N/A	2017/04/29	CAM SOP-00414	SM 22 2510 m
Conductivity	5	N/A	2017/04/30	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	12	N/A	2017/04/27	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	12	N/A	2017/04/30	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (3)	4	N/A	2017/04/28	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	8	N/A	2017/04/29	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (4)	12	2017/05/01	2017/05/02	CAM SOP-00316	CCME PHC-CWS m
Fluoride	7	2017/04/28	2017/04/29	CAM SOP-00449	SM 22 4500-F C m
Fluoride	5	2017/04/29	2017/04/30	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2017/04/29	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	8	N/A	2017/05/01	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	12	2017/05/01	2017/05/02	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (5)	4	N/A	2017/04/28	CAM SOP-00447	EPA 6020B m
Metals Analysis by ICPMS (as received) (5)	8	N/A	2017/04/30	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	3	N/A	2017/04/30		
Ion Balance (% Difference)	9	N/A	2017/05/01		
Anion and Cation Sum	3	N/A	2017/04/30		

Your Project #: 160900764
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B783174

Received: 2017/04/26, 08:30

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Anion and Cation Sum	9	N/A	2017/05/01		
Total Coliforms/ E. coli, CFU/100mL	12	N/A	2017/04/26	CAM SOP-00551	MOE E3407
Total Ammonia-N	2	N/A	2017/04/29	CAM SOP-00441	EPA GS I-2522-90 m
Total Ammonia-N	5	N/A	2017/05/01	CAM SOP-00441	EPA GS I-2522-90 m
Total Ammonia-N	5	N/A	2017/05/02	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (6)	2	N/A	2017/04/28	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (6)	8	N/A	2017/04/29	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (6)	2	N/A	2017/04/30	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	12	2017/04/27	2017/04/28	CAM SOP-00309	EPA 8082A m
pH	7	N/A	2017/04/29	CAM SOP-00413	SM 4500H+ B m
pH	5	N/A	2017/04/30	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	8	N/A	2017/04/28	CAM SOP-00461	EPA 365.1 m
Orthophosphate	4	N/A	2017/04/29	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	3	N/A	2017/04/30		
Sat. pH and Langelier Index (@ 20C)	9	N/A	2017/05/01		
Sat. pH and Langelier Index (@ 4C)	3	N/A	2017/04/30		
Sat. pH and Langelier Index (@ 4C)	9	N/A	2017/05/01		
Sulphate by Automated Colourimetry	8	N/A	2017/04/28	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	4	N/A	2017/04/29	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	3	N/A	2017/04/30		
Total Dissolved Solids (TDS calc)	9	N/A	2017/05/01		
Total Dissolved Solids	2	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540C m
Total Dissolved Solids	10	2017/04/27	2017/05/01	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (7)	8	N/A	2017/04/29	CAM SOP-00446	SM 22 5310B m
Total Organic Carbon (TOC) (7)	4	N/A	2017/05/01	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	10	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	2	2017/04/27	2017/05/05	CAM SOP-00428	SM 22 2540D m
Turbidity	12	N/A	2017/04/29	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	11	N/A	2017/04/28	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	1	N/A	2017/04/29	CAM SOP-00230	EPA 8260C m

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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B783174

Received: 2017/04/26, 08:30

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) Metals analysis was performed on the sample 'as received'.
- (6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (7) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Deepthi Shaji, Project Manager

Email: dshaji@maxxam.ca

Phone# (905)817-5700 Ext:5807

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Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your C.O.C. #: 607238-02-01, 607238-03-01

Attention:Report - 1609-00764

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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B783174

Received: 2017/04/26, 08:30

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU896		EGU897		
Sampling Date		2017/04/25 08:45		2017/04/25 09:25		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764-20170425-JK10	QC Batch	WG-160900764-20170425-JK11	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L	6.06	4955797	3.21	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	4956709	120	1.0	4956709
Calculated TDS	mg/L	360	4955517	180	1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.3	4956709	1.6	1.0	4956709
Cation Sum	me/L	6.13	4955797	3.15	N/A	4955797
Hardness (CaCO3)	mg/L	<1.0	4956771	86	1.0	4956771
Ion Balance (% Difference)	%	0.570	4955512	0.930	N/A	4955512
Langelier Index (@ 20C)	N/A	-1.58	4955798	0.0810		4955798
Langelier Index (@ 4C)	N/A	-1.83	4955799	-0.169		4955799
Saturation pH (@ 20C)	N/A	9.61	4955798	8.06		4955798
Saturation pH (@ 4C)	N/A	9.86	4955799	8.31		4955799

Inorganics

Total Ammonia-N	mg/L	<0.050	4962360	0.080	0.050	4960227
Conductivity	umho/cm	600	4959893	300	1.0	4959893
Dissolved Organic Carbon	mg/L	0.86	4959909	0.62	0.20	4959892
Orthophosphate (P)	mg/L	<0.010	4959054	<0.010	0.010	4959054
pH	pH	8.03	4959890	8.14		4959890
Dissolved Sulphate (SO4)	mg/L	30	4959043	32	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	230	4959870	120	1.0	4959870
Dissolved Chloride (Cl)	mg/L	14	4959038	2.1	1.0	4959038
Nitrite (N)	mg/L	<0.010	4959902	<0.010	0.010	4959902
Nitrate (N)	mg/L	6.23	4959902	<0.10	0.10	4959902

Metals

. Aluminum (Al)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Antimony (Sb)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Arsenic (As)	mg/L	<0.0010	4958454	0.0028	0.0010	4958454
. Barium (Ba)	mg/L	<0.0020	4958454	0.033	0.0020	4958454
. Beryllium (Be)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Boron (B)	mg/L	<0.010	4958454	0.081	0.010	4958454
. Cadmium (Cd)	mg/L	<0.00010	4958454	<0.00010	0.00010	4958454

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU896		EGU897		
Sampling Date		2017/04/25 08:45		2017/04/25 09:25		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	QC Batch	WG-160900764- 20170425-JK11	RDL	QC Batch
. Calcium (Ca)	mg/L	0.29	4958454	16	0.20	4958454
. Chromium (Cr)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Cobalt (Co)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Copper (Cu)	mg/L	0.011	4958454	<0.0010	0.0010	4958454
. Iron (Fe)	mg/L	<0.10	4958454	<0.10	0.10	4958454
. Lead (Pb)	mg/L	0.00050	4958454	<0.00050	0.00050	4958454
. Magnesium (Mg)	mg/L	<0.050	4958454	11	0.050	4958454
. Manganese (Mn)	mg/L	<0.0020	4958454	0.0098	0.0020	4958454
. Molybdenum (Mo)	mg/L	<0.00050	4958454	0.0054	0.00050	4958454
. Nickel (Ni)	mg/L	<0.0010	4958454	<0.0010	0.0010	4958454
. Phosphorus (P)	mg/L	<0.10	4958454	<0.10	0.10	4958454
. Potassium (K)	mg/L	<0.20	4958454	0.86	0.20	4958454
. Selenium (Se)	mg/L	<0.0020	4958454	<0.0020	0.0020	4958454
. Silicon (Si)	mg/L	5.9	4958454	6.2	0.050	4958454
. Silver (Ag)	mg/L	<0.00010	4958454	<0.00010	0.00010	4958454
. Sodium (Na)	mg/L	140	4958454	32	0.10	4958454
. Strontium (Sr)	mg/L	<0.0010	4958454	0.36	0.0010	4958454
. Thallium (Tl)	mg/L	<0.000050	4958454	<0.000050	0.000050	4958454
. Titanium (Ti)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Uranium (U)	mg/L	0.00063	4958454	0.00043	0.00010	4958454
. Vanadium (V)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Zinc (Zn)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Zirconium (Zr)	mg/L	<0.0010	4958454	<0.0010	0.0010	4958454

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU898			EGU899		
Sampling Date		2017/04/25 09:57			2017/04/25 10:42		
COC Number		607238-02-01			607238-02-01		
	UNITS	WG-160900764- 20170425-JK12	RDL	QC Batch	WG-160900764- 20170425-JK13	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	13.0	N/A	4955797	3.32	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220	1.0	4956709	150	1.0	4956709
Calculated TDS	mg/L	780	1.0	4955517	180	1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	4956709	1.9	1.0	4956709
Cation Sum	me/L	14.0	N/A	4955797	3.31	N/A	4955797
Hardness (CaCO3)	mg/L	43	1.0	4956771	130	1.0	4956771
Ion Balance (% Difference)	%	3.97	N/A	4955512	0.180	N/A	4955512
Langelier Index (@ 20C)	N/A	-0.525		4955798	0.383		4955798
Langelier Index (@ 4C)	N/A	-0.772		4955799	0.133		4955799
Saturation pH (@ 20C)	N/A	8.39		4955798	7.73		4955798
Saturation pH (@ 4C)	N/A	8.64		4955799	7.98		4955799

Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	4960227	0.13	0.050	4961702
Conductivity	umho/cm	1500	1.0	4959893	310	1.0	4960930
Dissolved Organic Carbon	mg/L	1.0	0.20	4959909	0.70	0.20	4959909
Orthophosphate (P)	mg/L	<0.010	0.010	4959110	0.011	0.010	4959110
pH	pH	7.87		4959890	8.12		4960936
Dissolved Sulphate (SO4)	mg/L	30	1.0	4959108	9.6	1.0	4959108
Alkalinity (Total as CaCO3)	mg/L	230	1.0	4959870	150	1.0	4960931
Dissolved Chloride (Cl)	mg/L	270	3.0	4959103	1.3	1.0	4959103
Nitrite (N)	mg/L	<0.010	0.010	4959058	<0.010	0.010	4959058
Nitrate (N)	mg/L	1.06	0.10	4959058	<0.10	0.10	4959058

Metals							
. Aluminum (Al)	mg/L	<0.0050	0.0050	4958454	0.0052	0.0050	4958454
. Antimony (Sb)	mg/L	<0.00050	0.00050	4958454	<0.00050	0.00050	4958454
. Arsenic (As)	mg/L	<0.0010	0.0010	4958454	0.0017	0.0010	4958454
. Barium (Ba)	mg/L	0.015	0.0020	4958454	0.12	0.0020	4958454
. Beryllium (Be)	mg/L	<0.00050	0.00050	4958454	<0.00050	0.00050	4958454
. Boron (B)	mg/L	0.028	0.010	4958454	0.045	0.010	4958454
. Cadmium (Cd)	mg/L	<0.00010	0.00010	4958454	<0.00010	0.00010	4958454

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU898			EGU899		
Sampling Date		2017/04/25 09:57			2017/04/25 10:42		
COC Number		607238-02-01			607238-02-01		
	UNITS	WG-160900764- 20170425-JK12	RDL	QC Batch	WG-160900764- 20170425-JK13	RDL	QC Batch
. Calcium (Ca)	mg/L	6.0	0.20	4958454	29	0.20	4958454
. Chromium (Cr)	mg/L	<0.0050	0.0050	4958454	<0.0050	0.0050	4958454
. Cobalt (Co)	mg/L	<0.00050	0.00050	4958454	<0.00050	0.00050	4958454
. Copper (Cu)	mg/L	0.029	0.0010	4958454	<0.0010	0.0010	4958454
. Iron (Fe)	mg/L	<0.10	0.10	4958454	0.51	0.10	4958454
. Lead (Pb)	mg/L	<0.00050	0.00050	4958454	<0.00050	0.00050	4958454
. Magnesium (Mg)	mg/L	6.8	0.050	4958454	15	0.050	4958454
. Manganese (Mn)	mg/L	0.0030	0.0020	4958454	0.022	0.0020	4958454
. Molybdenum (Mo)	mg/L	0.00061	0.00050	4958454	0.0011	0.00050	4958454
. Nickel (Ni)	mg/L	<0.0010	0.0010	4958454	<0.0010	0.0010	4958454
. Phosphorus (P)	mg/L	<0.10	0.10	4958454	<0.10	0.10	4958454
. Potassium (K)	mg/L	0.52	0.20	4958454	0.89	0.20	4958454
. Selenium (Se)	mg/L	<0.0020	0.0020	4958454	<0.0020	0.0020	4958454
. Silicon (Si)	mg/L	6.6	0.050	4958454	10	0.050	4958454
. Silver (Ag)	mg/L	<0.00010	0.00010	4958454	<0.00010	0.00010	4958454
. Sodium (Na)	mg/L	300	0.10	4958454	13	0.10	4958454
. Strontium (Sr)	mg/L	0.029	0.0010	4958454	0.31	0.0010	4958454
. Thallium (Tl)	mg/L	<0.000050	0.000050	4958454	<0.000050	0.000050	4958454
. Titanium (Ti)	mg/L	<0.0050	0.0050	4958454	<0.0050	0.0050	4958454
. Uranium (U)	mg/L	0.00034	0.00010	4958454	<0.00010	0.00010	4958454
. Vanadium (V)	mg/L	<0.00050	0.00050	4958454	<0.00050	0.00050	4958454
. Zinc (Zn)	mg/L	0.010	0.0050	4958454	<0.0050	0.0050	4958454
. Zirconium (Zr)	mg/L	<0.0010	0.0010	4958454	<0.0010	0.0010	4958454
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU899		EGU900		
Sampling Date		2017/04/25 10:42		2017/04/25 11:20		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK13 Lab-Dup	QC Batch	WG-160900764- 20170425-JK14	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		4955797	3.98	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L		4956709	180	1.0	4956709
Calculated TDS	mg/L		4955517	220	1.0	4955517
Carb. Alkalinity (calc. as CaCO ₃)	mg/L		4956709	1.8	1.0	4956709
Cation Sum	me/L		4955797	3.92	N/A	4955797
Hardness (CaCO ₃)	mg/L		4956771	180	1.0	4956771
Ion Balance (% Difference)	%		4955512	0.820	N/A	4955512
Langelier Index (@ 20C)	N/A		4955798	0.554		4955798
Langelier Index (@ 4C)	N/A		4955799	0.304		4955799
Saturation pH (@ 20C)	N/A		4955798	7.47		4955798
Saturation pH (@ 4C)	N/A		4955799	7.72		4955799

Inorganics

Total Ammonia-N	mg/L		4961702	0.079	0.050	4961702
Conductivity	umho/cm	310	4960930	370	1.0	4959893
Dissolved Organic Carbon	mg/L		4959909	0.71	0.20	4959892
Orthophosphate (P)	mg/L		4959110	<0.010	0.010	4959054
pH	pH	8.13	4960936	8.02		4959890
Dissolved Sulphate (SO ₄)	mg/L		4959108	11	1.0	4959043
Alkalinity (Total as CaCO ₃)	mg/L	160	4960931	190	1.0	4959870
Dissolved Chloride (Cl)	mg/L		4959103	1.7	1.0	4959038
Nitrite (N)	mg/L		4959058	<0.010	0.010	4959902
Nitrate (N)	mg/L		4959058	<0.10	0.10	4959902

Metals

. Aluminum (Al)	mg/L		4958454	<0.0050	0.0050	4958446
. Antimony (Sb)	mg/L		4958454	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L		4958454	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L		4958454	0.16	0.0020	4958446
. Beryllium (Be)	mg/L		4958454	<0.00050	0.00050	4958446
. Boron (B)	mg/L		4958454	0.019	0.010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU899		EGU900		
Sampling Date		2017/04/25 10:42		2017/04/25 11:20		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK13 Lab-Dup	QC Batch	WG-160900764- 20170425-JK14	RDL	QC Batch
. Cadmium (Cd)	mg/L		4958454	<0.00010	0.00010	4958446
. Calcium (Ca)	mg/L		4958454	46	0.20	4958446
. Chromium (Cr)	mg/L		4958454	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L		4958454	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L		4958454	0.0013	0.0010	4958446
. Iron (Fe)	mg/L		4958454	1.3	0.10	4958446
. Lead (Pb)	mg/L		4958454	<0.00050	0.00050	4958446
. Magnesium (Mg)	mg/L		4958454	15	0.050	4958446
. Manganese (Mn)	mg/L		4958454	0.020	0.0020	4958446
. Molybdenum (Mo)	mg/L		4958454	0.00072	0.00050	4958446
. Nickel (Ni)	mg/L		4958454	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L		4958454	<0.10	0.10	4958446
. Potassium (K)	mg/L		4958454	1.0	0.20	4958446
. Selenium (Se)	mg/L		4958454	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L		4958454	12	0.050	4958446
. Silver (Ag)	mg/L		4958454	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L		4958454	6.8	0.10	4958446
. Strontium (Sr)	mg/L		4958454	0.23	0.0010	4958446
. Thallium (Tl)	mg/L		4958454	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L		4958454	<0.0050	0.0050	4958446
. Uranium (U)	mg/L		4958454	<0.00010	0.00010	4958446
. Vanadium (V)	mg/L		4958454	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L		4958454	<0.0050	0.0050	4958446
. Zirconium (Zr)	mg/L		4958454	<0.0010	0.0010	4958446
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Lab-Dup = Laboratory Initiated Duplicate						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU901	EGU901		EGU902		
Sampling Date		2017/04/25 11:58	2017/04/25 11:58		2017/04/25 12:55		
COC Number		607238-02-01	607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK15 Lab-Dup	QC Batch	WG-160900764- 20170425-JK16	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	4.39		4955797	5.52	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200		4956709	250	1.0	4956709
Calculated TDS	mg/L	240		4955517	300	1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.3		4956709	2.5	1.0	4956709
Cation Sum	me/L	4.39		4955797	5.30	N/A	4955797
Hardness (CaCO3)	mg/L	200		4956771	1.1	1.0	4956771
Ion Balance (% Difference)	%	0.0800		4955512	2.07	N/A	4955512
Langelier Index (@ 20C)	N/A	0.745		4955798	-1.36		4955798
Langelier Index (@ 4C)	N/A	0.495		4955799	-1.61		4955799
Saturation pH (@ 20C)	N/A	7.34		4955798	9.39		4955798
Saturation pH (@ 4C)	N/A	7.59		4955799	9.64		4955799
Inorganics							
Total Ammonia-N	mg/L	0.093		4961702	<0.050	0.050	4961702
Conductivity	umho/cm	400		4959893	520	1.0	4960893
Dissolved Organic Carbon	mg/L	1.5		4959909	2.0	0.20	4959892
Orthophosphate (P)	mg/L	<0.010		4959054	<0.010	0.010	4959054
pH	pH	8.09		4959890	8.03		4960899
Dissolved Sulphate (SO4)	mg/L	14		4959043	12	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	200		4959870	250	1.0	4960882
Dissolved Chloride (Cl)	mg/L	2.4		4959038	7.8	1.0	4959038
Nitrite (N)	mg/L	<0.010	<0.010	4959902	<0.010	0.010	4959902
Nitrate (N)	mg/L	<0.10	<0.10	4959902	1.04	0.10	4959902
Metals							
. Aluminum (Al)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Antimony (Sb)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L	0.13		4958446	<0.0020	0.0020	4958446
. Beryllium (Be)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Boron (B)	mg/L	0.011		4958446	<0.010	0.010	4958446
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							
N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU901	EGU901		EGU902		
Sampling Date		2017/04/25 11:58	2017/04/25 11:58		2017/04/25 12:55		
COC Number		607238-02-01	607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK15 Lab-Dup	QC Batch	WG-160900764- 20170425-JK16	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010		4958446	<0.00010	0.00010	4958446
. Calcium (Ca)	mg/L	56		4958446	0.44	0.20	4958446
. Chromium (Cr)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L	0.0013		4958446	0.019	0.0010	4958446
. Iron (Fe)	mg/L	1.8		4958446	<0.10	0.10	4958446
. Lead (Pb)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Magnesium (Mg)	mg/L	16		4958446	<0.050	0.050	4958446
. Manganese (Mn)	mg/L	0.037		4958446	<0.0020	0.0020	4958446
. Molybdenum (Mo)	mg/L	0.00080		4958446	<0.00050	0.00050	4958446
. Nickel (Ni)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L	<0.10		4958446	<0.10	0.10	4958446
. Potassium (K)	mg/L	0.89		4958446	<0.20	0.20	4958446
. Selenium (Se)	mg/L	<0.0020		4958446	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L	9.1		4958446	3.1	0.050	4958446
. Silver (Ag)	mg/L	<0.00010		4958446	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L	4.6		4958446	120	0.10	4958446
. Strontium (Sr)	mg/L	0.21		4958446	<0.0010	0.0010	4958446
. Thallium (Tl)	mg/L	<0.000050		4958446	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Uranium (U)	mg/L	<0.00010		4958446	0.00089	0.00010	4958446
. Vanadium (V)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Zirconium (Zr)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU902		EGU903		
Sampling Date		2017/04/25 12:55		2017/04/25 13:32		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK16 Lab-Dup	QC Batch	WG-160900764- 20170425-JK17	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		4955797	8.27	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		4956709	330	1.0	4956709
Calculated TDS	mg/L		4955517	450	1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L		4956709	1.9	1.0	4956709
Cation Sum	me/L		4955797	8.28	N/A	4955797
Hardness (CaCO3)	mg/L		4956771	380	1.0	4956771
Ion Balance (% Difference)	%		4955512	0.0900	N/A	4955512
Langelier Index (@ 20C)	N/A		4955798	0.906		4955798
Langelier Index (@ 4C)	N/A		4955799	0.658		4955799
Saturation pH (@ 20C)	N/A		4955798	6.89		4955798
Saturation pH (@ 4C)	N/A		4955799	7.14		4955799

Inorganics

Total Ammonia-N	mg/L		4961702	<0.050	0.050	4961702
Conductivity	umho/cm	520	4960893	800	1.0	4959893
Dissolved Organic Carbon	mg/L		4959892	1.2	0.20	4959892
Orthophosphate (P)	mg/L		4959054	<0.010	0.010	4959054
pH	pH	7.99	4960899	7.79		4959890
Dissolved Sulphate (SO4)	mg/L		4959043	39	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	250	4960882	330	1.0	4959870
Dissolved Chloride (Cl)	mg/L		4959038	14	1.0	4959038
Nitrite (N)	mg/L		4959902	<0.010	0.010	4959917
Nitrate (N)	mg/L		4959902	6.39	0.10	4959917

Metals

. Aluminum (Al)	mg/L		4958446	<0.0050	0.0050	4958446
. Antimony (Sb)	mg/L		4958446	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L		4958446	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L		4958446	0.11	0.0020	4958446
. Beryllium (Be)	mg/L		4958446	<0.00050	0.00050	4958446
. Boron (B)	mg/L		4958446	0.011	0.010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU902		EGU903		
Sampling Date		2017/04/25 12:55		2017/04/25 13:32		
COC Number		607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK16 Lab-Dup	QC Batch	WG-160900764- 20170425-JK17	RDL	QC Batch
. Cadmium (Cd)	mg/L		4958446	<0.00010	0.00010	4958446
. Calcium (Ca)	mg/L		4958446	110	0.20	4958446
. Chromium (Cr)	mg/L		4958446	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L		4958446	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L		4958446	0.013	0.0010	4958446
. Iron (Fe)	mg/L		4958446	<0.10	0.10	4958446
. Lead (Pb)	mg/L		4958446	0.00090	0.00050	4958446
. Magnesium (Mg)	mg/L		4958446	23	0.050	4958446
. Manganese (Mn)	mg/L		4958446	<0.0020	0.0020	4958446
. Molybdenum (Mo)	mg/L		4958446	<0.00050	0.00050	4958446
. Nickel (Ni)	mg/L		4958446	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L		4958446	<0.10	0.10	4958446
. Potassium (K)	mg/L		4958446	9.4	0.20	4958446
. Selenium (Se)	mg/L		4958446	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L		4958446	7.7	0.050	4958446
. Silver (Ag)	mg/L		4958446	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L		4958446	10	0.10	4958446
. Strontium (Sr)	mg/L		4958446	0.27	0.0010	4958446
. Thallium (Tl)	mg/L		4958446	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L		4958446	<0.0050	0.0050	4958446
. Uranium (U)	mg/L		4958446	0.0012	0.00010	4958446
. Vanadium (V)	mg/L		4958446	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L		4958446	0.11	0.0050	4958446
. Zirconium (Zr)	mg/L		4958446	<0.0010	0.0010	4958446
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Lab-Dup = Laboratory Initiated Duplicate						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU904		EGU905	EGU905		
Sampling Date		2017/04/25 14:25		2017/04/25 15:01	2017/04/25 15:01		
COC Number		607238-02-01		607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK18	QC Batch	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK19 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	4.42	4955797	8.84		N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200	4956709	360		1.0	4956709
Calculated TDS	mg/L	240	4955517	520		1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	4956709	1.9		1.0	4956709
Cation Sum	me/L	4.34	4955797	8.98		N/A	4955797
Hardness (CaCO3)	mg/L	200	4956771	7.0		1.0	4956771
Ion Balance (% Difference)	%	1.02	4955512	0.790		N/A	4955512
Langelier Index (@ 20C)	N/A	0.667	4955798	-0.779			4955798
Langelier Index (@ 4C)	N/A	0.418	4955799	-1.03			4955799
Saturation pH (@ 20C)	N/A	7.35	4955798	8.54			4955798
Saturation pH (@ 4C)	N/A	7.59	4955799	8.78			4955799
Inorganics							
Total Ammonia-N	mg/L	0.13	4962360	<0.050		0.050	4962360
Conductivity	umho/cm	410	4960893	840		1.0	4960893
Dissolved Organic Carbon	mg/L	1.2	4960036	2.1		0.20	4961615
Orthophosphate (P)	mg/L	<0.010	4960410	<0.010		0.010	4960410
pH	pH	8.01	4960899	7.76			4960899
Dissolved Sulphate (SO4)	mg/L	14	4960403	22		1.0	4960403
Alkalinity (Total as CaCO3)	mg/L	200	4960882	360		1.0	4960882
Dissolved Chloride (Cl)	mg/L	1.8	4960401	24		1.0	4960401
Nitrite (N)	mg/L	<0.010	4960426	<0.010		<0.010	4960429
Nitrate (N)	mg/L	<0.10	4960426	6.20		6.22	4960429
Metals							
. Aluminum (Al)	mg/L	<0.0050	4958454	0.0062		0.0050	4958454
. Antimony (Sb)	mg/L	<0.00050	4958454	<0.00050		0.00050	4958454
. Arsenic (As)	mg/L	<0.0010	4958454	<0.0010		0.0010	4958454
. Barium (Ba)	mg/L	0.17	4958454	<0.0020		0.0020	4958454
. Beryllium (Be)	mg/L	<0.00050	4958454	<0.00050		0.00050	4958454
. Boron (B)	mg/L	0.014	4958454	0.011		0.010	4958454
. Cadmium (Cd)	mg/L	<0.00010	4958454	<0.00010		0.00010	4958454

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU904		EGU905	EGU905		
Sampling Date		2017/04/25 14:25		2017/04/25 15:01	2017/04/25 15:01		
COC Number		607238-02-01		607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK18	QC Batch	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK19 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L	55	4958454	2.3		0.20	4958454
. Chromium (Cr)	mg/L	<0.0050	4958454	<0.0050		0.0050	4958454
. Cobalt (Co)	mg/L	<0.00050	4958454	<0.00050		0.00050	4958454
. Copper (Cu)	mg/L	0.0015	4958454	0.055		0.0010	4958454
. Iron (Fe)	mg/L	1.6	4958454	<0.10		0.10	4958454
. Lead (Pb)	mg/L	<0.00050	4958454	<0.00050		0.00050	4958454
. Magnesium (Mg)	mg/L	15	4958454	0.30		0.050	4958454
. Manganese (Mn)	mg/L	0.024	4958454	<0.0020		0.0020	4958454
. Molybdenum (Mo)	mg/L	0.00059	4958454	<0.00050		0.00050	4958454
. Nickel (Ni)	mg/L	<0.0010	4958454	<0.0010		0.0010	4958454
. Phosphorus (P)	mg/L	<0.10	4958454	<0.10		0.10	4958454
. Potassium (K)	mg/L	1.0	4958454	<0.20		0.20	4958454
. Selenium (Se)	mg/L	<0.0020	4958454	<0.0020		0.0020	4958454
. Silicon (Si)	mg/L	11	4958454	8.3		0.050	4958454
. Silver (Ag)	mg/L	<0.00010	4958454	0.00096		0.00010	4958454
. Sodium (Na)	mg/L	5.0	4958454	200		0.10	4958454
. Strontium (Sr)	mg/L	0.23	4958454	0.0052		0.0010	4958454
. Thallium (Tl)	mg/L	<0.000050	4958454	<0.000050		0.000050	4958454
. Titanium (Ti)	mg/L	<0.0050	4958454	<0.0050		0.0050	4958454
. Uranium (U)	mg/L	<0.00010	4958454	0.00038		0.00010	4958454
. Vanadium (V)	mg/L	<0.00050	4958454	<0.00050		0.00050	4958454
. Zinc (Zn)	mg/L	0.0076	4958454	0.016		0.0050	4958454
. Zirconium (Zr)	mg/L	<0.0010	4958454	<0.0010		0.0010	4958454
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU906		EGU907		
Sampling Date		2017/04/25 16:22		2017/04/25 16:58		
COC Number		607238-03-01		607238-03-01		
	UNITS	WG-160900764- 20170425-JK20	QC Batch	WG-160900764- 20170425-JK21	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	7.76	4955797	5.11	N/A	4955797
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	300	4956709	230	1.0	4956709
Calculated TDS	mg/L	420	4955517	260	1.0	4955517
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	4956709	1.9	1.0	4956709
Cation Sum	me/L	7.49	4955797	4.88	N/A	4955797
Hardness (CaCO3)	mg/L	310	4956771	230	1.0	4956771
Ion Balance (% Difference)	%	1.74	4955512	2.26	N/A	4955512
Langelier Index (@ 20C)	N/A	0.832	4955798	0.816		4955798
Langelier Index (@ 4C)	N/A	0.584	4955799	0.567		4955799
Saturation pH (@ 20C)	N/A	6.96	4955798	7.12		4955798
Saturation pH (@ 4C)	N/A	7.21	4955799	7.37		4955799
Inorganics						
Total Ammonia-N	mg/L	<0.050	4962360	<0.050	0.050	4962360
Conductivity	umho/cm	740	4960893	480	1.0	4960893
Dissolved Organic Carbon	mg/L	2.5	4959892	1.1	0.20	4961615
Orthophosphate (P)	mg/L	<0.010	4960410	<0.010	0.010	4960410
pH	pH	7.79	4960899	7.94		4960899
Dissolved Sulphate (SO4)	mg/L	26	4960403	8.6	1.0	4960403
Alkalinity (Total as CaCO3)	mg/L	300	4960882	230	1.0	4960882
Dissolved Chloride (Cl)	mg/L	30	4960401	8.3	1.0	4960401
Nitrite (N)	mg/L	0.028	4960429	<0.010	0.010	4960426
Nitrate (N)	mg/L	4.21	4960429	1.10	0.10	4960426
Metals						
. Aluminum (Al)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Antimony (Sb)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Arsenic (As)	mg/L	<0.0010	4958454	<0.0010	0.0010	4958454
. Barium (Ba)	mg/L	0.044	4958454	0.024	0.0020	4958454
. Beryllium (Be)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Boron (B)	mg/L	0.032	4958454	<0.010	0.010	4958454
. Cadmium (Cd)	mg/L	<0.00010	4958454	<0.00010	0.00010	4958454
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU906		EGU907		
Sampling Date		2017/04/25 16:22		2017/04/25 16:58		
COC Number		607238-03-01		607238-03-01		
	UNITS	WG-160900764- 20170425-JK20	QC Batch	WG-160900764- 20170425-JK21	RDL	QC Batch
. Calcium (Ca)	mg/L	100	4958454	84	0.20	4958454
. Chromium (Cr)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Cobalt (Co)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Copper (Cu)	mg/L	0.099	4958454	0.0077	0.0010	4958454
. Iron (Fe)	mg/L	<0.10	4958454	<0.10	0.10	4958454
. Lead (Pb)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Magnesium (Mg)	mg/L	12	4958454	5.3	0.050	4958454
. Manganese (Mn)	mg/L	<0.0020	4958454	<0.0020	0.0020	4958454
. Molybdenum (Mo)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Nickel (Ni)	mg/L	<0.0010	4958454	<0.0010	0.0010	4958454
. Phosphorus (P)	mg/L	<0.10	4958454	<0.10	0.10	4958454
. Potassium (K)	mg/L	2.3	4958454	0.48	0.20	4958454
. Selenium (Se)	mg/L	<0.0020	4958454	<0.0020	0.0020	4958454
. Silicon (Si)	mg/L	5.1	4958454	3.9	0.050	4958454
. Silver (Ag)	mg/L	<0.00010	4958454	<0.00010	0.00010	4958454
. Sodium (Na)	mg/L	30	4958454	5.8	0.10	4958454
. Strontium (Sr)	mg/L	0.22	4958454	0.15	0.0010	4958454
. Thallium (Tl)	mg/L	<0.000050	4958454	<0.000050	0.000050	4958454
. Titanium (Ti)	mg/L	<0.0050	4958454	<0.0050	0.0050	4958454
. Uranium (U)	mg/L	0.00037	4958454	0.00020	0.00010	4958454
. Vanadium (V)	mg/L	<0.00050	4958454	<0.00050	0.00050	4958454
. Zinc (Zn)	mg/L	0.043	4958454	0.0072	0.0050	4958454
. Zirconium (Zr)	mg/L	<0.0010	4958454	<0.0010	0.0010	4958454
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGU896	EGU897		EGU898		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25		2017/04/25 09:57		
COC Number		607238-02-01	607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	QC Batch	WG-160900764- 20170425-JK12	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	17	<10	4960276	22	10	4960276
Total Dissolved Solids	mg/L	348	138	4958448	810	10	4958261
Fluoride (F-)	mg/L	0.14	0.36	4959879	<0.10	0.10	4959879
Free Cyanide	ug/L	<1	<1	4961940	<1	1	4961940
Total Organic Carbon (TOC)	mg/L	0.81	0.68	4960470	0.91	0.20	4960470
Total Suspended Solids	mg/L	<10	<10	4958445	<10	10	4958251
Turbidity	NTU	0.2	0.2	4958903	0.1	0.1	4958848
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		EGU899	EGU899		EGU900		
Sampling Date		2017/04/25 10:42	2017/04/25 10:42		2017/04/25 11:20		
COC Number		607238-02-01	607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK13	WG-160900764- 20170425-JK13 Lab-Dup	QC Batch	WG-160900764- 20170425-JK14	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	<10		4960276	12	10	4960276
Total Dissolved Solids	mg/L	190		4958261	226	10	4958261
Fluoride (F-)	mg/L	0.27	0.25	4960927	0.15	0.10	4959879
Free Cyanide	ug/L	<1		4961940	<1	1	4961940
Total Organic Carbon (TOC)	mg/L	0.48		4961669	0.58	0.20	4961669
Total Suspended Solids	mg/L	<10		4958251	<10	10	4958251
Turbidity	NTU	2.2		4958848	9.3	0.1	4958848
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGU901		EGU902	EGU902		
Sampling Date		2017/04/25 11:58		2017/04/25 12:55	2017/04/25 12:55		
COC Number		607238-02-01		607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK15	QC Batch	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK16 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	11	4960276	20		10	4960276
Total Dissolved Solids	mg/L	232	4958261	342		10	4958261
Fluoride (F-)	mg/L	<0.10	4959879	<0.10	<0.10	0.10	4961544
Free Cyanide	ug/L	<1	4961940	<1		1	4961940
Total Organic Carbon (TOC)	mg/L	1.3	4961669	1.9		0.20	4961669
Total Suspended Solids	mg/L	<10	4958251	<10		10	4958251
Turbidity	NTU	6.5	4958848	0.1	0.3	0.1	4958903
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EGU903		EGU904	EGU904		
Sampling Date		2017/04/25 13:32		2017/04/25 14:25	2017/04/25 14:25		
COC Number		607238-02-01		607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK17	QC Batch	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK18 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	46	4960276	15	15	10	4960276
Total Dissolved Solids	mg/L	482	4958261	228		10	4958261
Fluoride (F-)	mg/L	<0.10	4959879	0.13		0.10	4961544
Free Cyanide	ug/L	<1	4961940	<1	<1	1	4961940
Total Organic Carbon (TOC)	mg/L	1.1	4961669	1.1		0.20	4962598
Total Suspended Solids	mg/L	<10	4958251	<10		10	4958251
Turbidity	NTU	<0.1	4958903	6.4		0.1	4959860
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGU905		EGU906		EGU907		
Sampling Date		2017/04/25 15:01		2017/04/25 16:22		2017/04/25 16:58		
COC Number		607238-02-01		607238-03-01		607238-03-01		
	UNITS	WG-160900764- 20170425-JK19	QC Batch	WG-160900764- 20170425-JK20	QC Batch	WG-160900764- 20170425-JK21	RDL	QC Batch

Inorganics								
Acidity as CaCO3	mg/L	56	4960276	46	4960276	23	10	4960276
Total Dissolved Solids	mg/L	464	4958261	426	4958261	266	10	4958261
Fluoride (F-)	mg/L	<0.10	4961544	<0.10	4961544	<0.10	0.10	4961544
Free Cyanide	ug/L	1	4961940	<1	4961940	<1	1	4961940
Total Organic Carbon (TOC)	mg/L	2.1	4962598	2.5	4962598	1.0	0.20	4962598
Total Suspended Solids	mg/L	<10	4958251	<10	4958251	<10	10	4958251
Turbidity	NTU	<0.1	4959866	<0.1	4959860	<0.1	0.1	4959866

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGU896	EGU896	EGU897	EGU898		
Sampling Date		2017/04/25 08:45	2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:57		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK10 Lab-Dup	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK12	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4958439
Mercury (Hg)	ug/L	<0.1		<0.1	<0.1	0.1	4962477

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		EGU899		EGU900	EGU901		
Sampling Date		2017/04/25 10:42		2017/04/25 11:20	2017/04/25 11:58		
COC Number		607238-02-01		607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK13	QC Batch	WG-160900764- 20170425-JK14	WG-160900764- 20170425-JK15	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	4958439	<0.50	<0.50	0.50	4958439
Mercury (Hg)	ug/L	<0.1	4962590	<0.1	<0.1	0.1	4962477

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		EGU902	EGU903	EGU904		EGU905		
Sampling Date		2017/04/25 12:55	2017/04/25 13:32	2017/04/25 14:25		2017/04/25 15:01		
COC Number		607238-02-01	607238-02-01	607238-02-01		607238-02-01		
	UNITS	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	WG-160900764- 20170425-JK18	RDL	WG-160900764- 20170425-JK19	RDL	QC Batch

Metals								
Chromium (VI)	ug/L	<0.50	0.78	<0.50	0.50	<2.5	2.5	4958439
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	0.1	<0.1	0.1	4962477

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGU906	EGU907		
Sampling Date		2017/04/25 16:22	2017/04/25 16:58		
COC Number		607238-03-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK20	WG-160900764- 20170425-JK21	RDL	QC Batch
Metals					
Chromium (VI)	ug/L	<0.50	<0.50	0.50	4958439
Mercury (Hg)	ug/L	<0.1	<0.1	0.1	4962477
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

MICROBIOLOGY (WATER)

Maxxam ID		EGU896	EGU897	EGU898	EGU899	
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:57	2017/04/25 10:42	
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01	
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	QC Batch

Microbiological						
Background	CFU/100mL	0	0	4	0	4957083
Total Coliforms	CFU/100mL	0	0	1	0	4957083
Escherichia coli	CFU/100mL	0	0	0	0	4957083
QC Batch = Quality Control Batch						

Maxxam ID		EGU900	EGU901	EGU902	EGU903	
Sampling Date		2017/04/25 11:20	2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32	
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01	
	UNITS	WG-160900764- 20170425-JK14	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	QC Batch

Microbiological						
Background	CFU/100mL	76	0	740	0	4957083
Total Coliforms	CFU/100mL	36	0	3	0	4957083
Escherichia coli	CFU/100mL	0	0	0	0	4957083
QC Batch = Quality Control Batch						

Maxxam ID		EGU904	EGU905	EGU906	EGU907	
Sampling Date		2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22	2017/04/25 16:58	
COC Number		607238-02-01	607238-02-01	607238-03-01	607238-03-01	
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	WG-160900764- 20170425-JK21	QC Batch

Microbiological						
Background	CFU/100mL	0	0	89	53	4957083
Total Coliforms	CFU/100mL	0	0	10	1	4957083
Escherichia coli	CFU/100mL	0	0	0	1	4957083
QC Batch = Quality Control Batch						

O.REG 153 PCBs (WATER)

Maxxam ID		EGU896	EGU897	EGU898	EGU899		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:57	2017/04/25 10:42		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Surrogate Recovery (%)							
Decachlorobiphenyl	%	95	89	92	92		4957467
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		EGU900	EGU901	EGU902	EGU903		
Sampling Date		2017/04/25 11:20	2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK14	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Surrogate Recovery (%)							
Decachlorobiphenyl	%	87	94	91	91		4957467
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

O.REG 153 PCBS (WATER)

Maxxam ID		EGU904	EGU904	EGU905	EGU906		
Sampling Date		2017/04/25 14:25	2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK18 Lab-Dup	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	RDL	QC Batch
PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4957467
Surrogate Recovery (%)							
Decachlorobiphenyl	%	90	93	75	93		4957467
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		EGU907		
Sampling Date		2017/04/25 16:58		
COC Number		607238-03-01		
	UNITS	WG-160900764- 20170425-JK21	RDL	QC Batch
PCBs				
Aroclor 1242	ug/L	<0.05	0.05	4957467
Aroclor 1248	ug/L	<0.05	0.05	4957467
Aroclor 1254	ug/L	<0.05	0.05	4957467
Aroclor 1260	ug/L	<0.05	0.05	4957467
Total PCB	ug/L	<0.05	0.05	4957467
Surrogate Recovery (%)				
Decachlorobiphenyl	%	89		4957467
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU896	EGU897	EGU897		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:25		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764-20170425-JK10	WG-160900764-20170425-JK11	WG-160900764-20170425-JK11 Lab-Dup	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	4956826
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10		10	4957572
Benzene	ug/L	<0.20	<0.20		0.20	4957572
Bromodichloromethane	ug/L	<0.50	<0.50		0.50	4957572
Bromoform	ug/L	<1.0	<1.0		1.0	4957572
Bromomethane	ug/L	<0.50	<0.50		0.50	4957572
Carbon Tetrachloride	ug/L	<0.20	<0.20		0.20	4957572
Chlorobenzene	ug/L	<0.20	<0.20		0.20	4957572
Chloroform	ug/L	<0.20	<0.20		0.20	4957572
Dibromochloromethane	ug/L	<0.50	<0.50		0.50	4957572
1,2-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4957572
1,3-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4957572
1,4-Dichlorobenzene	ug/L	<0.50	<0.50		0.50	4957572
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0		1.0	4957572
1,1-Dichloroethane	ug/L	<0.20	<0.20		0.20	4957572
1,2-Dichloroethane	ug/L	<0.50	<0.50		0.50	4957572
1,1-Dichloroethylene	ug/L	<0.20	<0.20		0.20	4957572
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4957572
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50		0.50	4957572
1,2-Dichloropropane	ug/L	<0.20	<0.20		0.20	4957572
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30		0.30	4957572
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40		0.40	4957572
Ethylbenzene	ug/L	<0.20	<0.20		0.20	4957572
Ethylene Dibromide	ug/L	<0.20	<0.20		0.20	4957572
Hexane	ug/L	<1.0	<1.0		1.0	4957572
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0		2.0	4957572
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10		10	4957572
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0		5.0	4957572
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50		0.50	4957572

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU896	EGU897	EGU897		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:25		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK11 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50		0.50	4957572
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4957572
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50		0.50	4957572
Tetrachloroethylene	ug/L	<0.20	<0.20		0.20	4957572
Toluene	ug/L	<0.20	<0.20		0.20	4957572
1,1,1-Trichloroethane	ug/L	<0.20	<0.20		0.20	4957572
1,1,2-Trichloroethane	ug/L	<0.50	<0.50		0.50	4957572
Trichloroethylene	ug/L	<0.20	<0.20		0.20	4957572
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50		0.50	4957572
Vinyl Chloride	ug/L	<0.20	<0.20		0.20	4957572
p+m-Xylene	ug/L	<0.20	<0.20		0.20	4957572
o-Xylene	ug/L	<0.20	<0.20		0.20	4957572
Total Xylenes	ug/L	<0.20	<0.20		0.20	4957572
F1 (C6-C10)	ug/L	<25	<25		25	4957572
F1 (C6-C10) - BTEX	ug/L	<25	<25		25	4957572
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4963251
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4963251
Surrogate Recovery (%)						
o-Terphenyl	%	106	107	107		4963251
4-Bromofluorobenzene	%	89	92			4957572
D4-1,2-Dichloroethane	%	108	106			4957572
D8-Toluene	%	95	96			4957572
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU898	EGU899	EGU900		
Sampling Date		2017/04/25 09:57	2017/04/25 10:42	2017/04/25 11:20		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	WG-160900764- 20170425-JK14	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4956826
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957572
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Chloroform	ug/L	2.0	<0.20	<0.20	0.20	4957572
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957572
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957572
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957572
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957572
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957572
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957572
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957572

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU898	EGU899	EGU900		
Sampling Date		2017/04/25 09:57	2017/04/25 10:42	2017/04/25 11:20		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	WG-160900764- 20170425-JK14	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957572
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957572
F1 (C6-C10)	ug/L	<25	<25	<25	25	4957572
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4957572
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4963251
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4963251
Surrogate Recovery (%)						
o-Terphenyl	%	106	106	108		4963251
4-Bromofluorobenzene	%	91	89	89		4957572
D4-1,2-Dichloroethane	%	106	109	107		4957572
D8-Toluene	%	96	95	96		4957572
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU901	EGU902	EGU903		
Sampling Date		2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4956826
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957572
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Chloroform	ug/L	<0.20	<0.20	0.35	0.20	4957572
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957572
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957572
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957572
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957572
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957572
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957572
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957572

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU901	EGU902	EGU903		
Sampling Date		2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32		
COC Number		607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957572
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957572
F1 (C6-C10)	ug/L	<25	<25	<25	25	4957572
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4957572
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4963251
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4963251
Surrogate Recovery (%)						
o-Terphenyl	%	106	106	105		4963251
4-Bromofluorobenzene	%	91	90	90		4957572
D4-1,2-Dichloroethane	%	107	107	107		4957572
D8-Toluene	%	95	96	95		4957572
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU904	EGU905	EGU906		
Sampling Date		2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22		
COC Number		607238-02-01	607238-02-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4956826
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4957572
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Bromodichloromethane	ug/L	<0.50	5.0	<0.50	0.50	4957572
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Carbon Tetrachloride	ug/L	<0.20	4.9	<0.20	0.20	4957572
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Chloroform	ug/L	<0.20	18	<0.20	0.20	4957572
Dibromochloromethane	ug/L	<0.50	2.0	<0.50	0.50	4957572
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4957572
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4957572
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4957572
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4957572
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4957572
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4957572
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4957572
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4957572

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU904	EGU905	EGU906		
Sampling Date		2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22		
COC Number		607238-02-01	607238-02-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4957572
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4957572
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4957572
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4957572
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4957572
F1 (C6-C10)	ug/L	<25	40 (1)	<25	25	4957572
F1 (C6-C10) - BTEX	ug/L	<25	40	<25	25	4957572
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	4963251
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	4963251
Reached Baseline at C50	ug/L	Yes	Yes	Yes		4963251
Surrogate Recovery (%)						
o-Terphenyl	%	106	109	107		4963251
4-Bromofluorobenzene	%	88	90	91		4957572
D4-1,2-Dichloroethane	%	107	109	105		4957572
D8-Toluene	%	96	94	96		4957572
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Result reported was mainly due to one non-hydrocarbon compound eluted inside F1 range.						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU907		
Sampling Date		2017/04/25 16:58		
COC Number		607238-03-01		
	UNITS	WG-160900764- 20170425-JK21	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	4956826
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	4957572
Benzene	ug/L	<0.20	0.20	4957572
Bromodichloromethane	ug/L	<0.50	0.50	4957572
Bromoform	ug/L	<1.0	1.0	4957572
Bromomethane	ug/L	<0.50	0.50	4957572
Carbon Tetrachloride	ug/L	<0.20	0.20	4957572
Chlorobenzene	ug/L	<0.20	0.20	4957572
Chloroform	ug/L	<0.20	0.20	4957572
Dibromochloromethane	ug/L	<0.50	0.50	4957572
1,2-Dichlorobenzene	ug/L	<0.50	0.50	4957572
1,3-Dichlorobenzene	ug/L	<0.50	0.50	4957572
1,4-Dichlorobenzene	ug/L	<0.50	0.50	4957572
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	4957572
1,1-Dichloroethane	ug/L	<0.20	0.20	4957572
1,2-Dichloroethane	ug/L	<0.50	0.50	4957572
1,1-Dichloroethylene	ug/L	<0.20	0.20	4957572
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	4957572
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	4957572
1,2-Dichloropropane	ug/L	<0.20	0.20	4957572
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	4957572
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	4957572
Ethylbenzene	ug/L	<0.20	0.20	4957572
Ethylene Dibromide	ug/L	<0.20	0.20	4957572
Hexane	ug/L	<1.0	1.0	4957572
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	4957572
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	4957572
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	4957572
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	4957572
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU907		
Sampling Date		2017/04/25 16:58		
COC Number		607238-03-01		
	UNITS	WG-160900764- 20170425-JK21	RDL	QC Batch
Styrene	ug/L	<0.50	0.50	4957572
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	4957572
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	4957572
Tetrachloroethylene	ug/L	<0.20	0.20	4957572
Toluene	ug/L	<0.20	0.20	4957572
1,1,1-Trichloroethane	ug/L	<0.20	0.20	4957572
1,1,2-Trichloroethane	ug/L	<0.50	0.50	4957572
Trichloroethylene	ug/L	<0.20	0.20	4957572
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	4957572
Vinyl Chloride	ug/L	<0.20	0.20	4957572
p+m-Xylene	ug/L	<0.20	0.20	4957572
o-Xylene	ug/L	<0.20	0.20	4957572
Total Xylenes	ug/L	<0.20	0.20	4957572
F1 (C6-C10)	ug/L	<25	25	4957572
F1 (C6-C10) - BTEX	ug/L	<25	25	4957572
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	4963251
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	4963251
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	4963251
Reached Baseline at C50	ug/L	Yes		4963251
Surrogate Recovery (%)				
o-Terphenyl	%	106		4963251
4-Bromofluorobenzene	%	88		4957572
D4-1,2-Dichloroethane	%	108		4957572
D8-Toluene	%	95		4957572
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU896	EGU897	EGU898	EGU899		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:57	2017/04/25 10:42		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966016
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966016
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	2	<1	1	4966016
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Diethyl phthalate	ug/L	0.2	0.2	0.1	0.1	0.1	4966016
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU896	EGU897	EGU898	EGU899		
Sampling Date		2017/04/25 08:45	2017/04/25 09:25	2017/04/25 09:57	2017/04/25 10:42		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK10	WG-160900764- 20170425-JK11	WG-160900764- 20170425-JK12	WG-160900764- 20170425-JK13	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966016
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4955468
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	66	71	73	72		4966016
2-Fluorobiphenyl	%	82	82	63	84		4966016
D14-Terphenyl (FS)	%	97	97	98	98		4966016
D5-Nitrobenzene	%	89	87	64	90		4966016
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU900	EGU901	EGU902	EGU903		
Sampling Date		2017/04/25 11:20	2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK14	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966016
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966016
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-ethylhexyl)phthalate	ug/L	<1	2	<1	<1	1	4966016
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Diethyl phthalate	ug/L	<0.1	<0.1	0.1	0.1	0.1	4966016
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU900	EGU901	EGU902	EGU903		
Sampling Date		2017/04/25 11:20	2017/04/25 11:58	2017/04/25 12:55	2017/04/25 13:32		
COC Number		607238-02-01	607238-02-01	607238-02-01	607238-02-01		
	UNITS	WG-160900764- 20170425-JK14	WG-160900764- 20170425-JK15	WG-160900764- 20170425-JK16	WG-160900764- 20170425-JK17	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966016
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4955468
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	30 (1)	28 (1)	60	62		4966016
2-Fluorobiphenyl	%	52	44 (1)	69	84		4966016
D14-Terphenyl (FS)	%	97	95	96	96		4966016
D5-Nitrobenzene	%	56	51	71	88		4966016
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a lower bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU904	EGU905	EGU906	EGU907		
Sampling Date		2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22	2017/04/25 16:58		
COC Number		607238-02-01	607238-02-01	607238-03-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	WG-160900764- 20170425-JK21	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	4966016
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	4966016
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	4966016
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	4966016
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Diethyl phthalate	ug/L	0.1	<0.1	<0.1	0.1	0.1	4966016
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU904	EGU905	EGU906	EGU907		
Sampling Date		2017/04/25 14:25	2017/04/25 15:01	2017/04/25 16:22	2017/04/25 16:58		
COC Number		607238-02-01	607238-02-01	607238-03-01	607238-03-01		
	UNITS	WG-160900764- 20170425-JK18	WG-160900764- 20170425-JK19	WG-160900764- 20170425-JK20	WG-160900764- 20170425-JK21	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4966016
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	4966016
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	4966016
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4966016
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	4966016
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	4955468
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	48 (1)	39 (1)	21 (1)	60		4966016
2-Fluorobiphenyl	%	81	49 (1)	73	84		4966016
D14-Terphenyl (FS)	%	99	97	98	98		4966016
D5-Nitrobenzene	%	85	52	75	89		4966016
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a lower bias in some results.							

TEST SUMMARY

Maxxam ID: EGU896
Sample ID: WG-160900764-20170425-JK10
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962360	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4960470	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU896 Dup
Sample ID: WG-160900764-20170425-JK10
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le

TEST SUMMARY

Maxxam ID: EGU897
Sample ID: WG-160900764-20170425-JK11
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4960227	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4960470	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU897 Dup
Sample ID: WG-160900764-20170425-JK11
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam

TEST SUMMARY

Maxxam ID: EGU898
Sample ID: WG-160900764-20170425-JK12
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959103	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4960227	N/A	2017/04/29	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959058	N/A	2017/04/28	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959110	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959108	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4960470	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958848	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU899
Sample ID: WG-160900764-20170425-JK13
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/08	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4960931	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk

TEST SUMMARY

Maxxam ID: EGU899
Sample ID: WG-160900764-20170425-JK13
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959103	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4960930	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4960927	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962590	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4961702	N/A	2017/05/01	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959058	N/A	2017/04/28	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960936	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959110	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959108	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4961669	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958848	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU899 Dup
Sample ID: WG-160900764-20170425-JK13
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	4960931	N/A	2017/04/29	Surinder Rai
Conductivity	AT	4960930	N/A	2017/04/29	Surinder Rai
Fluoride	ISE	4960927	2017/04/28	2017/04/29	Surinder Rai
pH	AT	4960936	N/A	2017/04/29	Surinder Rai

TEST SUMMARY

Maxxam ID: EGU900
Sample ID: WG-160900764-20170425-JK14
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4955512	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/04/30	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4961702	N/A	2017/05/01	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4961669	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958848	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU901
Sample ID: WG-160900764-20170425-JK15
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk

TEST SUMMARY

Maxxam ID: EGU901
Sample ID: WG-160900764-20170425-JK15
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4956771	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4955512	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/04/30	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4961702	N/A	2017/05/01	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4961669	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958848	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU901 Dup
Sample ID: WG-160900764-20170425-JK15
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal

Maxxam ID: EGU902
Sample ID: WG-160900764-20170425-JK16
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison

TEST SUMMARY

Maxxam ID: EGU902
Sample ID: WG-160900764-20170425-JK16
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4956771	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4961702	N/A	2017/05/01	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959902	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4961669	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU902 Dup
Sample ID: WG-160900764-20170425-JK16
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar

TEST SUMMARY

Maxxam ID: EGU903
Sample ID: WG-160900764-20170425-JK17
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO ₃ in liquid		4960276	N/A	2017/05/12	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO ₃)		4956771	N/A	2017/04/29	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4955512	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/04/30	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH ₄	4961702	N/A	2017/05/01	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4961669	N/A	2017/04/29	Anastasia Hamanov
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU904
Sample ID: WG-160900764-20170425-JK18
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO ₃ in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/05/01	Automated Statchk

TEST SUMMARY

Maxxam ID: EGU904
Sample ID: WG-160900764-20170425-JK18
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4960036	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962360	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4960426	N/A	2017/04/30	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4959860	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU904 Dup
Sample ID: WG-160900764-20170425-JK18
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng

Maxxam ID: EGU905
Sample ID: WG-160900764-20170425-JK19
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk

TEST SUMMARY

Maxxam ID: EGU905
Sample ID: WG-160900764-20170425-JK19
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4961615	N/A	2017/04/29	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962360	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4960429	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4959866	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/29	Manpreet Sarao

Maxxam ID: EGU905 Dup
Sample ID: WG-160900764-20170425-JK19
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4960429	N/A	2017/04/29	Chandra Nandlal

TEST SUMMARY

Maxxam ID: EGU906
Sample ID: WG-160900764-20170425-JK20
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962360	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4960429	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4959860	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

Maxxam ID: EGU907
Sample ID: WG-160900764-20170425-JK21
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4955468	N/A	2017/05/02	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4966016	2017/05/03	2017/05/04	Kathy Horvat
Acidity as CaCO3 in liquid		4960276	N/A	2017/05/05	Grace Sison
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4956709	N/A	2017/05/01	Automated Statchk

TEST SUMMARY

Maxxam ID: EGU907
Sample ID: WG-160900764-20170425-JK21
Matrix: Water

Collected: 2017/04/25
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4956826	N/A	2017/04/29	Automated Statchk
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4958439	N/A	2017/04/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4961615	N/A	2017/04/29	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963251	2017/05/01	2017/05/02	Jeevaraj Jeevaratnam
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4956771	N/A	2017/05/01	Automated Statchk
Mercury	CV/AA	4962477	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958454	N/A	2017/04/30	John Bowman
Ion Balance (% Difference)	CALC	4955512	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4955797	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4957083	N/A	2017/04/26	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962360	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4960426	N/A	2017/04/30	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4957467	2017/04/27	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4955798	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4955799	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4955517	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4959866	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4957572	N/A	2017/04/28	Manpreet Sarao

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.0°C
Package 2	0.3°C
Package 3	2.7°C
Package 4	-0.7°C
Package 5	0.7°C
Package 6	2.7°C
Package 7	0.7°C
Package 8	6.0°C
Package 9	2.0°C
Package 10	3.0°C
Package 11	3.7°C
Package 12	2.0°C

Sample EGU896 [WG-160900764-20170425-JK10] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU898 [WG-160900764-20170425-JK12] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU899 [WG-160900764-20170425-JK13] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU900 [WG-160900764-20170425-JK14] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU901 [WG-160900764-20170425-JK15] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU902 [WG-160900764-20170425-JK16] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU903 [WG-160900764-20170425-JK17] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957467	Decachlorobiphenyl	2017/04/28	99	60 - 130	93	60 - 130	94	%				
4957572	4-Bromofluorobenzene	2017/04/28	101	70 - 130	102	70 - 130	90	%				
4957572	D4-1,2-Dichloroethane	2017/04/28	105	70 - 130	103	70 - 130	103	%				
4957572	D8-Toluene	2017/04/28	101	70 - 130	104	70 - 130	98	%				
4963251	o-Terphenyl	2017/05/02	109	60 - 130	109	60 - 130	106	%				
4966016	2,4,6-Tribromophenol	2017/05/06	102	50 - 130	91	50 - 130	69	%				
4966016	2-Fluorobiphenyl	2017/05/06	79	50 - 130	74	50 - 130	69	%				
4966016	D14-Terphenyl (FS)	2017/05/06	95	50 - 130	101	50 - 130	95	%				
4966016	D5-Nitrobenzene	2017/05/06	90	50 - 130	92	50 - 130	69	%				
4957467	Aroclor 1242	2017/04/28					<0.05	ug/L	NC	30		
4957467	Aroclor 1248	2017/04/28					<0.05	ug/L	NC	30		
4957467	Aroclor 1254	2017/04/28					<0.05	ug/L	NC	30		
4957467	Aroclor 1260	2017/04/28	99	60 - 130	92	60 - 130	<0.05	ug/L	NC	30		
4957467	Total PCB	2017/04/28	99	60 - 130	92	60 - 130	<0.05	ug/L	NC	40		
4957572	1,1,1,2-Tetrachloroethane	2017/04/28	103	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4957572	1,1,1-Trichloroethane	2017/04/28	99	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4957572	1,1,2,2-Tetrachloroethane	2017/04/28	105	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4957572	1,1,2-Trichloroethane	2017/04/28	104	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4957572	1,1-Dichloroethane	2017/04/28	101	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4957572	1,1-Dichloroethylene	2017/04/28	97	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
4957572	1,2-Dichlorobenzene	2017/04/28	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4957572	1,2-Dichloroethane	2017/04/28	102	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4957572	1,2-Dichloropropane	2017/04/28	104	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4957572	1,3-Dichlorobenzene	2017/04/28	97	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4957572	1,4-Dichlorobenzene	2017/04/28	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4957572	Acetone (2-Propanone)	2017/04/28	101	60 - 140	86	60 - 140	<10	ug/L	2.4	30		
4957572	Benzene	2017/04/28	102	70 - 130	97	70 - 130	<0.20	ug/L	0.75	30		
4957572	Bromodichloromethane	2017/04/28	104	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4957572	Bromoform	2017/04/28	102	70 - 130	98	70 - 130	<1.0	ug/L	NC	30		
4957572	Bromomethane	2017/04/28	108	60 - 140	96	60 - 140	<0.50	ug/L	NC	30		
4957572	Carbon Tetrachloride	2017/04/28	103	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4957572	Chlorobenzene	2017/04/28	103	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4957572	Chloroform	2017/04/28	99	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
4957572	cis-1,2-Dichloroethylene	2017/04/28	106	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4957572	cis-1,3-Dichloropropene	2017/04/28	105	70 - 130	94	70 - 130	<0.30	ug/L	NC	30		
4957572	Dibromochloromethane	2017/04/28	103	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4957572	Dichlorodifluoromethane (FREON 12)	2017/04/28	91	60 - 140	90	60 - 140	<1.0	ug/L	NC	30		
4957572	Ethylbenzene	2017/04/28	97	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
4957572	Ethylene Dibromide	2017/04/28	106	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4957572	F1 (C6-C10) - BTEX	2017/04/28					<25	ug/L	NC	30		
4957572	F1 (C6-C10)	2017/04/28	93	60 - 140	93	60 - 140	<25	ug/L	NC	30		
4957572	Hexane	2017/04/28	100	70 - 130	100	70 - 130	<1.0	ug/L	NC	30		
4957572	Methyl Ethyl Ketone (2-Butanone)	2017/04/28	106	60 - 140	96	60 - 140	<10	ug/L	2.6	30		
4957572	Methyl Isobutyl Ketone	2017/04/28	100	70 - 130	99	70 - 130	<5.0	ug/L	1.2	30		
4957572	Methyl t-butyl ether (MTBE)	2017/04/28	99	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4957572	Methylene Chloride(Dichloromethane)	2017/04/28	107	70 - 130	102	70 - 130	<2.0	ug/L	NC	30		
4957572	o-Xylene	2017/04/28	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4957572	p+m-Xylene	2017/04/28	93	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
4957572	Styrene	2017/04/28	94	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4957572	Tetrachloroethylene	2017/04/28	102	70 - 130	99	70 - 130	<0.20	ug/L	1.4	30		
4957572	Toluene	2017/04/28	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4957572	Total Xylenes	2017/04/28					<0.20	ug/L	NC	30		
4957572	trans-1,2-Dichloroethylene	2017/04/28	103	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
4957572	trans-1,3-Dichloropropene	2017/04/28	109	70 - 130	93	70 - 130	<0.40	ug/L	NC	30		
4957572	Trichloroethylene	2017/04/28	101	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
4957572	Trichlorofluoromethane (FREON 11)	2017/04/28	104	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4957572	Vinyl Chloride	2017/04/28	105	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4958251	Total Suspended Solids	2017/04/28					<10	mg/L	NC	25	96	85 - 115
4958261	Total Dissolved Solids	2017/05/01					<10	mg/L	2.0	25	99	90 - 110
4958439	Chromium (VI)	2017/04/27	99	80 - 120	98	80 - 120	<0.50	ug/L	NC	20		
4958445	Total Suspended Solids	2017/05/05					<10	mg/L	NC	25	97	85 - 115
4958446	. Aluminum (Al)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958446	. Antimony (Sb)	2017/04/28	103	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Arsenic (As)	2017/04/28	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Barium (Ba)	2017/04/28	99	80 - 120	95	80 - 120	<0.0020	mg/L	1.7	20		
4958446	. Beryllium (Be)	2017/04/28	100	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Boron (B)	2017/04/28	96	80 - 120	92	80 - 120	<0.010	mg/L	0.16	20		
4958446	. Cadmium (Cd)	2017/04/28	101	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
4958446	. Calcium (Ca)	2017/04/28	NC	80 - 120	95	80 - 120	<0.20	mg/L	1.4	20		
4958446	. Chromium (Cr)	2017/04/28	102	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Cobalt (Co)	2017/04/28	98	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Copper (Cu)	2017/04/28	104	80 - 120	97	80 - 120	<0.0010	mg/L	6.4	20		
4958446	. Iron (Fe)	2017/04/28	96	80 - 120	95	80 - 120	<0.10	mg/L	0.64	20		
4958446	. Lead (Pb)	2017/04/28	101	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Magnesium (Mg)	2017/04/28	97	80 - 120	99	80 - 120	<0.050	mg/L	1.0	20		
4958446	. Manganese (Mn)	2017/04/28	96	80 - 120	92	80 - 120	<0.0020	mg/L	1.2	20		
4958446	. Molybdenum (Mo)	2017/04/28	105	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Nickel (Ni)	2017/04/28	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Phosphorus (P)	2017/04/28	104	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
4958446	. Potassium (K)	2017/04/28	99	80 - 120	97	80 - 120	<0.20	mg/L	0.73	20		
4958446	. Selenium (Se)	2017/04/28	102	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4958446	. Silicon (Si)	2017/04/28	101	80 - 120	97	80 - 120	<0.050	mg/L	1.9	20		
4958446	. Silver (Ag)	2017/04/28	100	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		
4958446	. Sodium (Na)	2017/04/28	NC	80 - 120	99	80 - 120	0.15, RDL=0.10	mg/L	1.5	20		
4958446	. Strontium (Sr)	2017/04/28	96	80 - 120	89	80 - 120	<0.0010	mg/L	1.7	20		
4958446	. Thallium (Tl)	2017/04/28	102	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
4958446	. Titanium (Ti)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Uranium (U)	2017/04/28	104	80 - 120	97	80 - 120	<0.00010	mg/L	2.6	20		
4958446	. Vanadium (V)	2017/04/28	101	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Zinc (Zn)	2017/04/28	98	80 - 120	95	80 - 120	<0.0050	mg/L	4.5	20		
4958446	. Zirconium (Zr)	2017/04/28	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958448	Total Dissolved Solids	2017/04/28					<10	mg/L	1.6	25	99	90 - 110

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958454	. Aluminum (Al)	2017/04/30	101	80 - 120	98	80 - 120	<0.0050	mg/L				
4958454	. Antimony (Sb)	2017/04/30	107	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
4958454	. Arsenic (As)	2017/04/30	102	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
4958454	. Barium (Ba)	2017/04/30	103	80 - 120	101	80 - 120	<0.0020	mg/L	1.1	20		
4958454	. Beryllium (Be)	2017/04/30	106	80 - 120	102	80 - 120	<0.00050	mg/L				
4958454	. Boron (B)	2017/04/30	106	80 - 120	105	80 - 120	<0.010	mg/L	2.3	20		
4958454	. Cadmium (Cd)	2017/04/30	103	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		
4958454	. Calcium (Ca)	2017/04/30	NC	80 - 120	94	80 - 120	<0.20	mg/L	0.50	20		
4958454	. Chromium (Cr)	2017/04/30	101	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
4958454	. Cobalt (Co)	2017/04/30	99	80 - 120	99	80 - 120	<0.00050	mg/L				
4958454	. Copper (Cu)	2017/04/30	103	80 - 120	101	80 - 120	<0.0010	mg/L	5.0	20		
4958454	. Iron (Fe)	2017/04/30	101	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
4958454	. Lead (Pb)	2017/04/30	97	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
4958454	. Magnesium (Mg)	2017/04/30	100	80 - 120	100	80 - 120	<0.050	mg/L	0.32	20		
4958454	. Manganese (Mn)	2017/04/30	100	80 - 120	99	80 - 120	<0.0020	mg/L	11	20		
4958454	. Molybdenum (Mo)	2017/04/30	107	80 - 120	102	80 - 120	<0.00050	mg/L				
4958454	. Nickel (Ni)	2017/04/30	99	80 - 120	98	80 - 120	<0.0010	mg/L				
4958454	. Phosphorus (P)	2017/04/30	115	80 - 120	109	80 - 120	<0.10	mg/L				
4958454	. Potassium (K)	2017/04/30	102	80 - 120	100	80 - 120	<0.20	mg/L	1.1	20		
4958454	. Selenium (Se)	2017/04/30	101	80 - 120	96	80 - 120	<0.0020	mg/L	NC	20		
4958454	. Silicon (Si)	2017/04/30	101	80 - 120	96	80 - 120	<0.050	mg/L				
4958454	. Silver (Ag)	2017/04/30	102	80 - 120	100	80 - 120	<0.00010	mg/L				
4958454	. Sodium (Na)	2017/04/30	NC	80 - 120	102	80 - 120	<0.10	mg/L	0.51	20		
4958454	. Strontium (Sr)	2017/04/30	99	80 - 120	97	80 - 120	<0.0010	mg/L				
4958454	. Thallium (Tl)	2017/04/30	97	80 - 120	96	80 - 120	<0.000050	mg/L				
4958454	. Titanium (Ti)	2017/04/30	100	80 - 120	95	80 - 120	<0.0050	mg/L				
4958454	. Uranium (U)	2017/04/30	101	80 - 120	99	80 - 120	<0.00010	mg/L	5.7	20		
4958454	. Vanadium (V)	2017/04/30	101	80 - 120	98	80 - 120	<0.00050	mg/L				
4958454	. Zinc (Zn)	2017/04/30	98	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
4958454	. Zirconium (Zr)	2017/04/30	106	80 - 120	102	80 - 120	<0.0010	mg/L				
4958848	Turbidity	2017/04/28			100	85 - 115	<0.1	NTU	1.4	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958903	Turbidity	2017/04/29			98	85 - 115	<0.1	NTU	NC	20		
4959038	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	102	80 - 120	<1.0	mg/L				
4959043	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	99	80 - 120	<1.0	mg/L				
4959054	Orthophosphate (P)	2017/04/28	103	75 - 125	98	80 - 120	<0.010	mg/L	NC	25		
4959058	Nitrate (N)	2017/04/28	102	80 - 120	104	80 - 120	<0.10	mg/L	0.83	20		
4959058	Nitrite (N)	2017/04/28	99	80 - 120	100	80 - 120	<0.010	mg/L				
4959103	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	99	80 - 120	<1.0	mg/L	3.5	20		
4959108	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	102	80 - 120	<1.0	mg/L	0.65	20		
4959110	Orthophosphate (P)	2017/04/28	96	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
4959860	Turbidity	2017/04/29			99	85 - 115	<0.1	NTU	9.4	20		
4959866	Turbidity	2017/04/29			99	85 - 115	<0.1	NTU	12	20		
4959870	Alkalinity (Total as CaCO3)	2017/04/29			95	85 - 115	<1.0	mg/L	0.55	20		
4959879	Fluoride (F-)	2017/04/29	82	80 - 120	101	80 - 120	<0.10	mg/L	1.9	20		
4959890	pH	2017/04/29			102	98 - 103			1.1	N/A		
4959892	Dissolved Organic Carbon	2017/04/29	101	80 - 120	102	80 - 120	<0.20	mg/L	3.6	20		
4959893	Conductivity	2017/04/29			100	85 - 115	<1.0	umho/cm	0.084	25		
4959902	Nitrate (N)	2017/04/29	98	80 - 120	101	80 - 120	<0.10	mg/L	NC	20		
4959902	Nitrite (N)	2017/04/29	99	80 - 120	99	80 - 120	<0.010	mg/L	NC	20		
4959909	Dissolved Organic Carbon	2017/04/28	103	80 - 120	105	80 - 120	<0.20	mg/L	0.75	20		
4959917	Nitrate (N)	2017/04/29	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.17	20		
4959917	Nitrite (N)	2017/04/29	98	80 - 120	98	80 - 120	<0.010	mg/L	NC	20		
4960036	Dissolved Organic Carbon	2017/04/28	101	80 - 120	102	80 - 120	<0.20	mg/L	3.0	20		
4960227	Total Ammonia-N	2017/04/29	95	80 - 120	98	85 - 115	<0.050	mg/L	NC	20		
4960276	Acidity as CaCO3	2017/05/05					<10	mg/L	NC	25		
4960401	Dissolved Chloride (Cl)	2017/04/29	NC	80 - 120	103	80 - 120	<1.0	mg/L	3.6	20		
4960403	Dissolved Sulphate (SO4)	2017/04/29	NC	75 - 125	107	80 - 120	<1.0	mg/L	1.6	20		
4960410	Orthophosphate (P)	2017/04/29	91	75 - 125	100	80 - 120	<0.010	mg/L	NC	25		
4960426	Nitrate (N)	2017/04/30	NC	80 - 120	101	80 - 120	<0.10	mg/L	0.27	20		
4960426	Nitrite (N)	2017/04/30	95	80 - 120	96	80 - 120	<0.010	mg/L	1.4	20		
4960429	Nitrate (N)	2017/04/29	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.23	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4960429	Nitrite (N)	2017/04/29	0 (1)	80 - 120	100	80 - 120	<0.010	mg/L	NC	20		
4960470	Total Organic Carbon (TOC)	2017/04/29	104	80 - 120	105	80 - 120	<0.20	mg/L	1.2	20		
4960882	Alkalinity (Total as CaCO3)	2017/04/30			95	85 - 115	<1.0	mg/L	0.42	20		
4960893	Conductivity	2017/04/30			101	85 - 115	<1.0	umho/cm	0.19	25		
4960899	pH	2017/04/30			102	98 - 103			0.41	N/A		
4960927	Fluoride (F-)	2017/04/29	90	80 - 120	97	80 - 120	<0.10	mg/L	8.0	20		
4960930	Conductivity	2017/04/29			101	85 - 115	<1.0	umho/cm	0.64	25		
4960931	Alkalinity (Total as CaCO3)	2017/04/29			97	85 - 115	<1.0	mg/L	1.4	20		
4960936	pH	2017/04/29			101	98 - 103			0.23	N/A		
4961544	Fluoride (F-)	2017/04/30	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
4961615	Dissolved Organic Carbon	2017/04/29	100	80 - 120	102	80 - 120	<0.20	mg/L	1.7	20		
4961669	Total Organic Carbon (TOC)	2017/04/29	NC	80 - 120	103	80 - 120	<0.20	mg/L	1.9	20		
4961702	Total Ammonia-N	2017/05/01	95	80 - 120	101	85 - 115	<0.050	mg/L	NC	20		
4961940	Free Cyanide	2017/04/30	99	80 - 120	99	80 - 120	<1	ug/L	NC	20		
4962360	Total Ammonia-N	2017/05/02	100	80 - 120	101	85 - 115	<0.050	mg/L	NC	20		
4962477	Mercury (Hg)	2017/05/02	96	75 - 125	98	80 - 120	<0.1	ug/L	NC	20		
4962590	Mercury (Hg)	2017/05/02	100	75 - 125	95	80 - 120	<0.1	ug/L	NC	20		
4962598	Total Organic Carbon (TOC)	2017/05/01	101	80 - 120	102	80 - 120	<0.20	mg/L	1.5	20		
4963251	F2 (C10-C16 Hydrocarbons)	2017/05/02	95	50 - 130	95	60 - 130	<100	ug/L	NC	30		
4963251	F3 (C16-C34 Hydrocarbons)	2017/05/02	99	50 - 130	100	60 - 130	<200	ug/L	NC	30		
4963251	F4 (C34-C50 Hydrocarbons)	2017/05/02	101	50 - 130	101	60 - 130	<200	ug/L	NC	30		
4966016	1,2,4-Trichlorobenzene	2017/05/06	60	40 - 130	66	40 - 130	<0.1	ug/L				
4966016	1-Methylnaphthalene	2017/05/06	73	50 - 130	87	50 - 130	<0.2	ug/L	NC	30		
4966016	2,4,5-Trichlorophenol	2017/05/06	111	50 - 130	102	50 - 130	<0.2	ug/L				
4966016	2,4,6-Trichlorophenol	2017/05/06	106	50 - 130	88	50 - 130	<0.2	ug/L				
4966016	2,4-Dichlorophenol	2017/05/06	85	50 - 130	83	50 - 130	<0.1	ug/L				
4966016	2,4-Dimethylphenol	2017/05/06	57	30 - 130	18 (2)	30 - 130	<0.5	ug/L				
4966016	2,4-Dinitrophenol	2017/05/06	28 (2)	30 - 130	89	30 - 130	<2	ug/L				
4966016	2,4-Dinitrotoluene	2017/05/06	99	50 - 130	100	50 - 130	<0.3	ug/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4966016	2,6-Dinitrotoluene	2017/05/06	97	50 - 130	92	50 - 130	<0.3	ug/L				
4966016	2-Chlorophenol	2017/05/06	71	50 - 130	85	50 - 130	<0.1	ug/L				
4966016	2-Methylnaphthalene	2017/05/06	69	50 - 130	84	50 - 130	<0.2	ug/L	NC	30		
4966016	3,3'-Dichlorobenzidine	2017/05/06	0.00 (2)	30 - 130	82	30 - 130	<0.5	ug/L				
4966016	Acenaphthene	2017/05/06	91	50 - 130	94	50 - 130	<0.2	ug/L	NC	30		
4966016	Acenaphthylene	2017/05/06	86	50 - 130	91	50 - 130	<0.2	ug/L	NC	30		
4966016	Anthracene	2017/05/06	87	50 - 130	100	50 - 130	<0.05	ug/L	NC	30		
4966016	Benzo(a)anthracene	2017/05/06	98	50 - 130	112	50 - 130	<0.05	ug/L	NC	30		
4966016	Benzo(a)pyrene	2017/05/06	102	50 - 130	104	50 - 130	<0.01	ug/L	NC	30		
4966016	Benzo(b/j)fluoranthene	2017/05/06	117	50 - 130	111	50 - 130	<0.05	ug/L	NC	30		
4966016	Benzo(g,h,i)perylene	2017/05/06	69	50 - 130	121	50 - 130	<0.05	ug/L	NC	30		
4966016	Benzo(k)fluoranthene	2017/05/06	123	50 - 130	109	50 - 130	<0.05	ug/L	NC	30		
4966016	Biphenyl	2017/05/06	85	50 - 130	81	50 - 130	<0.1	ug/L				
4966016	Bis(2-chloroethyl)ether	2017/05/06	78	50 - 130	87	50 - 130	<0.5	ug/L				
4966016	Bis(2-chloroisopropyl)ether	2017/05/06	70	50 - 130	91	50 - 130	<0.5	ug/L				
4966016	Bis(2-ethylhexyl)phthalate	2017/05/06	112	50 - 130	96	50 - 130	<1	ug/L				
4966016	Chrysene	2017/05/06	98	50 - 130	101	50 - 130	<0.05	ug/L	NC	30		
4966016	Dibenz(a,h)anthracene	2017/05/06	65	50 - 130	125	50 - 130	<0.1	ug/L	NC	30		
4966016	Diethyl phthalate	2017/05/06	106	50 - 130	98	50 - 130	<0.1	ug/L				
4966016	Dimethyl phthalate	2017/05/06	93	50 - 130	96	50 - 130	<0.1	ug/L				
4966016	Fluoranthene	2017/05/06	102	50 - 130	108	50 - 130	<0.2	ug/L	NC	30		
4966016	Fluorene	2017/05/06	89	50 - 130	96	50 - 130	<0.2	ug/L	NC	30		
4966016	Indeno(1,2,3-cd)pyrene	2017/05/06	70	50 - 130	130	50 - 130	<0.1	ug/L	NC	30		
4966016	Naphthalene	2017/05/06	81	50 - 130	86	50 - 130	<0.2	ug/L	8.8	30		
4966016	p-Chloroaniline	2017/05/06	3.0 (2)	30 - 130	69	30 - 130	<1	ug/L				
4966016	Pentachlorophenol	2017/05/06	98	50 - 130	61	50 - 130	<0.1	ug/L				
4966016	Phenanthrene	2017/05/06	91	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
4966016	Phenol	2017/05/06	33	30 - 130	37	30 - 130	<0.5	ug/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4966016	Pyrene	2017/05/06	121	50 - 130	106	50 - 130	<0.05	ug/L	NC	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere

Cristina Carriere, Scientific Services

Eva Pranjic



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist



Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division

Srimathie Aluthwala

Srimathie Aluthwala, Campobello Micro

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:					
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2	0
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0	0
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	1	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	0	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0	0
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	3	2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		3	2
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	0	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	1	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		2	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7	1	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	3	2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		2	2
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9	5	6
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		6	3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	3	2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		2	3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2

MAXXAM JOB#:					
B783174					
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11	1	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12	4	4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		4	2
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2
CUSTODY SEAL	YES	NO	COOLER ID	TEMP	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>			
INTACT	<input type="checkbox"/>	<input type="checkbox"/>			
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1	2

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<i>Klynn</i> KLYNN ESQUIVALE	2019/04/26	13:50



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY-RECORD

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COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 0 4
CUSTODY SEAL	YES	NO	COOLER ID 2
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 0 1
CUSTODY SEAL	YES	NO	COOLER ID 3
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 0 5
CUSTODY SEAL	YES	NO	COOLER ID 4
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 7 1 0
CUSTODY SEAL	YES	NO	COOLER ID 5
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 0 1
CUSTODY SEAL	YES	NO	COOLER ID 6
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 1 5
CUSTODY SEAL	YES	NO	COOLER ID 7
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 0 3
CUSTODY SEAL	YES	NO	COOLER ID 8
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 7 4 7
CUSTODY SEAL	YES	NO	COOLER ID 9
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 1 2
CUSTODY SEAL	YES	NO	COOLER ID 10
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 3 4

MAXXAM JOB#: 3783174 AIR			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 0 5
CUSTODY SEAL	YES	NO	COOLER ID 12
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 2 2
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>[Signature]</i> JOSEPH GUENTER	2017/04/26	08:30



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 6740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

STANTEC CHAIN OF CUSTODY RECORD

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INVOICE INFORMATION: Company Name: #9197 Stantec Consulting Ltd Contact Name: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com		REPORT INFORMATION (if differs from invoice): Company Name: #18379 Stantec Consulting Ltd Contact Name: Report - 1609-00764 Address: ON Phone: + jamie.koch@stantec.com Email: aaron.warkentin@stantec.com, brant.gill@stantec.com		PROJECT INFORMATION: Quotation #: B48218 Task #: 160900764 Project #: 1609 Profit Centre: Clarington TS - Private Well Site #: 1609 Sampled By: JK		Laboratory Use Only: Maxxam Job #: Bottle Order #: COC #: 607235 Project Manager: Deepthi Shaji Turnaround Time (TAT) Required: Please provide advance notice for rush projects.	
--	--	--	--	---	--	---	--

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)												Turnaround Time (TAT) Required			
Regulation 153 (2011)			Other Regulations			Special Instructions			Field Filtered (please circle) Metals / Hg / Cr / V	Acidity	Cr / Ni & Free CN	Fluoride & Turbidity	Mercury & TOC	Total Coliforms / E. coli Background	TDS & TSS	RCAs - Comprehensive (Drinking Water) - No field filter	Reg 143 PCBs	Reg 153 VOCs & P1-H4	SVOCS	Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.	
Table 1	Res/Park	Medium/Fine	CCME	Sanitary Sewer Bylaw																	
Table 2	Ind/Comm	Coarse	Reg 558	Storm Sewer Bylaw																	
Table 3	Agri/Other	For RSC	MISA	Municipality																	
Table			PWGO	Other																	
Include Criteria on Certificate of Analysis (Y/N)?																					
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix																	
26-Apr-17 08:30 Deepthi Shaji 3783174 HGR ENV-1208	WG-160900764-20170425-JK10	17/04/25	0845	GW	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19	
	WG-160900764-20170425-JK11		0925	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK12		0957	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK13		1042	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK14		1120	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK15		1158	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK16		1255	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK17		1332	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK18		1425	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20170425-JK19		1501	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

per analysis as per quote B48218 - Private well.

REC'D IN PORT HOPE

RELINQUISHED BY: (Signature/Print) JAMIE KOCH	Date: (YY/MM/DD) 17/04/25	Time 2128	RECEIVED BY: (Signature/Print) K. BROWN	Date: (YY/MM/DD) 17/04/26	Time 08:30	# jars used and not submitted	Laboratory Use Only						
						Time Sensitive		Temperature (°C) of Recept REFER TO ACTP	Custody Seal Present	Yes	No	White: Maxxa Yellow: Client	

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 ** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 *** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

Refer to ACTP



Maxxam Analytics International Corporation o/a Maxxam Analytics
 5740 Campbell Rd, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-563-6269 Fax: (905) 817-5777 www.maxxam.ca

STANTEC CHAIN OF CUSTODY RECORD

2 of 2
 Page 3 of 3

INVOICE INFORMATION: Company Name: #9197 Stantec Consulting Ltd Contact Name: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com		REPORT INFORMATION (if differs from invoice): Company Name: #18379 Stantec Consulting Ltd Contact Name: Report - 1609-00764 Address: ON Phone: James Koch Stantec.com Email: aaron.warkentin@stantec.com brant.gill@stantec.com		PROJECT INFORMATION: Quotation #: B48218 Task #: 160900764 Project #: 1609 Profit Centre: Clarington TS - Private Well Site #: JK Sampled By: JK		Laboratory Use Only: Maxxam Job #: Bottle Order #: COC #: Project Manager: Deepthi Shaj	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011) <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____	Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWO0 <input type="checkbox"/> Other _____	Special Instructions
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Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample Location Identification	Date Sampled	Time Sampled	Matrix
1	WG-160900764-2017042 5-JK20	17/04/25	1622	GW
2	WG-160900764-2017042 5-JK21	17/04/25	1658	GW
3	WG-160900764-2017042			GW
4	WG-160900764-2017042			GW
5				
6				
7				
8				
9				
10				

Field Filled? (please circle) Metals / Hg / Cr / VI	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)												
	Acidity	Cr (VI) & Free Cr	Fluoride & Turbidity	Mercury & TOC	Total Coliforms E. coli Background	HUS x TSS	RCAP - Comprehensive (Drinking Water) Not filed filter	Reg 153 PCBs	Reg 153 VOCs & FT-14	SVOCS			
NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Turnaround Time (TAT) Required
 Please provide advance notice for rush projects

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 Working days for most tests
 Please note: Standard TAT for certain tests such as BOD and Diatoms/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission)
 Date Required: _____ Time Required: _____
 Rush Confirmation Number: _____ (call lab for #)

RELINQUISHED BY: (Signature/Print) JAMIE KOCH Date: 17/04/25 Time: 2:40	RECEIVED BY: (Signature/Print) [Signature] Date: 17/04/25 Time: 08:30	Laboratory Use Only # jars used and not submitted: _____ Temperature (°C) at Recv: REFER TO ACTR Custody Seal Present: Intact Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
---	---	--

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** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

Analysis as per quote B48218 - private well

REC'D IN PORT HOPE

Refer to ACTR

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 607241-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/05/09
 Report #: R4453483
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782997

Received: 2017/04/26, 12:55

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	3	N/A	2017/05/01	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	3	2017/04/29	2017/04/30	CAM SOP-00301	EPA 8270 m
Acidity as CaCO ₃ in liquid (1, 2)	3	N/A	2017/05/08	SLA SOP-00100	APHA SM2310B (Mod)
Alkalinity	2	N/A	2017/04/29	CAM SOP-00448	SM 22 2320 B m
Alkalinity	1	N/A	2017/04/30	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	2	N/A	2017/04/30	CAM SOP-00102	APHA 4500-CO ₂ D
Carbonate, Bicarbonate and Hydroxide	1	N/A	2017/05/01	CAM SOP-00102	APHA 4500-CO ₂ D
1,3-Dichloropropene Sum	3	N/A	2017/05/01		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2017/04/28	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2017/04/29	CAM SOP-00463	EPA 325.2 m
Conductivity	2	N/A	2017/04/29	CAM SOP-00414	SM 22 2510 m
Conductivity	1	N/A	2017/04/30	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	3	N/A	2017/04/28	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	3	N/A	2017/04/30	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (3)	2	N/A	2017/04/28	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2017/04/29	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (4)	3	2017/05/01	2017/05/02	CAM SOP-00316	CCME PHC-CWS m
Fluoride	2	2017/04/28	2017/04/29	CAM SOP-00449	SM 22 4500-F C m
Fluoride	1	2017/04/29	2017/04/30	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO ₃)	2	N/A	2017/04/29	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	1	N/A	2017/05/01	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	3	2017/05/01	2017/05/02	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (5)	2	N/A	2017/04/28	CAM SOP-00447	EPA 6020B m
Metals Analysis by ICPMS (as received) (5)	1	N/A	2017/05/01	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2017/04/30		
Ion Balance (% Difference)	2	N/A	2017/05/01		
Anion and Cation Sum	1	N/A	2017/04/30		
Anion and Cation Sum	2	N/A	2017/05/01		
Total Coliforms/ E. coli, CFU/100mL	3	N/A	2017/04/27	CAM SOP-00551	MOE E3407

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 607241-01-01

Attention:Report - 1609-00764

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Report Date: 2017/05/09
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782997

Received: 2017/04/26, 12:55

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date		Laboratory Method	Reference
		Extracted	Analyzed		
Total Ammonia-N	3	N/A	2017/05/02	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (6)	3	N/A	2017/04/29	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	3	2017/04/28	2017/04/28	CAM SOP-00309	EPA 8082A m
pH	2	N/A	2017/04/29	CAM SOP-00413	SM 4500H+ B m
pH	1	N/A	2017/04/30	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	2	N/A	2017/04/28	CAM SOP-00461	EPA 365.1 m
Orthophosphate	1	N/A	2017/04/29	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2017/04/30		
Sat. pH and Langelier Index (@ 20C)	2	N/A	2017/05/01		
Sat. pH and Langelier Index (@ 4C)	1	N/A	2017/04/30		
Sat. pH and Langelier Index (@ 4C)	2	N/A	2017/05/01		
Sulphate by Automated Colourimetry	2	N/A	2017/04/28	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2017/04/29	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	1	N/A	2017/04/30		
Total Dissolved Solids (TDS calc)	2	N/A	2017/05/01		
Total Dissolved Solids	1	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540C m
Total Dissolved Solids	2	2017/04/27	2017/05/01	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (7)	3	N/A	2017/05/01	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	2	2017/04/27	2017/04/28	CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	1	2017/04/27	2017/05/05	CAM SOP-00428	SM 22 2540D m
Turbidity	3	N/A	2017/04/29	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2017/04/28	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your C.O.C. #: 607241-01-01

Attention:Report - 1609-00764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/05/09
Report #: R4453483
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B782997

Received: 2017/04/26, 12:55

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Sladeview Petrochemical
- (2) Sample(s) analyzed using methodologies that have not been subjected to Maxxam's standard validation process for the submitted matrix and is not an Accredited method. Analysis performed with client consent, however results should be viewed with discretion
- (3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) Metals analysis was performed on the sample 'as received'.
- (6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (7) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Deepthi Shaji, Project Manager

Email: dshaji@maxxam.ca

Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU145	EGU145		EGU146		
Sampling Date		2017/04/26 09:37	2017/04/26 09:37		2017/04/26 10:25		
COC Number		607241-01-01	607241-01-01		607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK22 Lab-Dup	QC Batch	WG-160900764- 20170426-JK23	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	9.75		4958144	9.17	N/A	4958144
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	330		4958142	340	1.0	4958142
Calculated TDS	mg/L	510		4958141	490	1.0	4958141
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.8		4958142	1.9	1.0	4958142
Cation Sum	me/L	9.15		4958144	9.12	N/A	4958144
Hardness (CaCO3)	mg/L	360		4957487	390	1.0	4957487
Ion Balance (% Difference)	%	3.20		4957675	0.290	N/A	4957675
Langelier Index (@ 20C)	N/A	1.05		4958145	0.954		4958145
Langelier Index (@ 4C)	N/A	0.797		4958146	0.706		4958146
Saturation pH (@ 20C)	N/A	6.90		4958145	6.82		4958145
Saturation pH (@ 4C)	N/A	7.15		4958146	7.06		4958146
Inorganics							
Total Ammonia-N	mg/L	<0.050		4962540	<0.050	0.050	4962540
Conductivity	umho/cm	920		4960893	890	1.0	4959893
Dissolved Organic Carbon	mg/L	2.0		4959909	1.2	0.20	4959892
Orthophosphate (P)	mg/L	0.014	0.010	4960410	<0.010	0.010	4959054
pH	pH	7.95		4960899	7.77		4959890
Dissolved Sulphate (SO4)	mg/L	37	36	4960403	21	1.0	4959043
Alkalinity (Total as CaCO3)	mg/L	330		4960882	340	1.0	4959870
Dissolved Chloride (Cl)	mg/L	79	76	4960401	63	1.0	4959038
Nitrite (N)	mg/L	<0.010		4959917	<0.010	0.010	4959917
Nitrate (N)	mg/L	1.52		4959917	2.92	0.10	4959917
Metals							
. Aluminum (Al)	mg/L	<0.0050		4958446	0.018	0.0050	4958446
. Antimony (Sb)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L	0.067		4958446	0.052	0.0020	4958446
. Beryllium (Be)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Boron (B)	mg/L	0.015		4958446	0.013	0.010	4958446
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU145	EGU145		EGU146		
Sampling Date		2017/04/26 09:37	2017/04/26 09:37		2017/04/26 10:25		
COC Number		607241-01-01	607241-01-01		607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK22 Lab-Dup	QC Batch	WG-160900764- 20170426-JK23	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010		4958446	<0.00010	0.00010	4958446
. Calcium (Ca)	mg/L	110		4958446	130	0.20	4958446
. Chromium (Cr)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L	0.0082		4958446	<0.0010	0.0010	4958446
. Iron (Fe)	mg/L	<0.10		4958446	<0.10	0.10	4958446
. Lead (Pb)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Magnesium (Mg)	mg/L	20		4958446	13	0.050	4958446
. Manganese (Mn)	mg/L	<0.0020		4958446	0.0046	0.0020	4958446
. Molybdenum (Mo)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Nickel (Ni)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L	<0.10		4958446	<0.10	0.10	4958446
. Potassium (K)	mg/L	1.5		4958446	1.1	0.20	4958446
. Selenium (Se)	mg/L	<0.0020		4958446	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L	5.7		4958446	5.3	0.050	4958446
. Silver (Ag)	mg/L	<0.00010		4958446	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L	44		4958446	31	0.10	4958446
. Strontium (Sr)	mg/L	0.26		4958446	0.23	0.0010	4958446
. Thallium (Tl)	mg/L	<0.000050		4958446	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L	<0.0050		4958446	<0.0050	0.0050	4958446
. Uranium (U)	mg/L	0.0012		4958446	0.00098	0.00010	4958446
. Vanadium (V)	mg/L	<0.00050		4958446	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L	0.0077		4958446	<0.0050	0.0050	4958446
. Zirconium (Zr)	mg/L	<0.0010		4958446	<0.0010	0.0010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU146		EGU147	EGU147		
Sampling Date		2017/04/26 10:25		2017/04/26 11:14	2017/04/26 11:14		
COC Number		607241-01-01		607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK23 Lab-Dup	QC Batch	WG-160900764- 20170426-JK24	WG-160900764- 20170426-JK24 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L		4958144	9.73		N/A	4958144
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		4958142	310		1.0	4958142
Calculated TDS	mg/L		4958141	520		1.0	4958141
Carb. Alkalinity (calc. as CaCO3)	mg/L		4958142	1.7		1.0	4958142
Cation Sum	me/L		4958144	9.55		N/A	4958144
Hardness (CaCO3)	mg/L		4957487	400		1.0	4957487
Ion Balance (% Difference)	%		4957675	0.920		N/A	4957675
Langelier Index (@ 20C)	N/A		4958145	0.876			4958145
Langelier Index (@ 4C)	N/A		4958146	0.628			4958146
Saturation pH (@ 20C)	N/A		4958145	6.90			4958145
Saturation pH (@ 4C)	N/A		4958146	7.15			4958146
Inorganics							
Total Ammonia-N	mg/L		4962540	<0.050		0.050	4962540
Conductivity	umho/cm		4959893	950		1.0	4959893
Dissolved Organic Carbon	mg/L		4959892	0.93		0.20	4959909
Orthophosphate (P)	mg/L		4959054	<0.010		0.010	4959054
pH	pH		4959890	7.78			4959890
Dissolved Sulphate (SO4)	mg/L		4959043	37		1.0	4959043
Alkalinity (Total as CaCO3)	mg/L		4959870	310		1.0	4959870
Dissolved Chloride (Cl)	mg/L		4959038	97		1.0	4959038
Nitrite (N)	mg/L	<0.010	4959917	<0.010		0.010	4959917
Nitrate (N)	mg/L	2.92	4959917	0.72		0.10	4959917
Metals							
. Aluminum (Al)	mg/L		4958446	<0.0050	<0.0050	0.0050	4958446
. Antimony (Sb)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Arsenic (As)	mg/L		4958446	<0.0010	<0.0010	0.0010	4958446
. Barium (Ba)	mg/L		4958446	0.067	0.068	0.0020	4958446
. Beryllium (Be)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Boron (B)	mg/L		4958446	<0.010	0.010	0.010	4958446
. Cadmium (Cd)	mg/L		4958446	<0.00010	<0.00010	0.00010	4958446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		EGU146		EGU147	EGU147		
Sampling Date		2017/04/26 10:25		2017/04/26 11:14	2017/04/26 11:14		
COC Number		607241-01-01		607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK23 Lab-Dup	QC Batch	WG-160900764- 20170426-JK24	WG-160900764- 20170426-JK24 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L		4958446	120	120	0.20	4958446
. Chromium (Cr)	mg/L		4958446	<0.0050	<0.0050	0.0050	4958446
. Cobalt (Co)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Copper (Cu)	mg/L		4958446	0.0060	0.0056	0.0010	4958446
. Iron (Fe)	mg/L		4958446	0.78	0.79	0.10	4958446
. Lead (Pb)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Magnesium (Mg)	mg/L		4958446	25	25	0.050	4958446
. Manganese (Mn)	mg/L		4958446	0.0069	0.0070	0.0020	4958446
. Molybdenum (Mo)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Nickel (Ni)	mg/L		4958446	<0.0010	<0.0010	0.0010	4958446
. Phosphorus (P)	mg/L		4958446	<0.10	<0.10	0.10	4958446
. Potassium (K)	mg/L		4958446	1.9	1.9	0.20	4958446
. Selenium (Se)	mg/L		4958446	<0.0020	<0.0020	0.0020	4958446
. Silicon (Si)	mg/L		4958446	6.4	6.3	0.050	4958446
. Silver (Ag)	mg/L		4958446	<0.00010	<0.00010	0.00010	4958446
. Sodium (Na)	mg/L		4958446	32	33	0.10	4958446
. Strontium (Sr)	mg/L		4958446	0.26	0.26	0.0010	4958446
. Thallium (Tl)	mg/L		4958446	<0.000050	<0.000050	0.000050	4958446
. Titanium (Ti)	mg/L		4958446	<0.0050	<0.0050	0.0050	4958446
. Uranium (U)	mg/L		4958446	0.013	0.013	0.00010	4958446
. Vanadium (V)	mg/L		4958446	<0.00050	<0.00050	0.00050	4958446
. Zinc (Zn)	mg/L		4958446	0.013	0.012	0.0050	4958446
. Zirconium (Zr)	mg/L		4958446	<0.0010	<0.0010	0.0010	4958446
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							

RESULTS OF ANALYSES OF WATER

Maxxam ID		EGU145	EGU145		EGU146		
Sampling Date		2017/04/26 09:37	2017/04/26 09:37		2017/04/26 10:25		
COC Number		607241-01-01	607241-01-01		607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK22 Lab-Dup	QC Batch	WG-160900764- 20170426-JK23	RDL	QC Batch

Inorganics							
Acidity as CaCO3	mg/L	31		4960285	46	10	4960285
Total Dissolved Solids	mg/L	512		4958261	516	10	4958261
Fluoride (F-)	mg/L	<0.10		4961544	<0.10	0.10	4959879
Free Cyanide	ug/L	<1		4961940	<1	1	4961940
Total Organic Carbon (TOC)	mg/L	1.8		4962598	1.1	0.20	4962598
Total Suspended Solids	mg/L	<10	<10	4958251	<10	10	4958251
Turbidity	NTU	0.2		4959860	1.0	0.1	4958903

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		EGU147	EGU147		
Sampling Date		2017/04/26 11:14	2017/04/26 11:14		
COC Number		607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK24	WG-160900764- 20170426-JK24 Lab-Dup	RDL	QC Batch

Inorganics						
Acidity as CaCO3	mg/L	47		47	10	4960285
Total Dissolved Solids	mg/L	536			10	4958448
Fluoride (F-)	mg/L	<0.10			0.10	4959879
Free Cyanide	ug/L	<1			1	4961940
Total Organic Carbon (TOC)	mg/L	0.65			0.20	4962598
Total Suspended Solids	mg/L	<10			10	4958445
Turbidity	NTU	0.6			0.1	4958903

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		EGU145	EGU146	EGU147		
Sampling Date		2017/04/26 09:37	2017/04/26 10:25	2017/04/26 11:14		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK23	WG-160900764- 20170426-JK24	RDL	QC Batch
Metals						
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	0.50	4959768
Mercury (Hg)	mg/L	<0.0001	<0.0001	<0.0001	0.0001	4962586
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

MICROBIOLOGY (WATER)

Maxxam ID		EGU145	EGU146	EGU147	
Sampling Date		2017/04/26 09:37	2017/04/26 10:25	2017/04/26 11:14	
COC Number		607241-01-01	607241-01-01	607241-01-01	
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK23	WG-160900764- 20170426-JK24	QC Batch
Microbiological					
Background	CFU/100mL	25	38	0	4959028
Total Coliforms	CFU/100mL	1	1	0	4959028
Escherichia coli	CFU/100mL	0	0	0	4959028
QC Batch = Quality Control Batch					

O.REG 153 PCBS (WATER)

Maxxam ID		EGU145	EGU146	EGU147		
Sampling Date		2017/04/26 09:37	2017/04/26 10:25	2017/04/26 11:14		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK23	WG-160900764- 20170426-JK24	RDL	QC Batch
PCBs						
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	4960282
Surrogate Recovery (%)						
Decachlorobiphenyl	%	83	89	88		4960282
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU145	EGU145	EGU146		
Sampling Date		2017/04/26 09:37	2017/04/26 09:37	2017/04/26 10:25		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK22 Lab-Dup	WG-160900764- 20170426-JK23	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50		<0.50	0.50	4957890
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4958383
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Bromodichloromethane	ug/L	1.4	1.4	<0.50	0.50	4958383
Bromoform	ug/L	1.5	1.5	<1.0	1.0	4958383
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Chloroform	ug/L	0.90	0.87	<0.20	0.20	4958383
Dibromochloromethane	ug/L	2.2	2.1	<0.50	0.50	4958383
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4958383
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4958383
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4958383
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4958383
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4958383
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4958383
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4958383
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4958383

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU145	EGU145	EGU146		
Sampling Date		2017/04/26 09:37	2017/04/26 09:37	2017/04/26 10:25		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK22 Lab-Dup	WG-160900764- 20170426-JK23	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4958383
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4958383
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4958383
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	4958383
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	4958383
F1 (C6-C10)	ug/L	<25	<25	<25	25	4958383
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	4958383
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100		<100	100	4963047
F3 (C16-C34 Hydrocarbons)	ug/L	<200		<200	200	4963047
F4 (C34-C50 Hydrocarbons)	ug/L	<200		<200	200	4963047
Reached Baseline at C50	ug/L	Yes		Yes		4963047
Surrogate Recovery (%)						
o-Terphenyl	%	99		101		4963047
4-Bromofluorobenzene	%	92	92	92		4958383
D4-1,2-Dichloroethane	%	101	103	101		4958383
D8-Toluene	%	97	95	98		4958383
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU147		
Sampling Date		2017/04/26 11:14		
COC Number		607241-01-01		
	UNITS	WG-160900764- 20170426-JK24	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	4957890
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	4958383
Benzene	ug/L	<0.20	0.20	4958383
Bromodichloromethane	ug/L	<0.50	0.50	4958383
Bromoform	ug/L	<1.0	1.0	4958383
Bromomethane	ug/L	<0.50	0.50	4958383
Carbon Tetrachloride	ug/L	<0.20	0.20	4958383
Chlorobenzene	ug/L	<0.20	0.20	4958383
Chloroform	ug/L	<0.20	0.20	4958383
Dibromochloromethane	ug/L	<0.50	0.50	4958383
1,2-Dichlorobenzene	ug/L	<0.50	0.50	4958383
1,3-Dichlorobenzene	ug/L	<0.50	0.50	4958383
1,4-Dichlorobenzene	ug/L	<0.50	0.50	4958383
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	4958383
1,1-Dichloroethane	ug/L	<0.20	0.20	4958383
1,2-Dichloroethane	ug/L	<0.50	0.50	4958383
1,1-Dichloroethylene	ug/L	<0.20	0.20	4958383
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	4958383
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	4958383
1,2-Dichloropropane	ug/L	<0.20	0.20	4958383
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	4958383
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	4958383
Ethylbenzene	ug/L	<0.20	0.20	4958383
Ethylene Dibromide	ug/L	<0.20	0.20	4958383
Hexane	ug/L	<1.0	1.0	4958383
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	4958383
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	4958383
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	4958383
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	4958383
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		EGU147		
Sampling Date		2017/04/26 11:14		
COC Number		607241-01-01		
	UNITS	WG-160900764- 20170426-JK24	RDL	QC Batch
Styrene	ug/L	<0.50	0.50	4958383
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	4958383
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	4958383
Tetrachloroethylene	ug/L	<0.20	0.20	4958383
Toluene	ug/L	<0.20	0.20	4958383
1,1,1-Trichloroethane	ug/L	<0.20	0.20	4958383
1,1,2-Trichloroethane	ug/L	<0.50	0.50	4958383
Trichloroethylene	ug/L	<0.20	0.20	4958383
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	4958383
Vinyl Chloride	ug/L	<0.20	0.20	4958383
p+m-Xylene	ug/L	<0.20	0.20	4958383
o-Xylene	ug/L	<0.20	0.20	4958383
Total Xylenes	ug/L	<0.20	0.20	4958383
F1 (C6-C10)	ug/L	<25	25	4958383
F1 (C6-C10) - BTEX	ug/L	<25	25	4958383
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	150	100	4963047
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	4963047
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	4963047
Reached Baseline at C50	ug/L	Yes		4963047
Surrogate Recovery (%)				
o-Terphenyl	%	107		4963047
4-Bromofluorobenzene	%	92		4958383
D4-1,2-Dichloroethane	%	103		4958383
D8-Toluene	%	97		4958383
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU145	EGU146	EGU147		
Sampling Date		2017/04/26 09:37	2017/04/26 10:25	2017/04/26 11:14		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK23	WG-160900764- 20170426-JK24	RDL	QC Batch
Semivolatile Organics						
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	0.1	4961356
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	4961356
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	4961356
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	4961356
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	0.5	4961356
2,4-Dinitrophenol	ug/L	<2	<2	<2	2	4961356
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	4961356
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	4961356
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	4961356
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	0.5	4961356
Acenaphthene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
Anthracene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	0.01	4961356
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Biphenyl	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	4961356
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	1	4961356
Chrysene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Fluoranthene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
Fluorene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		EGU145	EGU146	EGU147		
Sampling Date		2017/04/26 09:37	2017/04/26 10:25	2017/04/26 11:14		
COC Number		607241-01-01	607241-01-01	607241-01-01		
	UNITS	WG-160900764- 20170426-JK22	WG-160900764- 20170426-JK23	WG-160900764- 20170426-JK24	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Naphthalene	ug/L	<0.2	<0.2	<0.2	0.2	4961356
p-Chloroaniline	ug/L	<1	<1	<1	1	4961356
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Phenanthrene	ug/L	<0.1	<0.1	<0.1	0.1	4961356
Phenol	ug/L	<0.5	<0.5	<0.5	0.5	4961356
Pyrene	ug/L	<0.05	<0.05	<0.05	0.05	4961356
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	0.28	4957722
Surrogate Recovery (%)						
2,4,6-Tribromophenol	%	33 (1)	36 (1)	38 (1)		4961356
2-Fluorobiphenyl	%	69	121	53		4961356
D14-Terphenyl (FS)	%	98	100	101		4961356
D5-Nitrobenzene	%	69	77	56		4961356
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.						

TEST SUMMARY

Maxxam ID: EGU145
Sample ID: WG-160900764-20170426-JK22
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4957722	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4960285	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4960882	N/A	2017/04/30	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	4958142	N/A	2017/05/01	Automated Statchk
1,3-Dichloropropene Sum	CALC	4957890	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Conductivity	AT	4960893	N/A	2017/04/30	Yogesh Patel
Chromium (VI) in Water	IC	4959768	N/A	2017/04/28	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963047	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4961544	2017/04/29	2017/04/30	Yogesh Patel
Hardness (calculated as CaCO3)		4957487	N/A	2017/04/29	Automated Statchk
Mercury in Water by CVAA	CV/AA	4962586	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4957675	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4958144	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4959028	N/A	2017/04/27	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/28	Li Peng
pH	AT	4960899	N/A	2017/04/30	Yogesh Patel
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4958145	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4958146	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Dissolved Solids (TDS calc)	CALC	4958141	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4959860	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGU145 Dup
Sample ID: WG-160900764-20170426-JK22
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	4960401	N/A	2017/04/29	Deonarine Ramnarine
Orthophosphate	KONE	4960410	N/A	2017/04/29	Alina Dobreanu
Sulphate by Automated Colourimetry	KONE	4960403	N/A	2017/04/29	Deonarine Ramnarine
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

TEST SUMMARY

Maxxam ID: EGU146
Sample ID: WG-160900764-20170426-JK23
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4957722	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4960285	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4958142	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4957890	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4959768	N/A	2017/04/28	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959892	N/A	2017/04/29	Azadeh Shahbazi
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963047	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4957487	N/A	2017/05/01	Automated Statchk
Mercury in Water by CVAA	CV/AA	4962586	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/05/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	4957675	N/A	2017/05/01	Automated Statchk
Anion and Cation Sum	CALC	4958144	N/A	2017/05/01	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4959028	N/A	2017/04/27	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4958145	N/A	2017/05/01	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4958146	N/A	2017/05/01	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4958141	N/A	2017/05/01	Automated Statchk
Total Dissolved Solids	BAL	4958261	2017/04/27	2017/05/01	Lu Wang(Alice)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958251	2017/04/27	2017/04/28	Arpan Shah
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGU146 Dup
Sample ID: WG-160900764-20170426-JK23
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal

TEST SUMMARY

Maxxam ID: EGU147
Sample ID: WG-160900764-20170426-JK24
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4957722	N/A	2017/05/01	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	4961356	2017/04/29	2017/04/30	Milijana Avramovic
Acidity as CaCO3 in liquid		4960285	N/A	2017/05/08	Grace Sison
Alkalinity	AT	4959870	N/A	2017/04/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	4958142	N/A	2017/04/30	Automated Statchk
1,3-Dichloropropene Sum	CALC	4957890	N/A	2017/05/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	4959038	N/A	2017/04/28	Alina Dobreanu
Conductivity	AT	4959893	N/A	2017/04/29	Surinder Rai
Chromium (VI) in Water	IC	4959768	N/A	2017/04/28	Lang Le
Free (WAD) Cyanide	SKAL/CN	4961940	N/A	2017/04/30	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	4959909	N/A	2017/04/28	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4963047	2017/05/01	2017/05/02	Zhiyue (Frank) Zhu
Fluoride	ISE	4959879	2017/04/28	2017/04/29	Surinder Rai
Hardness (calculated as CaCO3)		4957487	N/A	2017/04/29	Automated Statchk
Mercury in Water by CVAA	CV/AA	4962586	2017/05/01	2017/05/02	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad
Ion Balance (% Difference)	CALC	4957675	N/A	2017/04/30	Automated Statchk
Anion and Cation Sum	CALC	4958144	N/A	2017/04/30	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	4959028	N/A	2017/04/27	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	4962540	N/A	2017/05/02	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	4959917	N/A	2017/04/29	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	4960282	2017/04/28	2017/04/28	Li Peng
pH	AT	4959890	N/A	2017/04/29	Surinder Rai
Orthophosphate	KONE	4959054	N/A	2017/04/28	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	4958145	N/A	2017/04/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	4958146	N/A	2017/04/30	Automated Statchk
Sulphate by Automated Colourimetry	KONE	4959043	N/A	2017/04/28	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	4958141	N/A	2017/04/30	Automated Statchk
Total Dissolved Solids	BAL	4958448	2017/04/27	2017/04/28	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	4962598	N/A	2017/05/01	Azadeh Shahbazi
Total Suspended Solids	BAL	4958445	2017/04/27	2017/05/05	Bansari Ray
Turbidity	AT	4958903	N/A	2017/04/29	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4958383	N/A	2017/04/28	Denis Reid

Maxxam ID: EGU147 Dup
Sample ID: WG-160900764-20170426-JK24
Matrix: Water

Collected: 2017/04/26
Shipped:
Received: 2017/04/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity as CaCO3 in liquid		4960285	N/A	2017/05/08	Grace Sison
Metals Analysis by ICPMS (as received)	ICP/MS	4958446	N/A	2017/04/28	Arefa Dabhad

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.3°C
Package 2	6.3°C
Package 3	7.3°C

Sample EGU145 [WG-160900764-20170426-JK22] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent. TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample EGU146 [WG-160900764-20170426-JK23] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958383	4-Bromofluorobenzene	2017/04/28	97	70 - 130	96	70 - 130	92	%				
4958383	D4-1,2-Dichloroethane	2017/04/28	101	70 - 130	98	70 - 130	100	%				
4958383	D8-Toluene	2017/04/28	100	70 - 130	103	70 - 130	97	%				
4960282	Decachlorobiphenyl	2017/04/28	71	60 - 130	82	60 - 130	79	%				
4961356	2,4,6-Tribromophenol	2017/04/29	74	50 - 130	101	50 - 130	74	%				
4961356	2-Fluorobiphenyl	2017/04/29	81	50 - 130	74	50 - 130	77	%				
4961356	D14-Terphenyl (FS)	2017/04/29	111	50 - 130	108	50 - 130	104	%				
4961356	D5-Nitrobenzene	2017/04/29	88	50 - 130	97	50 - 130	84	%				
4963047	o-Terphenyl	2017/05/02	102	60 - 130	99	60 - 130	97	%				
4958251	Total Suspended Solids	2017/04/28					<10	mg/L	NC	25	96	85 - 115
4958261	Total Dissolved Solids	2017/05/01					<10	mg/L	2.0	25	99	90 - 110
4958383	1,1,1,2-Tetrachloroethane	2017/04/28	99	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1,1-Trichloroethane	2017/04/28	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	1,1,2,2-Tetrachloroethane	2017/04/28	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1,2-Trichloroethane	2017/04/28	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
4958383	1,1-Dichloroethane	2017/04/28	101	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4958383	1,1-Dichloroethylene	2017/04/28	106	70 - 130	109	70 - 130	<0.20	ug/L	NC	30		
4958383	1,2-Dichlorobenzene	2017/04/28	95	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
4958383	1,2-Dichloroethane	2017/04/28	95	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
4958383	1,2-Dichloropropane	2017/04/28	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	1,3-Dichlorobenzene	2017/04/28	96	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
4958383	1,4-Dichlorobenzene	2017/04/28	95	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
4958383	Acetone (2-Propanone)	2017/04/28	91	60 - 140	86	60 - 140	<10	ug/L	NC	30		
4958383	Benzene	2017/04/28	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4958383	Bromodichloromethane	2017/04/28	99	70 - 130	98	70 - 130	<0.50	ug/L	2.6	30		
4958383	Bromoform	2017/04/28	94	70 - 130	94	70 - 130	<1.0	ug/L	0.96	30		
4958383	Bromomethane	2017/04/28	105	60 - 140	103	60 - 140	<0.50	ug/L	NC	30		
4958383	Carbon Tetrachloride	2017/04/28	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
4958383	Chlorobenzene	2017/04/28	98	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
4958383	Chloroform	2017/04/28	99	70 - 130	99	70 - 130	<0.20	ug/L	2.8	30		
4958383	cis-1,2-Dichloroethylene	2017/04/28	102	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958383	cis-1,3-Dichloropropene	2017/04/28	96	70 - 130	93	70 - 130	<0.30	ug/L	NC	30		
4958383	Dibromochloromethane	2017/04/28	97	70 - 130	98	70 - 130	<0.50	ug/L	3.9	30		
4958383	Dichlorodifluoromethane (FREON 12)	2017/04/28	92	60 - 140	96	60 - 140	<1.0	ug/L	NC	30		
4958383	Ethylbenzene	2017/04/28	94	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	Ethylene Dibromide	2017/04/28	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
4958383	F1 (C6-C10) - BTEX	2017/04/28					<25	ug/L	NC	30		
4958383	F1 (C6-C10)	2017/04/28	95	60 - 140	100	60 - 140	<25	ug/L	NC	30		
4958383	Hexane	2017/04/28	104	70 - 130	107	70 - 130	<1.0	ug/L	NC	30		
4958383	Methyl Ethyl Ketone (2-Butanone)	2017/04/28	96	60 - 140	92	60 - 140	<10	ug/L	NC	30		
4958383	Methyl Isobutyl Ketone	2017/04/28	94	70 - 130	92	70 - 130	<5.0	ug/L	NC	30		
4958383	Methyl t-butyl ether (MTBE)	2017/04/28	93	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
4958383	Methylene Chloride(Dichloromethane)	2017/04/28	104	70 - 130	103	70 - 130	<2.0	ug/L	NC	30		
4958383	o-Xylene	2017/04/28	90	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
4958383	p+m-Xylene	2017/04/28	89	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
4958383	Styrene	2017/04/28	91	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
4958383	Tetrachloroethylene	2017/04/28	97	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
4958383	Toluene	2017/04/28	95	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
4958383	Total Xylenes	2017/04/28					<0.20	ug/L	NC	30		
4958383	trans-1,2-Dichloroethylene	2017/04/28	102	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
4958383	trans-1,3-Dichloropropene	2017/04/28	96	70 - 130	95	70 - 130	<0.40	ug/L	NC	30		
4958383	Trichloroethylene	2017/04/28	98	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
4958383	Trichlorofluoromethane (FREON 11)	2017/04/28	104	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
4958383	Vinyl Chloride	2017/04/28	105	70 - 130	108	70 - 130	<0.20	ug/L	NC	30		
4958445	Total Suspended Solids	2017/05/05					<10	mg/L	NC	25	97	85 - 115
4958446	. Aluminum (Al)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Antimony (Sb)	2017/04/28	103	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Arsenic (As)	2017/04/28	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Barium (Ba)	2017/04/28	99	80 - 120	95	80 - 120	<0.0020	mg/L	1.7	20		
4958446	. Beryllium (Be)	2017/04/28	100	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Boron (B)	2017/04/28	96	80 - 120	92	80 - 120	<0.010	mg/L	0.16	20		
4958446	. Cadmium (Cd)	2017/04/28	101	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4958446	. Calcium (Ca)	2017/04/28	NC	80 - 120	95	80 - 120	<0.20	mg/L	1.4	20		
4958446	. Chromium (Cr)	2017/04/28	102	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Cobalt (Co)	2017/04/28	98	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Copper (Cu)	2017/04/28	104	80 - 120	97	80 - 120	<0.0010	mg/L	6.4	20		
4958446	. Iron (Fe)	2017/04/28	96	80 - 120	95	80 - 120	<0.10	mg/L	0.64	20		
4958446	. Lead (Pb)	2017/04/28	101	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Magnesium (Mg)	2017/04/28	97	80 - 120	99	80 - 120	<0.050	mg/L	1.0	20		
4958446	. Manganese (Mn)	2017/04/28	96	80 - 120	92	80 - 120	<0.0020	mg/L	1.2	20		
4958446	. Molybdenum (Mo)	2017/04/28	105	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Nickel (Ni)	2017/04/28	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
4958446	. Phosphorus (P)	2017/04/28	104	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
4958446	. Potassium (K)	2017/04/28	99	80 - 120	97	80 - 120	<0.20	mg/L	0.73	20		
4958446	. Selenium (Se)	2017/04/28	102	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
4958446	. Silicon (Si)	2017/04/28	101	80 - 120	97	80 - 120	<0.050	mg/L	1.9	20		
4958446	. Silver (Ag)	2017/04/28	100	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		
4958446	. Sodium (Na)	2017/04/28	NC	80 - 120	99	80 - 120	0.15, RDL=0.10	mg/L	1.5	20		
4958446	. Strontium (Sr)	2017/04/28	96	80 - 120	89	80 - 120	<0.0010	mg/L	1.7	20		
4958446	. Thallium (Tl)	2017/04/28	102	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
4958446	. Titanium (Ti)	2017/04/28	104	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
4958446	. Uranium (U)	2017/04/28	104	80 - 120	97	80 - 120	<0.00010	mg/L	2.6	20		
4958446	. Vanadium (V)	2017/04/28	101	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
4958446	. Zinc (Zn)	2017/04/28	98	80 - 120	95	80 - 120	<0.0050	mg/L	4.5	20		
4958446	. Zirconium (Zr)	2017/04/28	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
4958448	Total Dissolved Solids	2017/04/28					<10	mg/L	1.6	25	99	90 - 110
4958903	Turbidity	2017/04/29			98	85 - 115	<0.1	NTU	NC	20		
4959038	Dissolved Chloride (Cl)	2017/04/28	NC	80 - 120	102	80 - 120	<1.0	mg/L				
4959043	Dissolved Sulphate (SO4)	2017/04/28	NC	75 - 125	99	80 - 120	<1.0	mg/L				
4959054	Orthophosphate (P)	2017/04/28	103	75 - 125	98	80 - 120	<0.010	mg/L	NC	25		
4959768	Chromium (VI)	2017/04/28	NC	80 - 120	99	80 - 120	<0.50	ug/L	0.44	20		
4959860	Turbidity	2017/04/29			99	85 - 115	<0.1	NTU	9.4	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4959870	Alkalinity (Total as CaCO3)	2017/04/29			95	85 - 115	<1.0	mg/L	0.55	20		
4959879	Fluoride (F-)	2017/04/29	82	80 - 120	101	80 - 120	<0.10	mg/L	1.9	20		
4959890	pH	2017/04/29			102	98 - 103			1.1	N/A		
4959892	Dissolved Organic Carbon	2017/04/29	101	80 - 120	102	80 - 120	<0.20	mg/L	3.6	20		
4959893	Conductivity	2017/04/29			100	85 - 115	<1.0	umho/cm	0.084	25		
4959909	Dissolved Organic Carbon	2017/04/28	103	80 - 120	105	80 - 120	<0.20	mg/L	0.75	20		
4959917	Nitrate (N)	2017/04/29	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.17	20		
4959917	Nitrite (N)	2017/04/29	98	80 - 120	98	80 - 120	<0.010	mg/L	NC	20		
4960282	Aroclor 1242	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1248	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1254	2017/04/28					<0.05	ug/L	NC	30		
4960282	Aroclor 1260	2017/04/28	64	60 - 130	83	60 - 130	<0.05	ug/L	NC	30		
4960282	Total PCB	2017/04/28	64	60 - 130	83	60 - 130	<0.05	ug/L	NC	40		
4960285	Acidity as CaCO3	2017/05/08					<10	mg/L	NC	25		
4960401	Dissolved Chloride (Cl)	2017/04/29	NC	80 - 120	103	80 - 120	<1.0	mg/L	3.6	20		
4960403	Dissolved Sulphate (SO4)	2017/04/29	NC	75 - 125	107	80 - 120	<1.0	mg/L	1.6	20		
4960410	Orthophosphate (P)	2017/04/29	91	75 - 125	100	80 - 120	<0.010	mg/L	NC	25		
4960882	Alkalinity (Total as CaCO3)	2017/04/30			95	85 - 115	<1.0	mg/L	0.42	20		
4960893	Conductivity	2017/04/30			101	85 - 115	<1.0	umho/cm	0.19	25		
4960899	pH	2017/04/30			102	98 - 103			0.41	N/A		
4961356	1,2,4-Trichlorobenzene	2017/04/29	84	40 - 130	80	40 - 130	<0.1	ug/L	NC	30		
4961356	1-Methylnaphthalene	2017/04/29	78	50 - 130	72	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4,5-Trichlorophenol	2017/04/29	109	50 - 130	108	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4,6-Trichlorophenol	2017/04/29	100	50 - 130	104	50 - 130	<0.2	ug/L	NC	30		
4961356	2,4-Dichlorophenol	2017/04/29	94	50 - 130	108	50 - 130	<0.1	ug/L	NC	30		
4961356	2,4-Dimethylphenol	2017/04/29	28 (1)	30 - 130	61	30 - 130	<0.5	ug/L	NC	30		
4961356	2,4-Dinitrophenol	2017/04/29	119	30 - 130	96	30 - 130	<2	ug/L	NC	30		
4961356	2,4-Dinitrotoluene	2017/04/29	108	50 - 130	110	50 - 130	<0.3	ug/L	NC	30		
4961356	2,6-Dinitrotoluene	2017/04/29	96	50 - 130	98	50 - 130	<0.3	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4961356	2-Chlorophenol	2017/04/29	80	50 - 130	83	50 - 130	<0.1	ug/L	NC	30		
4961356	2-Methylnaphthalene	2017/04/29	75	50 - 130	69	50 - 130	<0.2	ug/L	NC	30		
4961356	3,3'-Dichlorobenzidine	2017/04/29	76	30 - 130	119	30 - 130	<0.5	ug/L	NC	30		
4961356	Acenaphthene	2017/04/29	92	50 - 130	90	50 - 130	<0.2	ug/L	NC	30		
4961356	Acenaphthylene	2017/04/29	91	50 - 130	89	50 - 130	<0.2	ug/L	NC	30		
4961356	Anthracene	2017/04/29	93	50 - 130	88	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(a)anthracene	2017/04/29	114	50 - 130	109	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(a)pyrene	2017/04/29	109	50 - 130	102	50 - 130	<0.01	ug/L	NC	30		
4961356	Benzo(b/j)fluoranthene	2017/04/29	112	50 - 130	104	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(g,h,i)perylene	2017/04/29	117	50 - 130	127	50 - 130	<0.05	ug/L	NC	30		
4961356	Benzo(k)fluoranthene	2017/04/29	112	50 - 130	100	50 - 130	<0.05	ug/L	NC	30		
4961356	Biphenyl	2017/04/29	80	50 - 130	79	50 - 130	<0.1	ug/L	NC	30		
4961356	Bis(2-chloroethyl)ether	2017/04/29	84	50 - 130	87	50 - 130	<0.5	ug/L	NC	30		
4961356	Bis(2-chloroisopropyl)ether	2017/04/29	86	50 - 130	91	50 - 130	<0.5	ug/L	NC	30		
4961356	Bis(2-ethylhexyl)phthalate	2017/04/29	109	50 - 130	102	50 - 130	<1	ug/L	NC	30		
4961356	Chrysene	2017/04/29	108	50 - 130	102	50 - 130	<0.05	ug/L	NC	30		
4961356	Dibenz(a,h)anthracene	2017/04/29	112	50 - 130	127	50 - 130	<0.1	ug/L	NC	30		
4961356	Diethyl phthalate	2017/04/29	111	50 - 130	108	50 - 130	<0.1	ug/L	NC	30		
4961356	Dimethyl phthalate	2017/04/29	99	50 - 130	98	50 - 130	<0.1	ug/L	NC	30		
4961356	Fluoranthene	2017/04/29	108	50 - 130	107	50 - 130	<0.2	ug/L	NC	30		
4961356	Fluorene	2017/04/29	93	50 - 130	91	50 - 130	<0.2	ug/L	NC	30		
4961356	Indeno(1,2,3-cd)pyrene	2017/04/29	114	50 - 130	128	50 - 130	<0.1	ug/L	NC	30		
4961356	Naphthalene	2017/04/29	82	50 - 130	81	50 - 130	<0.2	ug/L	NC	30		
4961356	p-Chloroaniline	2017/04/29	49	30 - 130	100	30 - 130	<1	ug/L	NC	30		
4961356	Pentachlorophenol	2017/04/29	83	50 - 130	77	50 - 130	<0.1	ug/L	NC	30		
4961356	Phenanthrene	2017/04/29	93	50 - 130	88	50 - 130	<0.1	ug/L	NC	30		
4961356	Phenol	2017/04/29	35	30 - 130	38	30 - 130	<0.5	ug/L	NC	30		
4961356	Pyrene	2017/04/29	123	50 - 130	114	50 - 130	<0.05	ug/L	NC	30		
4961544	Fluoride (F-)	2017/04/30	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
4961940	Free Cyanide	2017/04/30	99	80 - 120	99	80 - 120	<1	ug/L	NC	20		
4962540	Total Ammonia-N	2017/05/02	99	80 - 120	100	85 - 115	<0.050	mg/L	9.5	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
4962586	Mercury (Hg)	2017/05/02	108	75 - 125	107	80 - 120	<0.0001	mg/L	NC	20		
4962598	Total Organic Carbon (TOC)	2017/05/01	101	80 - 120	102	80 - 120	<0.20	mg/L	1.5	20		
4963047	F2 (C10-C16 Hydrocarbons)	2017/05/02	94	50 - 130	93	60 - 130	<100	ug/L	NC	30		
4963047	F3 (C16-C34 Hydrocarbons)	2017/05/02	98	50 - 130	97	60 - 130	<200	ug/L	NC	30		
4963047	F4 (C34-C50 Hydrocarbons)	2017/05/02	105	50 - 130	105	60 - 130	<200	ug/L	NC	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere

Cristina Carriere, Scientific Services



Grace Sison, B.Sc., C.Chem, Senior Project Manager - Petroleum Division

SAL

Sirimathie Aluthwala, Campobello Micro

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INVOICE TO: Company Name: #9197 Stantec Consulting Ltd Attention: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Tel: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com	REPORT TO: Company Name: #18379 Stantec Consulting Ltd Attention: Report - 1609-00764 Address: ON Tel: <i>and jamie.koch@stantec.com</i> Fax: <i>stantec.com</i> Email: aaron.warkentin@stantec.com, brant.gill@stantec.com	PROJECT INFORMATION: Quotation #: B48218 P.O. #: 160900764 Project: Clarington TS - Private Well Site #: <i>JK</i> Sampled By:	Laboratory Use Only: Maxxam Job #: 607241 Bottle Order #: 607241 COC #: C#607241-01-01 Project Manager: Deepthi Shaji
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY	ANALYSIS REQUESTED (PLEASE BE SPECIFIC) <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <td style="width: 5%;">Field Filtered (please circle):</td> <td style="width: 5%;">Metals / Hg / Cr-V</td> <td style="width: 5%;">Acidity</td> <td style="width: 5%;">Cr (VI) & Free CN</td> <td style="width: 5%;">Fluoride & Turbidity</td> <td style="width: 5%;">Mercury & TDC</td> <td style="width: 5%;">Total Coliforms / E. coli Background</td> <td style="width: 5%;">TDS & TSS</td> <td style="width: 5%;">RCAP - Comprehensive (Drinking Water) No filter</td> <td style="width: 5%;">Reg-153 PCBs</td> <td style="width: 5%;">Reg-153 VOCs & F1-F4</td> <td style="width: 5%;">SVOCs</td> </tr> </table>	Field Filtered (please circle):	Metals / Hg / Cr-V	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TDC	Total Coliforms / E. coli Background	TDS & TSS	RCAP - Comprehensive (Drinking Water) No filter	Reg-153 PCBs	Reg-153 VOCs & F1-F4	SVOCs	Turnaround Time (TAT) Required: Please provide advance notice for rush projects Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)
Field Filtered (please circle):	Metals / Hg / Cr-V	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TDC	Total Coliforms / E. coli Background	TDS & TSS	RCAP - Comprehensive (Drinking Water) No filter	Reg-153 PCBs	Reg-153 VOCs & F1-F4	SVOCs			

Include Criteria on Certificate of Analysis (Y/N)?																				
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix		Field Filtered (please circle):	Metals / Hg / Cr-V	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TDC	Total Coliforms / E. coli Background	TDS & TSS	RCAP - Comprehensive (Drinking Water) No filter	Reg-153 PCBs	Reg-153 VOCs & F1-F4	SVOCs	# of Bottles	Comments	
1	WG-160900764-20170426- <i>JK22</i>	<i>Apr 26 2017</i>	<i>0937</i>	<i>WG</i>	<i>NA</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	19	
2	WG-160900764-20170426- <i>JK23</i>	<i>↓</i>	<i>1025</i>	<i>↓</i>	<i>↓</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	19	<i>Analysis per</i>
3	WG-160900764-20170426- <i>JK24</i>	<i>↓</i>	<i>1114</i>	<i>↓</i>	<i>↓</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	19	<i>quote B48218</i>
4																				
5																				
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8																				
9																				
10																				

* RELINQUISHED BY: (Signature/Print) <i>Jamie Koch</i> JAMIE KOCH	Date: (YY/MM/DD) <i>17/04/26</i> 17/04/26	Time <i>1300</i> 1300	RECEIVED BY: (Signature/Print) <i>Deepthi Shaji</i> DEEPTHI SHAJI	Date: (YY/MM/DD) <i>2017/04/26</i> 2017/04/26	Time <i>12:55</i> 12:55	# jars used and not submitted	Laboratory Use Only Time Sensitive: <input type="checkbox"/> Temperature (°C) on Recept: <i>8/19 8/15</i> Custody Seal: Present <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
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* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 ** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 *** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

71718

Your Project #: 160900764
Your C.O.C. #: 100036

Attention:Report - 1609-00764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/05/25
Report #: R4482450
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7A3600
Received: 2017/05/18, 16:55

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Volatile Organic Compounds in Water	1	N/A	2017/05/24	CAM SOP-00226	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

VOLATILE ORGANICS BY GC/MS (WATER)

Maxxam ID		EKM286		
Sampling Date		2017/05/18 13:30		
COC Number		100036		
	UNITS	WG-160900764- 20170518-JK1	RDL	QC Batch
Volatile Organics				
Carbon Tetrachloride	ug/L	0.62	0.10	4993180
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	102		4993180
D4-1,2-Dichloroethane	%	104		4993180
D8-Toluene	%	96		4993180
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

TEST SUMMARY

Maxxam ID: EKM286
Sample ID: WG-160900764-20170518-JK1
Matrix: Water

Collected: 2017/05/18
Shipped:
Received: 2017/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds in Water	P&T/MS	4993180	N/A	2017/05/24	Rebecca Schultz

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	3.7°C
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Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4993180	4-Bromofluorobenzene	2017/05/24	104	70 - 130	105	70 - 130	99	%		
4993180	D4-1,2-Dichloroethane	2017/05/24	97	70 - 130	100	70 - 130	99	%		
4993180	D8-Toluene	2017/05/24	99	70 - 130	98	70 - 130	97	%		
4993180	Carbon Tetrachloride	2017/05/24	95	70 - 130	103	70 - 130	<0.10	ug/L	NC	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times$ RDL).

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere

Cristina Carriere, Scientific Services

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Invoice Information		Report Information (if differs from invoice)		Project Information (where applicable)		Turnaround Time (TAT) Required	
Company Name: <u>Stantec Consulting</u>		Company Name:		Quotation #: <u>B48218</u>		<input type="checkbox"/> Regular TAT (5-7 days) Most analyses	
Contact Name: <u>Jamie Koch</u>		Contact Name:		P.O. #/ AFEN:		PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS	
Address: <u>100-300 Hagey Blvd Waterloo</u>		Address:		Project #: <u>160900764.50.200</u>		Rush TAT (Surcharges will be applied)	
Phone: <u>519 585 7448</u>		Phone:		Site Location:		<input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3-4 Days	
Email: <u>Jamie.Koch@stantec.com</u>		Email: <u>edd@stantec.com</u>		Site #:		Date Required:	
Fax:		Fax:		Sampled By: <u>JIC</u>		Rush Confirmation #:	
MDE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY							
Regulation 153		Other Regulations		Analysis Requested			
<input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Med/ Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/ Other <input type="checkbox"/> Table _____ FOR RSC (PLEASE CIRCLE) Y / N		<input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> MISA <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> PWQO Region <input type="checkbox"/> Other (Specify) <input type="checkbox"/> REG 55B (MIN. 3 DAY TAT REQUIRED)		# OF CONTAINERS SUBMITTED FIELD FILTERED (CIRCLE) (Mark / Ng / Cov) BTEX/ PHE/ F1 PHC/ F2 - F4 VOCs REG 153 METALS & INORGANICS REG 153 IC/PMS METALS REG 153 METALS (Vg, Cr, V, IC/PMS Metals, HWS - B)			
Include Criteria on Certificate of Analysis: Y / N		SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM		LABORATORY USE ONLY			
CUSTODY SEAL Y/N		COOLING MEDIA PRESENT: <u>(Y) (N) (C)</u>		COOLER TEMPERATURES			
Present		Intact		<u>2 6 3</u>			
COMMENTS							
SAMPLE IDENTIFICATION		DATE SAMPLED (YYYY/MM/DD)		TIME SAMPLED (HH:MM)		MATRIX	
1 <u>WG-160900764-20170518-3K1</u>		<u>2017/05/18</u>		<u>1330</u>		<u>WG 3</u>	
2							
3							
4							
5							
6							
7							
8							
9							
10							
RELINQUISHED BY: (Signature/Print)		DATE: (YYYY/MM/DD)		TIME: (HH:MM)		RECEIVED BY: (Signature/Print)	
<u>Jamie Koch</u>		<u>2017/05/18</u>		<u>1655</u>		<u>Tracy Stedman</u>	
						DATE: (YYYY/MM/DD)	
						<u>2017/05/19</u>	
						TIME: (HH:MM)	
						<u>12:43</u>	
						MAXXAM JOB #	

only need carbon tetrachloride

18-May-17 16:55
Augustyna Dobosz
B7A3600
ASR ENV-1077

REC'D IN WATERLOO

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms. Sample container, preservation, hold time and packages information can be viewed at <http://www.maxxam.ca/wp-content/uploads/Ontario-COC.pdf>.

COC-1004 (03/17)

Harriet Gu 2017/05/19 12:43
2/2/2

White: Maxxam - Yellow: Client

Your Project #: 160900764
 Site Location: CLARINGTON TS - SURFACE WATER
 Your C.O.C. #: 633344-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/26
 Report #: R4804960
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2060

Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	3	N/A	2017/10/25	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	3	2017/10/24	2017/10/25	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	3	N/A	2017/10/26		SM 22 2310
Alkalinity	3	N/A	2017/10/22	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2017/10/23	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	3	N/A	2017/10/24		EPA 8260C m
Chloride by Automated Colourimetry	3	N/A	2017/10/23	CAM SOP-00463	EPA 325.2 m
Conductivity	3	N/A	2017/10/22	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	3	N/A	2017/10/23	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	3	N/A	2017/10/25	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (2)	3	2017/10/24	2017/10/25	CAM SOP-00316	CCME PHC-CWS m
Fluoride	3	2017/10/20	2017/10/22	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2017/10/23	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	1	N/A	2017/10/25	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	3	2017/10/23	2017/10/25	CAM SOP-00453	EPA 7470A m
Lab Filtered Metals Analysis by ICP	3	2017/10/21	2017/10/23	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	1	N/A	2017/10/24	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICPMS	2	N/A	2017/10/25	CAM SOP-00447	EPA 6020B m
Total Ammonia-N	3	N/A	2017/10/24	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (3)	3	N/A	2017/10/24	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	3	2017/10/24	2017/10/25	CAM SOP-00309	EPA 8082A m
pH	3	N/A	2017/10/22	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	3	N/A	2017/10/23	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	3	N/A	2017/10/25		
Sat. pH and Langelier Index (@ 4C)	3	N/A	2017/10/25		
Sulphate by Automated Colourimetry	3	N/A	2017/10/23	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids	3	2017/10/23	2017/10/24	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (4)	1	N/A	2017/10/24	CAM SOP-00446	SM 22 5310B m
Total Organic Carbon (TOC) (4)	2	N/A	2017/10/25	CAM SOP-00446	SM 22 5310B m

Your Project #: 160900764
 Site Location: CLARINGTON TS - SURFACE WATER
 Your C.O.C. #: 633344-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/26
 Report #: R4804960
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2060
Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 3

Analyses	Quantity	Date		Laboratory Method	Reference
		Extracted	Analyzed		
Total Phosphorus (Colourimetric)	3	2017/10/24	2017/10/24	CAM SOP-00407	SM 22 4500 P B H m
Total Suspended Solids	3	2017/10/23	2017/10/23	CAM SOP-00428	SM 22 2540D m
Turbidity	3	N/A	2017/10/21	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2017/10/24	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Bedford
- (2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (4) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.



Your Project #: 160900764
Site Location: CLARINGTON TS - SURFACE WATER
Your C.O.C. #: 633344-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/26
Report #: R4804960
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2060
Received: 2017/10/19, 13:01

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - SURFACE WATER (WATER)

Maxxam ID		FJE561	FJE561	FJE562		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 14:44		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD101 Lab-Dup	WS-160900764- 20171018-RD102	RDL	QC Batch

Calculated Parameters						
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	270		270	1.0	5221453
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.7		2.9	1.0	5221453
Hardness (CaCO3)	mg/L	490		490	1.0	5221587
Langelier Index (@ 20C)	N/A	1.17		1.21		5221588
Langelier Index (@ 4C)	N/A	0.924		0.961		5221589
Saturation pH (@ 20C)	N/A	6.85		6.86		5221588
Saturation pH (@ 4C)	N/A	7.10		7.10		5221589

Inorganics						
Total Ammonia-N	mg/L	<0.050	<0.050	<0.050	0.050	5226615
Conductivity	umho/cm	890		890	1.0	5223932
Orthophosphate (P)	mg/L	<0.010		<0.010	0.010	5224849
pH	pH	8.02		8.07		5223934
Total Phosphorus	mg/L	<0.004		0.004	0.004	5227410
Dissolved Sulphate (SO4)	mg/L	210		210	1.0	5224847
Alkalinity (Total as CaCO3)	mg/L	270		270	1.0	5223924
Dissolved Chloride (Cl)	mg/L	15		15	1.0	5224844
Nitrite (N)	mg/L	<0.010		<0.010	0.010	5223780
Nitrate (N)	mg/L	0.68		0.70	0.10	5223780

Metals						
Dissolved Calcium (Ca)	mg/L	160		160	0.05	5225029
Dissolved Magnesium (Mg)	mg/L	24		24	0.05	5225029
Dissolved Potassium (K)	mg/L	8		8	1	5225029
Dissolved Sodium (Na)	mg/L	20		19	0.5	5225029
Total Aluminum (Al)	mg/L	0.014	0.015	0.018	0.0050	5228639
Total Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5228639
Total Arsenic (As)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5228639
Total Barium (Ba)	mg/L	0.071	0.068	0.069	0.0020	5228639
Total Beryllium (Be)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5228639
Total Boron (B)	mg/L	0.46	0.46	0.46	0.010	5228639
Total Cadmium (Cd)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	5228639

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - SURFACE WATER (WATER)

Maxxam ID		FJE561	FJE561	FJE562		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 14:44		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD101 Lab-Dup	WS-160900764- 20171018-RD102	RDL	QC Batch
Total Calcium (Ca)	mg/L	140	140	150	0.20	5228639
Total Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	5228639
Total Cobalt (Co)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5228639
Total Copper (Cu)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5228639
Total Iron (Fe)	mg/L	<0.10	<0.10	<0.10	0.10	5228639
Total Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5228639
Total Magnesium (Mg)	mg/L	23	22	22	0.050	5228639
Total Manganese (Mn)	mg/L	0.046	0.046	0.046	0.0020	5228639
Total Molybdenum (Mo)	mg/L	0.0017	0.0017	0.0017	0.00050	5228639
Total Nickel (Ni)	mg/L	<0.0010	<0.0010	0.0011	0.0010	5228639
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	5228639
Total Potassium (K)	mg/L	6.7	6.5	6.7	0.20	5228639
Total Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	0.0020	5228639
Total Silicon (Si)	mg/L	3.8	3.8	4.0	0.050	5228639
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	5228639
Total Sodium (Na)	mg/L	18	17	18	0.10	5228639
Total Strontium (Sr)	mg/L	2.7	2.6	2.7	0.0010	5228639
Total Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	0.000050	5228639
Total Titanium (Ti)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	5228639
Total Uranium (U)	mg/L	0.0011	0.0011	0.0011	0.00010	5228639
Total Vanadium (V)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5228639
Total Zinc (Zn)	mg/L	0.0070	0.0075	0.0072	0.0050	5228639
Total Zirconium (Zr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5228639
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Lab-Dup = Laboratory Initiated Duplicate						

RCAP - SURFACE WATER (WATER)

Maxxam ID		FJE562		FJE563	FJE563		
Sampling Date		2017/10/18 14:44		2017/10/18 16:13	2017/10/18 16:13		
COC Number		633344-01-01		633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD102 Lab-Dup	QC Batch	WS-160900764- 20171018-RD103	WS-160900764- 20171018-RD103 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		5221453	320		1.0	5221453
Carb. Alkalinity (calc. as CaCO3)	mg/L		5221453	4.8		1.0	5221453
Hardness (CaCO3)	mg/L		5221587	470		1.0	5221587
Langelier Index (@ 20C)	N/A		5221588	1.45			5221588
Langelier Index (@ 4C)	N/A		5221589	1.20			5221589
Saturation pH (@ 20C)	N/A		5221588	6.75			5221588
Saturation pH (@ 4C)	N/A		5221589	6.99			5221589
Inorganics							
Total Ammonia-N	mg/L		5226615	<0.050		0.050	5226615
Conductivity	umho/cm	890	5223932	820		1.0	5223932
Orthophosphate (P)	mg/L		5224849	<0.010		0.010	5223404
pH	pH	8.07	5223934	8.20			5223934
Total Phosphorus	mg/L		5227410	<0.004	<0.004	0.004	5227410
Dissolved Sulphate (SO4)	mg/L		5224847	98		1.0	5223403
Alkalinity (Total as CaCO3)	mg/L	270	5223924	330		1.0	5223924
Dissolved Chloride (Cl)	mg/L		5224844	19		1.0	5223401
Nitrite (N)	mg/L		5223780	<0.010		0.010	5223773
Nitrate (N)	mg/L		5223780	3.55		0.10	5223773
Metals							
Dissolved Calcium (Ca)	mg/L		5225029	160		0.05	5224713
Dissolved Magnesium (Mg)	mg/L		5225029	16		0.05	5224713
Dissolved Potassium (K)	mg/L		5225029	4		1	5224713
Dissolved Sodium (Na)	mg/L		5225029	16		0.5	5224713
Total Aluminum (Al)	mg/L		5228639	0.016		0.0050	5228441
Total Antimony (Sb)	mg/L		5228639	<0.00050		0.00050	5228441
Total Arsenic (As)	mg/L		5228639	<0.0010		0.0010	5228441
Total Barium (Ba)	mg/L		5228639	0.053		0.0020	5228441
Total Beryllium (Be)	mg/L		5228639	<0.00050		0.00050	5228441
Total Boron (B)	mg/L		5228639	0.19		0.010	5228441
Total Cadmium (Cd)	mg/L		5228639	<0.00010		0.00010	5228441

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - SURFACE WATER (WATER)

Maxxam ID		FJE562		FJE563	FJE563		
Sampling Date		2017/10/18 14:44		2017/10/18 16:13	2017/10/18 16:13		
COC Number		633344-01-01		633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD102 Lab-Dup	QC Batch	WS-160900764- 20171018-RD103	WS-160900764- 20171018-RD103 Lab-Dup	RDL	QC Batch
Total Calcium (Ca)	mg/L		5228639	140		0.20	5228441
Total Chromium (Cr)	mg/L		5228639	<0.0050		0.0050	5228441
Total Cobalt (Co)	mg/L		5228639	<0.00050		0.00050	5228441
Total Copper (Cu)	mg/L		5228639	0.0011		0.0010	5228441
Total Iron (Fe)	mg/L		5228639	<0.10		0.10	5228441
Total Lead (Pb)	mg/L		5228639	<0.00050		0.00050	5228441
Total Magnesium (Mg)	mg/L		5228639	15		0.050	5228441
Total Manganese (Mn)	mg/L		5228639	0.034		0.0020	5228441
Total Molybdenum (Mo)	mg/L		5228639	0.00085		0.00050	5228441
Total Nickel (Ni)	mg/L		5228639	<0.0010		0.0010	5228441
Total Phosphorus (P)	mg/L		5228639	<0.10		0.10	5228441
Total Potassium (K)	mg/L		5228639	3.1		0.20	5228441
Total Selenium (Se)	mg/L		5228639	<0.0020		0.0020	5228441
Total Silicon (Si)	mg/L		5228639	4.7		0.050	5228441
Total Silver (Ag)	mg/L		5228639	<0.00010		0.00010	5228441
Total Sodium (Na)	mg/L		5228639	14		0.10	5228441
Total Strontium (Sr)	mg/L		5228639	1.1		0.0010	5228441
Total Thallium (Tl)	mg/L		5228639	<0.000050		0.000050	5228441
Total Titanium (Ti)	mg/L		5228639	<0.0050		0.0050	5228441
Total Uranium (U)	mg/L		5228639	0.00085		0.00010	5228441
Total Vanadium (V)	mg/L		5228639	<0.00050		0.00050	5228441
Total Zinc (Zn)	mg/L		5228639	0.0064		0.0050	5228441
Total Zirconium (Zr)	mg/L		5228639	<0.0010		0.0010	5228441
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							

RESULTS OF ANALYSES OF WATER

Maxxam ID		FJE561		FJE562	FJE562		
Sampling Date		2017/10/18 14:44		2017/10/18 14:44	2017/10/18 14:44		
COC Number		633344-01-01		633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	QC Batch	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD102 Lab-Dup	RDL	QC Batch
Inorganics							
Acidity	mg/L	12	5232793	9.2		5.0	5232793
Total Dissolved Solids	mg/L	560	5226003	565		10	5226003
Fluoride (F-)	mg/L	0.36	5223930	0.38	0.38	0.10	5223930
Total Organic Carbon (TOC)	mg/L	2.7	5226832	2.9		0.20	5228173
Total Suspended Solids	mg/L	<10	5226002	<10		10	5226002
Turbidity	NTU	0.2	5222783	0.2		0.1	5222783
WAD Cyanide (Free)	ug/L	<1	5222618	<1		1	5222618
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FJE563		
Sampling Date		2017/10/18 16:13		
COC Number		633344-01-01		
	UNITS	WS-160900764- 20171018-RD103	RDL	QC Batch
Inorganics				
Acidity	mg/L	9.0	5.0	5232793
Total Dissolved Solids	mg/L	500	10	5226003
Fluoride (F-)	mg/L	0.20	0.10	5223930
Total Organic Carbon (TOC)	mg/L	2.9	0.20	5228173
Total Suspended Solids	mg/L	<10	10	5226002
Turbidity	NTU	0.3	0.1	5222783
WAD Cyanide (Free)	ug/L	<1	1	5222618
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FJE561		FJE562		FJE563		
Sampling Date		2017/10/18 14:44		2017/10/18 14:44		2017/10/18 16:13		
COC Number		633344-01-01		633344-01-01		633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	QC Batch	WS-160900764- 20171018-RD102	QC Batch	WS-160900764- 20171018-RD103	RDL	QC Batch

Metals								
Chromium (VI)	ug/L	<0.50	5221075	<0.50	5221075	<0.50	0.50	5221075
Mercury (Hg)	ug/L	<0.1	5226290	<0.1	5226259	<0.1	0.1	5226290

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 PCBS (WATER)

Maxxam ID		FJE561	FJE562	FJE563	FJE563		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 16:13	2017/10/18 16:13		
COC Number		633344-01-01	633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD103	WS-160900764- 20171018-RD103 Lab-Dup	RDL	QC Batch
PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Surrogate Recovery (%)							
Decachlorobiphenyl	%	97	88	82	88		5227890
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE561	FJE562	FJE562		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 14:44		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD102 Lab-Dup	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	5221762
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5224731
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5224731
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5224731
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5224731
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5224731
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5224731
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5224731
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5224731
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5224731
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.62	0.62	0.50	5224731

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE561	FJE562	FJE562		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 14:44		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD102 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5224731
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5224731
F1 (C6-C10)	ug/L	<25	<25	<25	25	5224731
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5224731
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100		100	5228396
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200		200	5228396
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200		200	5228396
Reached Baseline at C50	ug/L	Yes	Yes			5228396
Surrogate Recovery (%)						
o-Terphenyl	%	104	106			5228396
4-Bromofluorobenzene	%	87	87	87		5224731
D4-1,2-Dichloroethane	%	119	123	122		5224731
D8-Toluene	%	90	90	89		5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE563		
Sampling Date		2017/10/18 16:13		
COC Number		633344-01-01		
	UNITS	WS-160900764- 20171018-RD103	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	5221762
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	5224731
Benzene	ug/L	<0.20	0.20	5224731
Bromodichloromethane	ug/L	<0.50	0.50	5224731
Bromoform	ug/L	<1.0	1.0	5224731
Bromomethane	ug/L	<0.50	0.50	5224731
Carbon Tetrachloride	ug/L	<0.20	0.20	5224731
Chlorobenzene	ug/L	<0.20	0.20	5224731
Chloroform	ug/L	<0.20	0.20	5224731
Dibromochloromethane	ug/L	<0.50	0.50	5224731
1,2-Dichlorobenzene	ug/L	<0.50	0.50	5224731
1,3-Dichlorobenzene	ug/L	<0.50	0.50	5224731
1,4-Dichlorobenzene	ug/L	<0.50	0.50	5224731
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	5224731
1,1-Dichloroethane	ug/L	<0.20	0.20	5224731
1,2-Dichloroethane	ug/L	<0.50	0.50	5224731
1,1-Dichloroethylene	ug/L	<0.20	0.20	5224731
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	5224731
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	5224731
1,2-Dichloropropane	ug/L	<0.20	0.20	5224731
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	5224731
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	5224731
Ethylbenzene	ug/L	<0.20	0.20	5224731
Ethylene Dibromide	ug/L	<0.20	0.20	5224731
Hexane	ug/L	<1.0	1.0	5224731
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	5224731
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	5224731
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	5224731
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	5224731
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE563		
Sampling Date		2017/10/18 16:13		
COC Number		633344-01-01		
	UNITS	WS-160900764- 20171018-RD103	RDL	QC Batch
Styrene	ug/L	<0.50	0.50	5224731
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	5224731
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	5224731
Tetrachloroethylene	ug/L	<0.20	0.20	5224731
Toluene	ug/L	<0.20	0.20	5224731
1,1,1-Trichloroethane	ug/L	<0.20	0.20	5224731
1,1,2-Trichloroethane	ug/L	<0.50	0.50	5224731
Trichloroethylene	ug/L	<0.20	0.20	5224731
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	5224731
Vinyl Chloride	ug/L	<0.20	0.20	5224731
p+m-Xylene	ug/L	<0.20	0.20	5224731
o-Xylene	ug/L	<0.20	0.20	5224731
Total Xylenes	ug/L	<0.20	0.20	5224731
F1 (C6-C10)	ug/L	<25	25	5224731
F1 (C6-C10) - BTEX	ug/L	<25	25	5224731
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	5228396
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	5228396
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	5228396
Reached Baseline at C50	ug/L	Yes		5228396
Surrogate Recovery (%)				
o-Terphenyl	%	108		5228396
4-Bromofluorobenzene	%	87		5224731
D4-1,2-Dichloroethane	%	121		5224731
D8-Toluene	%	91		5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE561	FJE562	FJE563		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 16:13		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD103	RDL	QC Batch
Semivolatile Organics						
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	0.1	5228066
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	5228066
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	5228066
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	5228066
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	0.5	5228066
2,4-Dinitrophenol	ug/L	<2	<2	<2	2	5228066
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	5228066
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	5228066
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	5228066
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	0.5	5228066
Acenaphthene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
Anthracene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	0.01	5228066
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Biphenyl	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	1	5228066
Chrysene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Fluoranthene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
Fluorene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE561	FJE562	FJE563		
Sampling Date		2017/10/18 14:44	2017/10/18 14:44	2017/10/18 16:13		
COC Number		633344-01-01	633344-01-01	633344-01-01		
	UNITS	WS-160900764- 20171018-RD101	WS-160900764- 20171018-RD102	WS-160900764- 20171018-RD103	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Naphthalene	ug/L	<0.2	<0.2	<0.2	0.2	5228066
p-Chloroaniline	ug/L	<1	<1	<1	1	5228066
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Phenanthrene	ug/L	<0.1	<0.1	<0.1	0.1	5228066
Phenol	ug/L	<0.5	<0.5	<0.5	0.5	5228066
Pyrene	ug/L	<0.05	<0.05	<0.05	0.05	5228066
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	0.28	5221594
Surrogate Recovery (%)						
2,4,6-Tribromophenol	%	75	76	72		5228066
2-Fluorobiphenyl	%	68	68	67		5228066
D14-Terphenyl (FS)	%	104	103	103		5228066
D5-Nitrobenzene	%	73	73	74		5228066
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

TEST SUMMARY

Maxxam ID: FJE561
Sample ID: WS-160900764-20171018-RD101
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221762	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	5225029	2017/10/21	2017/10/23	Azita Fazaeli
Total Metals Analysis by ICPMS	ICP/MS	5228639	N/A	2017/10/25	Prempal Bhatti
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5226832	N/A	2017/10/24	Anastasia Hamanov
Total Phosphorus (Colourimetric)	LACH/P	5227410	2017/10/24	2017/10/24	Amanpreet Sappal
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCS	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJE561 Dup
Sample ID: WS-160900764-20171018-RD101
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICPMS	ICP/MS	5228639	N/A	2017/10/25	Prempal Bhatti
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware

TEST SUMMARY

Maxxam ID: FJE562
Sample ID: WS-160900764-20171018-RD102
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221762	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	5225029	2017/10/21	2017/10/23	Azita Fazaeli
Total Metals Analysis by ICPMS	ICP/MS	5228639	N/A	2017/10/25	Prempal Bhatti
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Phosphorus (Colourimetric)	LACH/P	5227410	2017/10/24	2017/10/24	Amanpreet Sappal
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJE562 Dup
Sample ID: WS-160900764-20171018-RD102
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

TEST SUMMARY

Maxxam ID: FJE563
Sample ID: WS-160900764-20171018-RD103
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221762	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5223401	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/25	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Lab Filtered Metals Analysis by ICP	ICP	5224713	2017/10/21	2017/10/23	Azita Fazaeli
Total Metals Analysis by ICPMS	ICP/MS	5228441	N/A	2017/10/24	Thao Nguyen
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223773	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5223404	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5223403	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Phosphorus (Colourimetric)	LACH/P	5227410	2017/10/24	2017/10/24	Amanpreet Sappal
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCS	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJE563 Dup
Sample ID: WS-160900764-20171018-RD103
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
Total Phosphorus (Colourimetric)	LACH/P	5227410	2017/10/24	2017/10/24	Amanpreet Sappal

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.7°C
Package 2	6.7°C

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224731	4-Bromofluorobenzene	2017/10/24	98	70 - 130	100	70 - 130	89	%				
5224731	D4-1,2-Dichloroethane	2017/10/24	111	70 - 130	110	70 - 130	119	%				
5224731	D8-Toluene	2017/10/24	105	70 - 130	106	70 - 130	90	%				
5227890	Decachlorobiphenyl	2017/10/25	103	60 - 130	93	60 - 130	85	%				
5228066	2,4,6-Tribromophenol	2017/10/25			101	50 - 130	62	%				
5228066	2-Fluorobiphenyl	2017/10/25			72	50 - 130	80	%				
5228066	D14-Terphenyl (FS)	2017/10/25			99	50 - 130	97	%				
5228066	D5-Nitrobenzene	2017/10/25			96	50 - 130	90	%				
5228396	o-Terphenyl	2017/10/25	105	60 - 130	108	60 - 130	104	%				
5221075	Chromium (VI)	2017/10/23	98	80 - 120	101	80 - 120	<0.50	ug/L	0.44	20		
5222618	WAD Cyanide (Free)	2017/10/25	97	80 - 120	101	80 - 120	<1	ug/L	NC	20		
5222783	Turbidity	2017/10/21			100	85 - 115	<0.1	NTU	7.5	20		
5223401	Dissolved Chloride (Cl)	2017/10/23	102	80 - 120	102	80 - 120	<1.0	mg/L	2.8	20		
5223403	Dissolved Sulphate (SO4)	2017/10/23	109	75 - 125	104	80 - 120	<1.0	mg/L	0.36	20		
5223404	Orthophosphate (P)	2017/10/23	100	75 - 125	101	80 - 120	<0.010	mg/L	1.3	25		
5223773	Nitrate (N)	2017/10/24	99	80 - 120	96	80 - 120	<0.10	mg/L	3.5	20		
5223773	Nitrite (N)	2017/10/24	106	80 - 120	99	80 - 120	<0.010	mg/L	6.8	20		
5223780	Nitrate (N)	2017/10/24	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.41	20		
5223780	Nitrite (N)	2017/10/24	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
5223924	Alkalinity (Total as CaCO3)	2017/10/22			97	85 - 115	<1.0	mg/L	0.33	20		
5223930	Fluoride (F-)	2017/10/22	107	80 - 120	105	80 - 120	<0.10	mg/L	1.9	20		
5223932	Conductivity	2017/10/22			101	85 - 115	<1.0	umho/cm	0.34	25		
5223934	pH	2017/10/22			101	98 - 103			0.025	N/A		
5224713	Dissolved Calcium (Ca)	2017/10/24	NC	80 - 120	103	80 - 120	<0.05	mg/L	2.4	25		
5224713	Dissolved Magnesium (Mg)	2017/10/24	NC	80 - 120	98	80 - 120	<0.05	mg/L	2.0	25		
5224713	Dissolved Potassium (K)	2017/10/24	NC	80 - 120	103	80 - 120	<1	mg/L	3.0	25		
5224713	Dissolved Sodium (Na)	2017/10/24	NC	80 - 120	105	80 - 120	<0.5	mg/L	8.2	25		
5224731	1,1,1,2-Tetrachloroethane	2017/10/24	105	70 - 130	108	70 - 130	<0.50	ug/L	NC	30		
5224731	1,1,1-Trichloroethane	2017/10/24	95	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	1,1,2,2-Tetrachloroethane	2017/10/24	109	70 - 130	109	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224731	1,1,2-Trichloroethane	2017/10/24	105	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
5224731	1,1-Dichloroethane	2017/10/24	106	70 - 130	110	70 - 130	<0.20	ug/L	NC	30		
5224731	1,1-Dichloroethylene	2017/10/24	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5224731	1,2-Dichlorobenzene	2017/10/24	89	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
5224731	1,2-Dichloroethane	2017/10/24	103	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
5224731	1,2-Dichloropropane	2017/10/24	97	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	1,3-Dichlorobenzene	2017/10/24	88	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
5224731	1,4-Dichlorobenzene	2017/10/24	84	70 - 130	85	70 - 130	<0.50	ug/L	NC	30		
5224731	Acetone (2-Propanone)	2017/10/24	107	60 - 140	103	60 - 140	<10	ug/L	NC	30		
5224731	Benzene	2017/10/24	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
5224731	Bromodichloromethane	2017/10/24	100	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5224731	Bromoform	2017/10/24	109	70 - 130	109	70 - 130	<1.0	ug/L	NC	30		
5224731	Bromomethane	2017/10/24	107	60 - 140	110	60 - 140	<0.50	ug/L	NC	30		
5224731	Carbon Tetrachloride	2017/10/24	94	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	Chlorobenzene	2017/10/24	90	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5224731	Chloroform	2017/10/24	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5224731	cis-1,2-Dichloroethylene	2017/10/24	98	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5224731	cis-1,3-Dichloropropene	2017/10/24	84	70 - 130	83	70 - 130	<0.30	ug/L	NC	30		
5224731	Dibromochloromethane	2017/10/24	106	70 - 130	107	70 - 130	<0.50	ug/L	NC	30		
5224731	Dichlorodifluoromethane (FREON 12)	2017/10/24	110	60 - 140	116	60 - 140	<1.0	ug/L	NC	30		
5224731	Ethylbenzene	2017/10/24	79	70 - 130	81	70 - 130	<0.20	ug/L	NC	30		
5224731	Ethylene Dibromide	2017/10/24	108	70 - 130	107	70 - 130	<0.20	ug/L	NC	30		
5224731	F1 (C6-C10) - BTEX	2017/10/24					<25	ug/L	NC	30		
5224731	F1 (C6-C10)	2017/10/24	97	60 - 140	92	60 - 140	<25	ug/L	NC	30		
5224731	Hexane	2017/10/24	97	70 - 130	101	70 - 130	<1.0	ug/L	NC	30		
5224731	Methyl Ethyl Ketone (2-Butanone)	2017/10/24	111	60 - 140	107	60 - 140	<10	ug/L	NC	30		
5224731	Methyl Isobutyl Ketone	2017/10/24	97	70 - 130	94	70 - 130	<5.0	ug/L	NC	30		
5224731	Methyl t-butyl ether (MTBE)	2017/10/24	89	70 - 130	87	70 - 130	<0.50	ug/L	0.64	30		
5224731	Methylene Chloride(Dichloromethane)	2017/10/24	118	70 - 130	120	70 - 130	<2.0	ug/L	NC	30		
5224731	o-Xylene	2017/10/24	82	70 - 130	84	70 - 130	<0.20	ug/L	NC	30		
5224731	p+m-Xylene	2017/10/24	79	70 - 130	82	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224731	Styrene	2017/10/24	82	70 - 130	84	70 - 130	<0.50	ug/L	NC	30		
5224731	Tetrachloroethylene	2017/10/24	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5224731	Toluene	2017/10/24	92	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5224731	Total Xylenes	2017/10/24					<0.20	ug/L	NC	30		
5224731	trans-1,2-Dichloroethylene	2017/10/24	96	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5224731	trans-1,3-Dichloropropene	2017/10/24	94	70 - 130	93	70 - 130	<0.40	ug/L	NC	30		
5224731	Trichloroethylene	2017/10/24	90	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5224731	Trichlorofluoromethane (FREON 11)	2017/10/24	100	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
5224731	Vinyl Chloride	2017/10/24	107	70 - 130	112	70 - 130	<0.20	ug/L	NC	30		
5224844	Dissolved Chloride (Cl)	2017/10/23	NC	80 - 120	104	80 - 120	<1.0	mg/L	2.6	20		
5224847	Dissolved Sulphate (SO4)	2017/10/23	NC	75 - 125	103	80 - 120	<1.0	mg/L	0.23	20		
5224849	Orthophosphate (P)	2017/10/23	120	75 - 125	101	80 - 120	<0.010	mg/L	NC	25		
5225029	Dissolved Calcium (Ca)	2017/10/23	NC	80 - 120	99	80 - 120	<0.05	mg/L	0.61	25		
5225029	Dissolved Magnesium (Mg)	2017/10/23	90	80 - 120	98	80 - 120	<0.05	mg/L	0.28	25		
5225029	Dissolved Potassium (K)	2017/10/23	100	80 - 120	100	80 - 120	<1	mg/L	0.41	25		
5225029	Dissolved Sodium (Na)	2017/10/23	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.29	25		
5226002	Total Suspended Solids	2017/10/23					<10	mg/L	3.9	25	100	85 - 115
5226003	Total Dissolved Solids	2017/10/24					<10	mg/L	8.3	25	95	90 - 110
5226259	Mercury (Hg)	2017/10/25	103	75 - 125	99	80 - 120	<0.1	ug/L	NC	20		
5226290	Mercury (Hg)	2017/10/25	101	75 - 125	98	80 - 120	<0.1	ug/L	NC	20		
5226615	Total Ammonia-N	2017/10/24	97	80 - 120	97	85 - 115	<0.050	mg/L	NC	20		
5226832	Total Organic Carbon (TOC)	2017/10/24	91	80 - 120	95	80 - 120	<0.20	mg/L	1.4	20		
5227410	Total Phosphorus	2017/10/24	92	80 - 120	96	80 - 120	<0.004	mg/L	NC	20	91	80 - 120
5227890	Aroclor 1242	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1248	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1254	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1260	2017/10/25	116	60 - 130	97	60 - 130	<0.05	ug/L	NC	30		
5227890	Total PCB	2017/10/25	116	60 - 130	97	60 - 130	<0.05	ug/L	NC	40		
5228066	1,2,4-Trichlorobenzene	2017/10/25			56	40 - 130	<0.1	ug/L	10	30		
5228066	1-Methylnaphthalene	2017/10/25			88	50 - 130	<0.2	ug/L	0.14	30		
5228066	2,4,5-Trichlorophenol	2017/10/25			104	50 - 130	<0.2	ug/L	1.8	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228066	2,4,6-Trichlorophenol	2017/10/25			97	50 - 130	<0.2	ug/L	3.3	30		
5228066	2,4-Dichlorophenol	2017/10/25			88	50 - 130	<0.1	ug/L	0.76	30		
5228066	2,4-Dimethylphenol	2017/10/25			60	30 - 130	<0.5	ug/L	2.4	30		
5228066	2,4-Dinitrophenol	2017/10/25			92	30 - 130	<2	ug/L	11	30		
5228066	2,4-Dinitrotoluene	2017/10/25			101	50 - 130	<0.3	ug/L	0.53	30		
5228066	2,6-Dinitrotoluene	2017/10/25			98	50 - 130	<0.3	ug/L	1.8	30		
5228066	2-Chlorophenol	2017/10/25			84	50 - 130	<0.1	ug/L	0.89	30		
5228066	2-Methylnaphthalene	2017/10/25			84	50 - 130	<0.2	ug/L	0.060	30		
5228066	3,3'-Dichlorobenzidine	2017/10/25			88	30 - 130	<0.5	ug/L	8.1	30		
5228066	Acenaphthene	2017/10/25			97	50 - 130	<0.2	ug/L	1.6	30		
5228066	Acenaphthylene	2017/10/25			93	50 - 130	<0.2	ug/L	0.96	30		
5228066	Anthracene	2017/10/25			95	50 - 130	<0.05	ug/L	2.4	30		
5228066	Benzo(a)anthracene	2017/10/25			100	50 - 130	<0.05	ug/L	3.0	30		
5228066	Benzo(a)pyrene	2017/10/25			95	50 - 130	<0.01	ug/L	1.1	30		
5228066	Benzo(b/j)fluoranthene	2017/10/25			99	50 - 130	<0.05	ug/L	1.1	30		
5228066	Benzo(g,h,i)perylene	2017/10/25			82	50 - 130	<0.05	ug/L	1.8	30		
5228066	Benzo(k)fluoranthene	2017/10/25			104	50 - 130	<0.05	ug/L	2.8	30		
5228066	Biphenyl	2017/10/25			88	50 - 130	<0.1	ug/L	1.1	30		
5228066	Bis(2-chloroethyl)ether	2017/10/25			87	50 - 130	<0.5	ug/L	1.8	30		
5228066	Bis(2-chloroisopropyl)ether	2017/10/25			88	50 - 130	<0.5	ug/L	0.65	30		
5228066	Bis(2-ethylhexyl)phthalate	2017/10/25			100	50 - 130	<1	ug/L	1.5	30		
5228066	Chrysene	2017/10/25			105	50 - 130	<0.05	ug/L	1.8	30		
5228066	Dibenz(a,h)anthracene	2017/10/25			88	50 - 130	<0.1	ug/L	2.1	30		
5228066	Diethyl phthalate	2017/10/25			90	50 - 130	<0.1	ug/L	2.5	30		
5228066	Dimethyl phthalate	2017/10/25			103	50 - 130	<0.1	ug/L	2.1	30		
5228066	Fluoranthene	2017/10/25			95	50 - 130	<0.2	ug/L	3.0	30		
5228066	Fluorene	2017/10/25			103	50 - 130	<0.2	ug/L	0.39	30		
5228066	Indeno(1,2,3-cd)pyrene	2017/10/25			79	50 - 130	<0.1	ug/L	2.9	30		
5228066	Naphthalene	2017/10/25			73	50 - 130	<0.2	ug/L	0.29	30		
5228066	p-Chloroaniline	2017/10/25			93	30 - 130	<1	ug/L	12	30		
5228066	Pentachlorophenol	2017/10/25			84	50 - 130	<0.1	ug/L	16	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228066	Phenanthrene	2017/10/25			99	50 - 130	<0.1	ug/L	2.4	30		
5228066	Phenol	2017/10/25			40	30 - 130	<0.5	ug/L	1.9	30		
5228066	Pyrene	2017/10/25			101	50 - 130	<0.05	ug/L	2.9	30		
5228173	Total Organic Carbon (TOC)	2017/10/24	94	80 - 120	97	80 - 120	<0.20	mg/L	13	20		
5228396	F2 (C10-C16 Hydrocarbons)	2017/10/25	96	50 - 130	95	60 - 130	<100	ug/L	NC	30		
5228396	F3 (C16-C34 Hydrocarbons)	2017/10/25	98	50 - 130	97	60 - 130	<200	ug/L	NC	30		
5228396	F4 (C34-C50 Hydrocarbons)	2017/10/25	95	50 - 130	95	60 - 130	<200	ug/L	NC	30		
5228441	Total Aluminum (Al)	2017/10/24	93	80 - 120	96	80 - 120	<0.0050	mg/L	1.2	20		
5228441	Total Antimony (Sb)	2017/10/24	101	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5228441	Total Arsenic (As)	2017/10/24	97	80 - 120	100	80 - 120	<0.0010	mg/L	7.3	20		
5228441	Total Barium (Ba)	2017/10/24	97	80 - 120	98	80 - 120	<0.0020	mg/L	1.4	20		
5228441	Total Beryllium (Be)	2017/10/24	101	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5228441	Total Boron (B)	2017/10/24	100	80 - 120	102	80 - 120	<0.010	mg/L	1.2	20		
5228441	Total Cadmium (Cd)	2017/10/24	99	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
5228441	Total Calcium (Ca)	2017/10/24	88	80 - 120	95	80 - 120	<0.20	mg/L	1.2	20		
5228441	Total Chromium (Cr)	2017/10/24	93	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
5228441	Total Cobalt (Co)	2017/10/24	95	80 - 120	98	80 - 120	<0.00050	mg/L	5.1	20		
5228441	Total Copper (Cu)	2017/10/24	98	80 - 120	99	80 - 120	<0.0010	mg/L	5.4	20		
5228441	Total Iron (Fe)	2017/10/24	96	80 - 120	98	80 - 120	<0.10	mg/L	1.4	20		
5228441	Total Lead (Pb)	2017/10/24	95	80 - 120	98	80 - 120	<0.00050	mg/L	4.2	20		
5228441	Total Magnesium (Mg)	2017/10/24	95	80 - 120	96	80 - 120	<0.050	mg/L	0.46	20		
5228441	Total Manganese (Mn)	2017/10/24	94	80 - 120	96	80 - 120	<0.0020	mg/L	0.49	20		
5228441	Total Molybdenum (Mo)	2017/10/24	99	80 - 120	100	80 - 120	<0.00050	mg/L	0.17	20		
5228441	Total Nickel (Ni)	2017/10/24	94	80 - 120	97	80 - 120	<0.0010	mg/L	1.7	20		
5228441	Total Phosphorus (P)	2017/10/24	104	80 - 120	109	80 - 120	<0.10	mg/L	NC	20		
5228441	Total Potassium (K)	2017/10/24	94	80 - 120	96	80 - 120	<0.20	mg/L	0.62	20		
5228441	Total Selenium (Se)	2017/10/24	97	80 - 120	104	80 - 120	<0.0020	mg/L	NC	20		
5228441	Total Silicon (Si)	2017/10/24	91	80 - 120	97	80 - 120	<0.050	mg/L	0.74	20		
5228441	Total Silver (Ag)	2017/10/24	98	80 - 120	99	80 - 120	<0.00010	mg/L	12	20		
5228441	Total Sodium (Na)	2017/10/24	NC	80 - 120	97	80 - 120	<0.10	mg/L	1.3	20		
5228441	Total Strontium (Sr)	2017/10/24	93	80 - 120	95	80 - 120	<0.0010	mg/L	0.67	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228441	Total Thallium (Tl)	2017/10/24	95	80 - 120	96	80 - 120	<0.000050	mg/L	NC	20		
5228441	Total Titanium (Ti)	2017/10/24	95	80 - 120	100	80 - 120	<0.0050	mg/L	13	20		
5228441	Total Uranium (U)	2017/10/24	96	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5228441	Total Vanadium (V)	2017/10/24	95	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
5228441	Total Zinc (Zn)	2017/10/24	98	80 - 120	103	80 - 120	<0.0050	mg/L	1.6	20		
5228441	Total Zirconium (Zr)	2017/10/24	100	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
5228639	Total Aluminum (Al)	2017/10/25	99	80 - 120	103	80 - 120	<0.0050	mg/L	11	20		
5228639	Total Antimony (Sb)	2017/10/25	105	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20		
5228639	Total Arsenic (As)	2017/10/25	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
5228639	Total Barium (Ba)	2017/10/25	95	80 - 120	98	80 - 120	<0.0020	mg/L	3.7	20		
5228639	Total Beryllium (Be)	2017/10/25	97	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20		
5228639	Total Boron (B)	2017/10/25	95	80 - 120	102	80 - 120	<0.010	mg/L	0.43	20		
5228639	Total Cadmium (Cd)	2017/10/25	100	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20		
5228639	Total Calcium (Ca)	2017/10/25	NC	80 - 120	95	80 - 120	<0.20	mg/L	2.8	20		
5228639	Total Chromium (Cr)	2017/10/25	97	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
5228639	Total Cobalt (Co)	2017/10/25	98	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
5228639	Total Copper (Cu)	2017/10/25	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
5228639	Total Iron (Fe)	2017/10/25	99	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
5228639	Total Lead (Pb)	2017/10/25	97	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5228639	Total Magnesium (Mg)	2017/10/25	91	80 - 120	98	80 - 120	<0.050	mg/L	4.4	20		
5228639	Total Manganese (Mn)	2017/10/25	93	80 - 120	95	80 - 120	<0.0020	mg/L	1.2	20		
5228639	Total Molybdenum (Mo)	2017/10/25	106	80 - 120	100	80 - 120	<0.00050	mg/L	1.3	20		
5228639	Total Nickel (Ni)	2017/10/25	95	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
5228639	Total Phosphorus (P)	2017/10/25	113	80 - 120	106	80 - 120	<0.10	mg/L	NC	20		
5228639	Total Potassium (K)	2017/10/25	100	80 - 120	100	80 - 120	<0.20	mg/L	3.0	20		
5228639	Total Selenium (Se)	2017/10/25	102	80 - 120	103	80 - 120	<0.0020	mg/L	NC	20		
5228639	Total Silicon (Si)	2017/10/25	96	80 - 120	100	80 - 120	<0.050	mg/L	0.67	20		
5228639	Total Silver (Ag)	2017/10/25	100	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5228639	Total Sodium (Na)	2017/10/25	96	80 - 120	99	80 - 120	<0.10	mg/L	1.5	20		
5228639	Total Strontium (Sr)	2017/10/25	NC	80 - 120	93	80 - 120	<0.0010	mg/L	1.2	20		
5228639	Total Thallium (Tl)	2017/10/25	101	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228639	Total Titanium (Ti)	2017/10/25	96	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
5228639	Total Uranium (U)	2017/10/25	99	80 - 120	100	80 - 120	<0.00010	mg/L	1.9	20		
5228639	Total Vanadium (V)	2017/10/25	98	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
5228639	Total Zinc (Zn)	2017/10/25	99	80 - 120	101	80 - 120	<0.0050	mg/L	6.8	20		
5228639	Total Zirconium (Zr)	2017/10/25	99	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
5232793	Acidity	2017/10/26	84	80 - 120	102	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

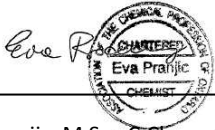
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

19-Oct-17 13:01

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name: #9197 Stantec Consulting Ltd	Contact Name: Accounts Payable	Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com	Company Name: #18379 Stantec Consulting Ltd	Contact Name: Report - 160900764
Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Phone: (519) 579-4410 x Fax: (519) 579-6733 x Email: accounts.payable.invoices@stantec.com	Address: ON	Phone: Fax: Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co	Quotation #: B48218	Task #: 200.500
Project Name: 160900764			Project #: 160900764	Profit Centre: 1609	Site #: Clarington TS - Surface Water
Sampled By: <i>[Signature]</i>			PS4 ENV-1340		Barcode: B7N2060

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011) <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____	Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA <input type="checkbox"/> Municipality _____ <input checked="" type="checkbox"/> PWOO <input type="checkbox"/> Other _____	Special Instructions _____
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Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / MB / Cr / V	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										# of Bottles	Comments
						Acidity	Cr / Ni & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAP - Surface Water (No field filter - Total metals)	Reg 153 PCBs	Reg 153 VOCs & F1-F4	SVOCs			
1	WS-160900764-201710-18 RD 103	Oct 13/17	14:44	SW	Y	X	X	X	X	X	X	X	X	X	17		
2	WS-160900764-201710-18 RD 102	↓	14:44	SW	Y	X	X	X	X	X	X	X	X	X	17		
3	WS-160900764-201710-18 RD 103	↓	16:13	SW	Y	X	X	X	X	X	X	X	X	X	17		
4	WS-160900764-201710			SW													
5	WS-160900764-201710			SW													
6	WS-160900764-201710			SW													
7																	
8																	
9																	
10																	

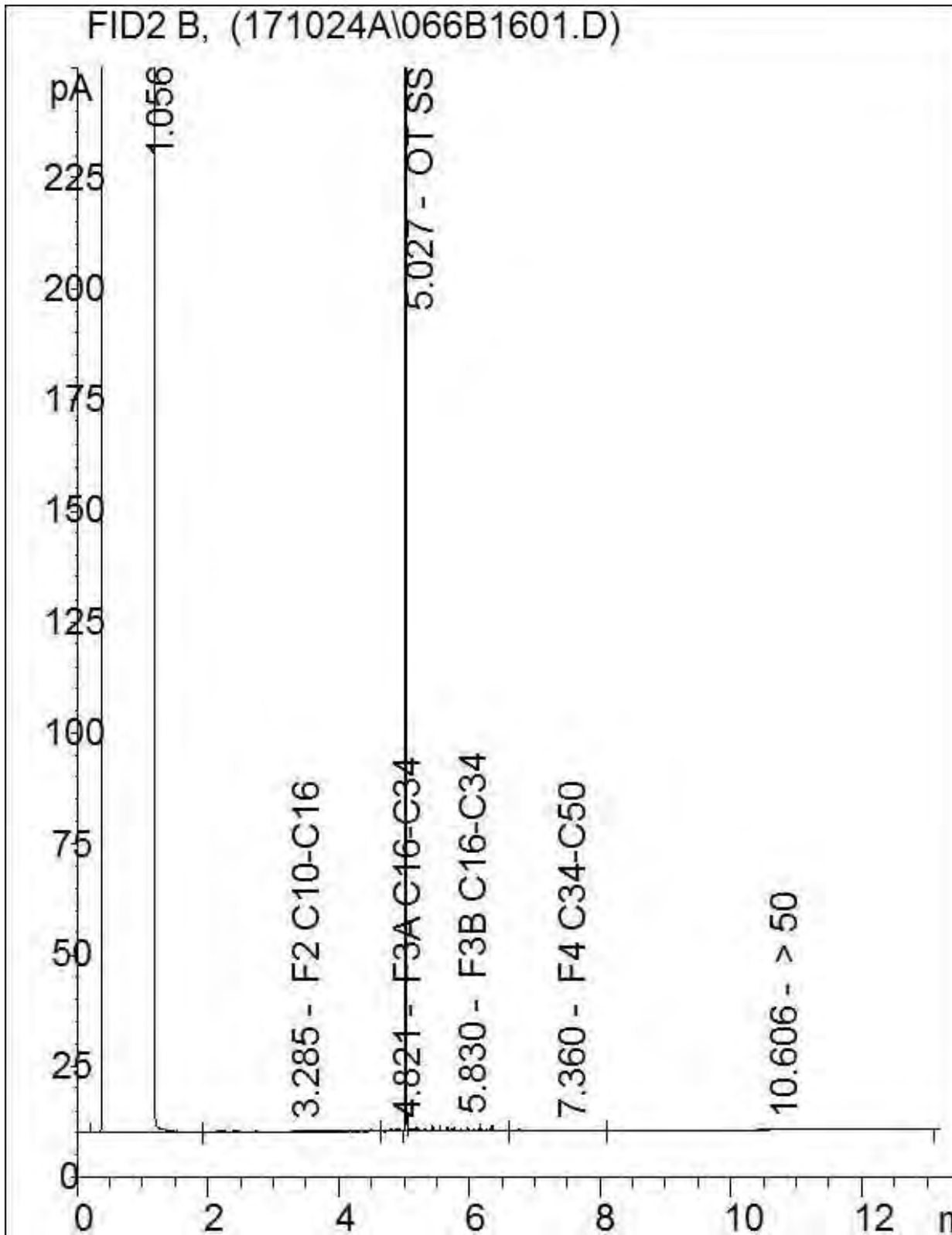
RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only
<i>[Signature]</i>	17		<i>[Signature]</i>	2017/10/19	13:01		Time Sensitive: <input type="checkbox"/> Temperature (°C) on Recd: 8/12/6 Custody Seal: Present <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> White: Maxxa Yellow: Client

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 * IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

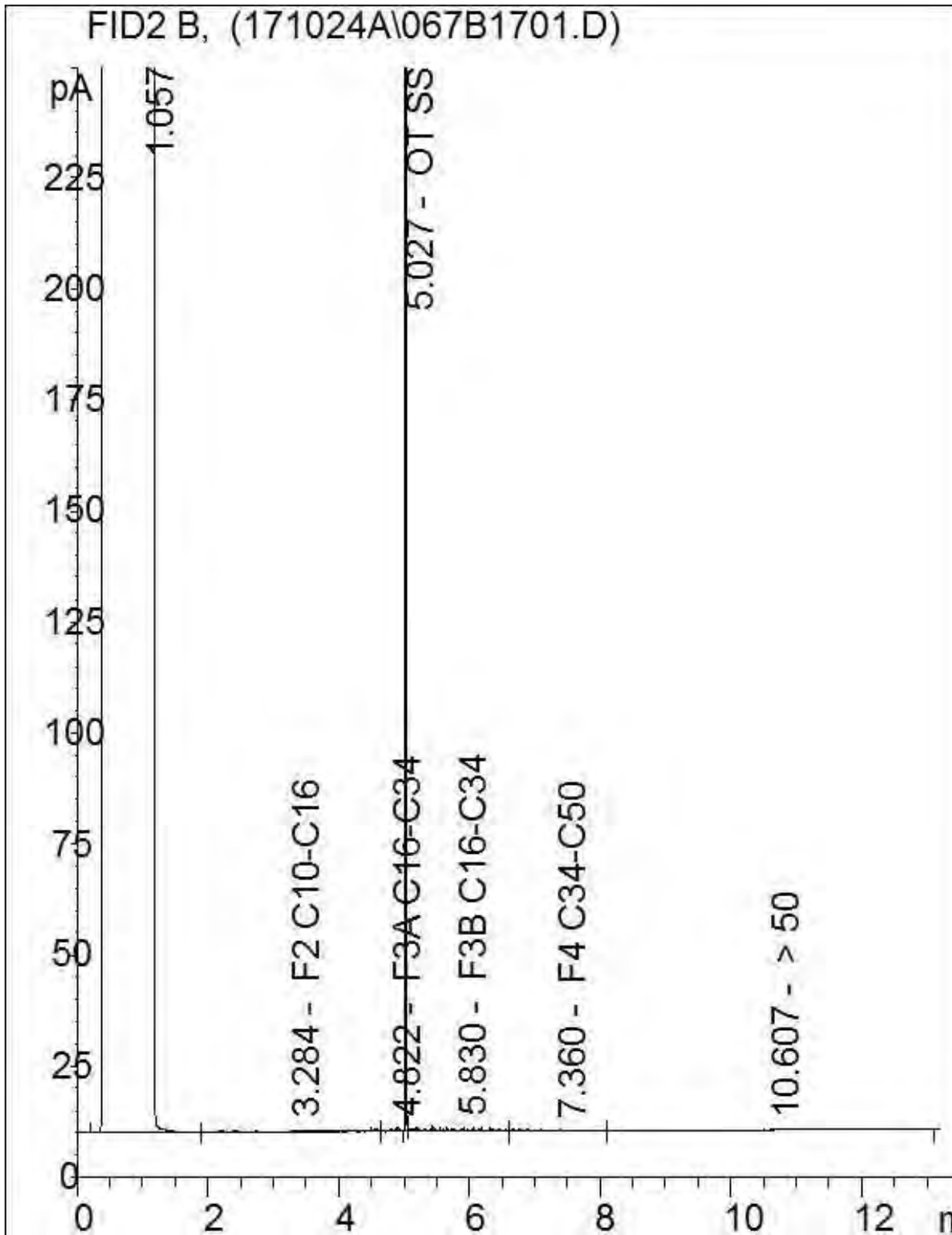
4/6/10

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



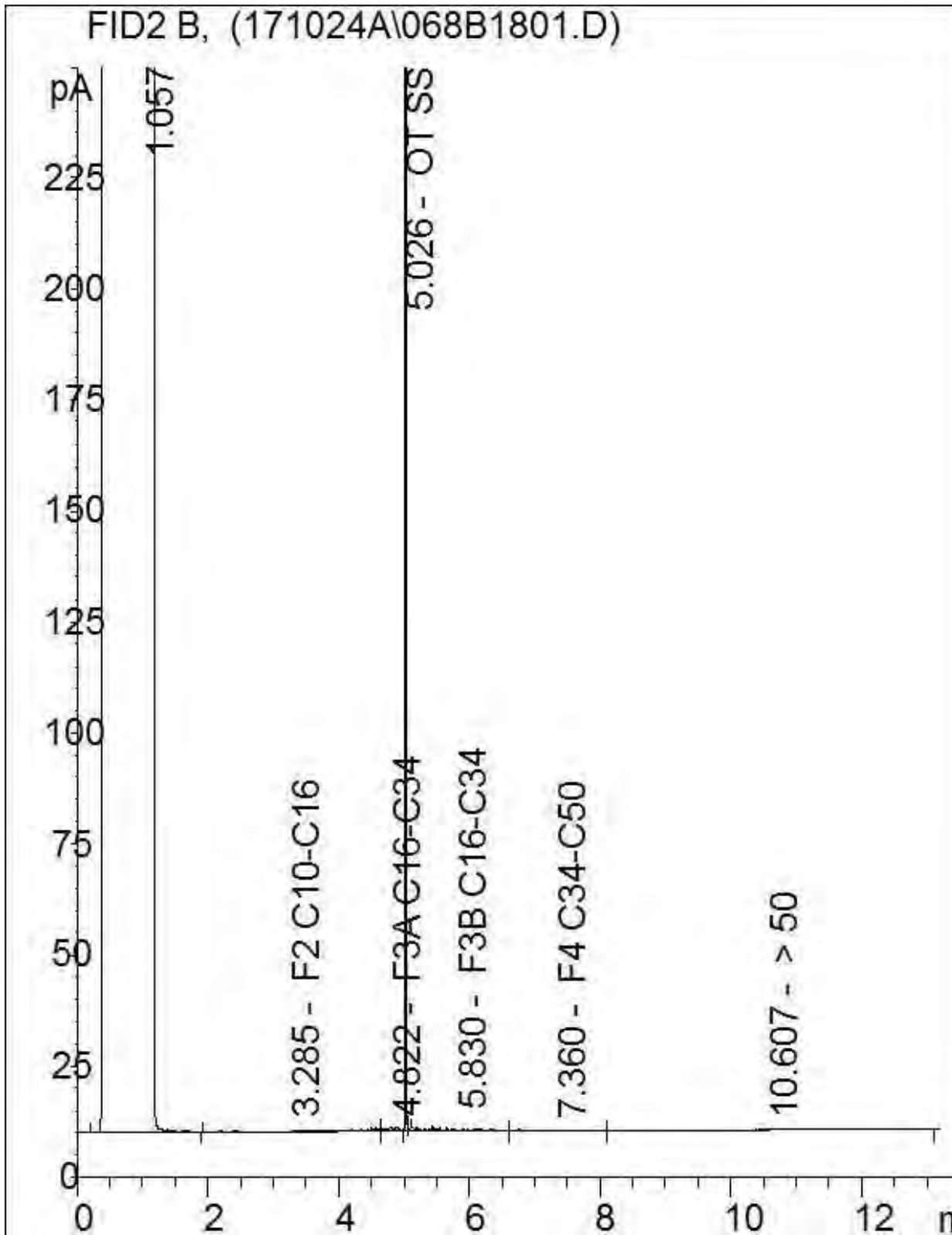
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 160900764
 Site Location: CLARINGTON TS - MONITORING WEL
 Your C.O.C. #: 633339-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/27
 Report #: R4807302
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9492

Received: 2017/10/17, 08:30

Sample Matrix: Water
 # Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	9	N/A	2017/10/23	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	4	2017/10/18	2017/10/22	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	6	2017/10/18	2017/10/23	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	4	N/A	2017/10/27		SM 22 2310
Alkalinity	4	N/A	2017/10/18	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	4	N/A	2017/10/19	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	4	N/A	2017/10/23		EPA 8260C m
Chloride by Automated Colourimetry	4	N/A	2017/10/20	CAM SOP-00463	EPA 325.2 m
Conductivity	4	N/A	2017/10/18	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	4	N/A	2017/10/19	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	4	N/A	2017/10/20	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	4	N/A	2017/10/18	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	4	2017/10/20	2017/10/22	CAM SOP-00316	CCME PHC-CWS m
Fluoride	4	2017/10/17	2017/10/18	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2017/10/20	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	4	2017/10/19	2017/10/20	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	4	N/A	2017/10/20	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	4	N/A	2017/10/20		
Anion and Cation Sum	4	N/A	2017/10/20		
Total Ammonia-N	4	N/A	2017/10/21	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	4	N/A	2017/10/20	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	4	2017/10/19	2017/10/20	CAM SOP-00309	EPA 8082A m
pH	4	N/A	2017/10/18	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	4	N/A	2017/10/20	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	4	N/A	2017/10/20		
Sat. pH and Langelier Index (@ 4C)	4	N/A	2017/10/20		
Sulphate by Automated Colourimetry	4	N/A	2017/10/20	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	4	N/A	2017/10/20		
Total Dissolved Solids	4	2017/10/19	2017/10/20	CAM SOP-00428	SM 22 2540C m

Your Project #: 160900764
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9492

Received: 2017/10/17, 08:30

Sample Matrix: Water
 # Samples Received: 10

Analyses	Date		Laboratory Method	Reference
	Quantity	Date Extracted		
Total Organic Carbon (TOC) (5)	4	N/A	2017/10/20 CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	1	2017/10/18	2017/10/18 CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	3	2017/10/19	2017/10/20 CAM SOP-00428	SM 22 2540D m
Turbidity	4	N/A	2017/10/18 CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	4	N/A	2017/10/20 CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (5) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.



Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 633339-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/27
Report #: R4807302
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9492
Received: 2017/10/17, 08:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00		
COC Number		633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	9.12	10.5	7.89	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	260	350	130	1.0	5216331
Calculated TDS	mg/L	540	590	490	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.3	1.1	1.8	1.0	5216331
Cation Sum	me/L	9.60	10.7	7.30	N/A	5216334
Hardness (CaCO3)	mg/L	420	490	130	1.0	5215470
Ion Balance (% Difference)	%	2.55	0.790	3.89	N/A	5216333
Langelier Index (@ 20C)	N/A	0.841	0.800	0.209		5216335
Langelier Index (@ 4C)	N/A	0.594	0.553	-0.0390		5216336
Saturation pH (@ 20C)	N/A	6.88	6.72	7.96		5216335
Saturation pH (@ 4C)	N/A	7.12	6.97	8.21		5216336
Inorganics						
Total Ammonia-N	mg/L	<0.050	<0.050	0.12	0.050	5222430
Conductivity	umho/cm	830	870	710	1.0	5217186
Dissolved Organic Carbon	mg/L	1.2	2.0	0.86	0.20	5219054
Orthophosphate (P)	mg/L	<0.010	0.011	<0.010	0.010	5221927
pH	pH	7.72	7.52	8.17		5217187
Dissolved Sulphate (SO4)	mg/L	91	130	240	1.0	5221913
Alkalinity (Total as CaCO3)	mg/L	260	350	130	1.0	5217178
Dissolved Chloride (Cl)	mg/L	50	30	8.0	1.0	5221904
Nitrite (N)	mg/L	<0.010	<0.010	<0.010	0.010	5217140
Nitrate (N)	mg/L	8.48	0.79	0.22	0.10	5217140
Nitrate + Nitrite (N)	mg/L	8.48	0.79	0.22	0.10	5217140
Metals						
Dissolved Aluminum (Al)	mg/L	0.0052	<0.0050	0.0076	0.0050	5218409
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5218409
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5218409
Dissolved Barium (Ba)	mg/L	0.070	0.11	0.021	0.0020	5218409
Dissolved Beryllium (Be)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5218409
Dissolved Boron (B)	mg/L	0.053	0.11	0.34	0.010	5218409
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00		
COC Number		633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	5218409
Dissolved Calcium (Ca)	mg/L	150	170	24	0.20	5218409
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	5218409
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5218409
Dissolved Copper (Cu)	mg/L	<0.0010	0.0016	<0.0010	0.0010	5218409
Dissolved Iron (Fe)	mg/L	<0.10	<0.10	<0.10	0.10	5218409
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5218409
Dissolved Magnesium (Mg)	mg/L	9.9	17	17	0.050	5218409
Dissolved Manganese (Mn)	mg/L	<0.0020	<0.0020	<0.0020	0.0020	5218409
Dissolved Molybdenum (Mo)	mg/L	<0.00050	<0.00050	0.11	0.00050	5218409
Dissolved Nickel (Ni)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5218409
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	5218409
Dissolved Potassium (K)	mg/L	1.5	1.6	4.0	0.20	5218409
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	0.0020	5218409
Dissolved Silicon (Si)	mg/L	5.3	6.2	3.4	0.050	5218409
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	5218409
Dissolved Sodium (Na)	mg/L	25	22	110	0.10	5218409
Dissolved Strontium (Sr)	mg/L	0.30	0.55	0.77	0.0010	5218409
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	0.000050	5218409
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	5218409
Dissolved Uranium (U)	mg/L	0.00058	0.00088	0.0020	0.00010	5218409
Dissolved Vanadium (V)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	5218409
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	5218409
Dissolved Zirconium (Zr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	5218409
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIQ046		
Sampling Date		2017/10/16 16:35		
COC Number		633339-01-01		
	UNITS	WG-160900764- 20171016-RD04	RDL	QC Batch
Calculated Parameters				
Anion Sum	me/L	7.17	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	1.0	5216331
Calculated TDS	mg/L	390	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.6	1.0	5216331
Cation Sum	me/L	7.22	N/A	5216334
Hardness (CaCO3)	mg/L	310	1.0	5215470
Ion Balance (% Difference)	%	0.350	N/A	5216333
Langelier Index (@ 20C)	N/A	0.803		5216335
Langelier Index (@ 4C)	N/A	0.555		5216336
Saturation pH (@ 20C)	N/A	7.29		5216335
Saturation pH (@ 4C)	N/A	7.53		5216336
Inorganics				
Total Ammonia-N	mg/L	<0.050	0.050	5222430
Conductivity	umho/cm	630	1.0	5217186
Dissolved Organic Carbon	mg/L	0.80	0.20	5219054
Orthophosphate (P)	mg/L	<0.010	0.010	5221927
pH	pH	8.09		5217187
Dissolved Sulphate (SO4)	mg/L	82	1.0	5221913
Alkalinity (Total as CaCO3)	mg/L	230	1.0	5217178
Dissolved Chloride (Cl)	mg/L	26	1.0	5221904
Nitrite (N)	mg/L	0.022	0.010	5217140
Nitrate (N)	mg/L	1.18	0.10	5217140
Nitrate + Nitrite (N)	mg/L	1.20	0.10	5217140
Metals				
Dissolved Aluminum (Al)	mg/L	<0.0050	0.0050	5218409
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	5218409
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	5218409
Dissolved Barium (Ba)	mg/L	0.053	0.0020	5218409
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	5218409
Dissolved Boron (B)	mg/L	0.083	0.010	5218409
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable				

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIQ046		
Sampling Date		2017/10/16 16:35		
COC Number		633339-01-01		
	UNITS	WG-160900764- 20171016-RD04	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	5218409
Dissolved Calcium (Ca)	mg/L	61	0.20	5218409
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	5218409
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	5218409
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	5218409
Dissolved Iron (Fe)	mg/L	<0.10	0.10	5218409
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	5218409
Dissolved Magnesium (Mg)	mg/L	37	0.050	5218409
Dissolved Manganese (Mn)	mg/L	0.010	0.0020	5218409
Dissolved Molybdenum (Mo)	mg/L	0.0069	0.00050	5218409
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	5218409
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	5218409
Dissolved Potassium (K)	mg/L	5.3	0.20	5218409
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	5218409
Dissolved Silicon (Si)	mg/L	6.4	0.050	5218409
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	5218409
Dissolved Sodium (Na)	mg/L	22	0.10	5218409
Dissolved Strontium (Sr)	mg/L	0.81	0.0010	5218409
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	5218409
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	5218409
Dissolved Uranium (U)	mg/L	0.0032	0.00010	5218409
Dissolved Vanadium (V)	mg/L	0.00069	0.00050	5218409
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	5218409
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	5218409
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIQ040	FIQ040	FIQ042	FIQ042		
Sampling Date		2017/10/16 12:01	2017/10/16 12:01	2017/10/16 13:51	2017/10/16 13:51		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD01 Lab-Dup	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD02 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity	mg/L	25		52	60	5.0	5234504
Total Dissolved Solids	mg/L	550		585		50	5221289
Fluoride (F-)	mg/L	<0.10		<0.10		0.10	5217188
Total Organic Carbon (TOC)	mg/L	1.5		2.4		0.20	5220611
Total Suspended Solids	mg/L	30		15		10	5221284
Turbidity	NTU	1.7		2.8		0.1	5216135
WAD Cyanide (Free)	ug/L	<1	<1	<1		1	5220334

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIQ044		FIQ046		
Sampling Date		2017/10/16 15:00		2017/10/16 16:35		
COC Number		633339-01-01		633339-01-01		
	UNITS	WG-160900764- 20171016-RD03	QC Batch	WG-160900764- 20171016-RD04	RDL	QC Batch

Inorganics						
Acidity	mg/L	<5.0	5234504	<5.0	5.0	5234504
Total Dissolved Solids	mg/L	475	5220449	375	50	5221289
Fluoride (F-)	mg/L	0.64	5217188	0.29	0.10	5217188
Total Organic Carbon (TOC)	mg/L	2.3	5220611	0.81	0.20	5220611
Total Suspended Solids	mg/L	110	5218954	<10	10	5221284
Turbidity	NTU	41	5216135	0.6	0.1	5216135
WAD Cyanide (Free)	ug/L	<1	5220334	<1	1	5220334

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044	FIQ046		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00	2017/10/16 16:35		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	WG-160900764- 20171016-RD04	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	2.4	<0.50	<0.50	<0.50	0.50	5218814
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5221601
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

O.REG 153 PCBS (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044	FIQ046		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00	2017/10/16 16:35		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	WG-160900764- 20171016-RD04	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417

Surrogate Recovery (%)							
Decachlorobiphenyl	%	115	110	118	122		5221417

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00		
COC Number		633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5215462
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5220082
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5220082
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5220082
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5220082
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5220082
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5220082
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5220082
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5220082
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5220082
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5220082
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5220082
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5220082

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIQ040	FIQ042	FIQ044		
Sampling Date		2017/10/16 12:01	2017/10/16 13:51	2017/10/16 15:00		
COC Number		633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD03	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5220082
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5220082
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5220082
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5220082
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5220082
F1 (C6-C10)	ug/L	<25	<25	<25	25	5220082
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5220082
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5222613
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5222613
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5222613
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5222613
Surrogate Recovery (%)						
o-Terphenyl	%	95	98	96		5222613
4-Bromofluorobenzene	%	88	87	87		5220082
D4-1,2-Dichloroethane	%	125	127	126		5220082
D8-Toluene	%	89	88	89		5220082
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIQ046		
Sampling Date		2017/10/16 16:35		
COC Number		633339-01-01		
	UNITS	WG-160900764- 20171016-RD04	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	5215462
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	5220082
Benzene	ug/L	<0.20	0.20	5220082
Bromodichloromethane	ug/L	<0.50	0.50	5220082
Bromoform	ug/L	<1.0	1.0	5220082
Bromomethane	ug/L	<0.50	0.50	5220082
Carbon Tetrachloride	ug/L	<0.20	0.20	5220082
Chlorobenzene	ug/L	<0.20	0.20	5220082
Chloroform	ug/L	<0.20	0.20	5220082
Dibromochloromethane	ug/L	<0.50	0.50	5220082
1,2-Dichlorobenzene	ug/L	<0.50	0.50	5220082
1,3-Dichlorobenzene	ug/L	<0.50	0.50	5220082
1,4-Dichlorobenzene	ug/L	<0.50	0.50	5220082
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	5220082
1,1-Dichloroethane	ug/L	<0.20	0.20	5220082
1,2-Dichloroethane	ug/L	<0.50	0.50	5220082
1,1-Dichloroethylene	ug/L	<0.20	0.20	5220082
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	5220082
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	5220082
1,2-Dichloropropane	ug/L	<0.20	0.20	5220082
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	5220082
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	5220082
Ethylbenzene	ug/L	<0.20	0.20	5220082
Ethylene Dibromide	ug/L	<0.20	0.20	5220082
Hexane	ug/L	<1.0	1.0	5220082
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	5220082
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	5220082
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	5220082
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	5220082
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIQ046		
Sampling Date		2017/10/16 16:35		
COC Number		633339-01-01		
	UNITS	WG-160900764- 20171016-RD04	RDL	QC Batch
Styrene	ug/L	<0.50	0.50	5220082
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	5220082
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	5220082
Tetrachloroethylene	ug/L	<0.20	0.20	5220082
Toluene	ug/L	<0.20	0.20	5220082
1,1,1-Trichloroethane	ug/L	<0.20	0.20	5220082
1,1,2-Trichloroethane	ug/L	<0.50	0.50	5220082
Trichloroethylene	ug/L	<0.20	0.20	5220082
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	5220082
Vinyl Chloride	ug/L	<0.20	0.20	5220082
p+m-Xylene	ug/L	<0.20	0.20	5220082
o-Xylene	ug/L	<0.20	0.20	5220082
Total Xylenes	ug/L	<0.20	0.20	5220082
F1 (C6-C10)	ug/L	<25	25	5220082
F1 (C6-C10) - BTEX	ug/L	<25	25	5220082
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	5222613
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	5222613
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	5222613
Reached Baseline at C50	ug/L	Yes		5222613
Surrogate Recovery (%)				
o-Terphenyl	%	97		5222613
4-Bromofluorobenzene	%	87		5220082
D4-1,2-Dichloroethane	%	126		5220082
D8-Toluene	%	90		5220082
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIQ040	FIQ041	FIQ042	FIQ043		
Sampling Date		2017/10/16 12:01	2017/10/16 12:01	2017/10/16 13:51	2017/10/16 13:51		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD01A	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD02A	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5217963
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5217963
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5217963
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIQ040	FIQ041	FIQ042	FIQ043		
Sampling Date		2017/10/16 12:01	2017/10/16 12:01	2017/10/16 13:51	2017/10/16 13:51		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD01	WG-160900764- 20171016-RD01A	WG-160900764- 20171016-RD02	WG-160900764- 20171016-RD02A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5217963
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5216131
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	28 (1)	27 (1)	52	28 (1)		5217963
2-Fluorobiphenyl	%	80	78	90	81		5217963
D14-Terphenyl (FS)	%	103	18 (1)	103	15 (1)		5217963
D5-Nitrobenzene	%	68	76	85	78		5217963
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIQ044	FIQ045	FIQ046	FIQ047		
Sampling Date		2017/10/16 15:00	2017/10/16 15:00	2017/10/16 16:35	2017/10/16 16:35		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD03	WG-160900764- 20171016-RD03A	WG-160900764- 20171016-RD04	WG-160900764- 20171016-RD04A	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5217963
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5217963
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-ethylhexyl)phthalate	ug/L	5	<1	<1	<1	1	5217963
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIQ044	FIQ045	FIQ046	FIQ047		
Sampling Date		2017/10/16 15:00	2017/10/16 15:00	2017/10/16 16:35	2017/10/16 16:35		
COC Number		633339-01-01	633339-01-01	633339-01-01	633339-01-01		
	UNITS	WG-160900764- 20171016-RD03	WG-160900764- 20171016-RD03A	WG-160900764- 20171016-RD04	WG-160900764- 20171016-RD04A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5217963
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5216131
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	9.6 (1)	12 (1)	28 (1)	44 (1)		5217963
2-Fluorobiphenyl	%	69	71	87	84		5217963
D14-Terphenyl (FS)	%	103	12 (1)	105	22 (1)		5217963
D5-Nitrobenzene	%	84	77	78	77		5217963
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIR304		FIR305		
Sampling Date		2017/10/16		2017/10/16		
COC Number		633339-01-01		633339-01-01		
	UNITS	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Semivolatile Organics						
1,2,4-Trichlorobenzene	ug/L	<0.1	0.1	56	1	5217963
1-Methylnaphthalene	ug/L	<0.2	0.2	82	1	5217963
2,4,5-Trichlorophenol	ug/L	<0.2	0.2	97	1	5217963
2,4,6-Trichlorophenol	ug/L	<0.2	0.2	90	1	5217963
2,4-Dichlorophenol	ug/L	<0.1	0.1	67	1	5217963
2,4-Dimethylphenol	ug/L	<0.5	0.5	37	1	5217963
2,4-Dinitrophenol	ug/L	<2	2	100	1	5217963
2,4-Dinitrotoluene	ug/L	<0.3	0.3	94	1	5217963
2,6-Dinitrotoluene	ug/L	<0.3	0.3	97	1	5217963
2-Chlorophenol	ug/L	<0.1	0.1	72	1	5217963
2-Methylnaphthalene	ug/L	<0.2	0.2	77	1	5217963
3,3'-Dichlorobenzidine	ug/L	<0.5	0.5	70	1	5217963
Acenaphthene	ug/L	<0.2	0.2	93	1	5217963
Acenaphthylene	ug/L	<0.2	0.2	91	1	5217963
Anthracene	ug/L	<0.05	0.05	63	1	5217963
Benzo(a)anthracene	ug/L	<0.05	0.05	36 (1)	1	5217963
Benzo(a)pyrene	ug/L	<0.01	0.01	25 (1)	1	5217963
Benzo(b/j)fluoranthene	ug/L	<0.05	0.05	34 (1)	1	5217963
Benzo(g,h,i)perylene	ug/L	<0.05	0.05	17 (1)	1	5217963
Benzo(k)fluoranthene	ug/L	<0.05	0.05	27 (1)	1	5217963
Biphenyl	ug/L	<0.1	0.1	85	1	5217963
Bis(2-chloroethyl)ether	ug/L	<0.5	0.5	84	1	5217963
Bis(2-chloroisopropyl)ether	ug/L	<0.5	0.5	79	1	5217963
Bis(2-ethylhexyl)phthalate	ug/L	<1	1	38 (1)	1	5217963
Chrysene	ug/L	<0.05	0.05	30 (1)	1	5217963
Dibenz(a,h)anthracene	ug/L	<0.1	0.1	17 (1)	1	5217963
Diethyl phthalate	ug/L	<0.1	0.1	83	1	5217963
Dimethyl phthalate	ug/L	<0.1	0.1	58	1	5217963
Fluoranthene	ug/L	<0.2	0.2	66	1	5217963
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIR304		FIR305		
Sampling Date		2017/10/16		2017/10/16		
COC Number		633339-01-01		633339-01-01		
	UNITS	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Fluorene	ug/L	<0.2	0.2	81	1	5217963
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	0.1	19 (1)	1	5217963
Naphthalene	ug/L	<0.2	0.2	74	1	5217963
p-Chloroaniline	ug/L	<1	1	51	1	5217963
Pentachlorophenol	ug/L	<0.1	0.1	63	1	5217963
Phenanthrene	ug/L	<0.1	0.1	85	1	5217963
Phenol	ug/L	<0.5	0.5	35	1	5217963
Pyrene	ug/L	<0.05	0.05	70	1	5217963
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	<0.28	0.28			5216131
Surrogate Recovery (%)						
2,4,6-Tribromophenol	%	37 (2)		76		5217963
2-Fluorobiphenyl	%	98		79		5217963
D14-Terphenyl (FS)	%	27 (2)		35 (2)		5217963
D5-Nitrobenzene	%	96		88		5217963
<p>RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. (2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.</p>						

TEST SUMMARY

Maxxam ID: FIQ040
Sample ID: WG-160900764-20171016-RD01
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5234504	N/A	2017/10/27	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218814	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5221601	2017/10/19	2017/10/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5218409	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Ammonia-N	LACH/NH4	5222430	N/A	2017/10/21	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5220082	N/A	2017/10/20	Denis Reid

Maxxam ID: FIQ040 Dup
Sample ID: WG-160900764-20171016-RD01
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding

TEST SUMMARY

Maxxam ID: FIQ041
Sample ID: WG-160900764-20171016-RD01A
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic

Maxxam ID: FIQ042
Sample ID: WG-160900764-20171016-RD02
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5234504	N/A	2017/10/27	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218814	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5221601	2017/10/19	2017/10/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5218409	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Ammonia-N	LACH/NH4	5222430	N/A	2017/10/21	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5220082	N/A	2017/10/20	Denis Reid

TEST SUMMARY

Maxxam ID: FIQ042 Dup
Sample ID: WG-160900764-20171016-RD02
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	5234504	N/A	2017/10/27	Brent Boudreau

Maxxam ID: FIQ043
Sample ID: WG-160900764-20171016-RD02A
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic

Maxxam ID: FIQ044
Sample ID: WG-160900764-20171016-RD03
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5234504	N/A	2017/10/27	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218814	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5221601	2017/10/19	2017/10/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5218409	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Ammonia-N	LACH/NH4	5222430	N/A	2017/10/21	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5220449	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov

TEST SUMMARY

Maxxam ID: FIQ044
Sample ID: WG-160900764-20171016-RD03
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Suspended Solids	BAL	5218954	2017/10/18	2017/10/18	Xue Zheng Li(Scott)
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5220082	N/A	2017/10/20	Denis Reid

Maxxam ID: FIQ045
Sample ID: WG-160900764-20171016-RD03A
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic

Maxxam ID: FIQ046
Sample ID: WG-160900764-20171016-RD04
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5234504	N/A	2017/10/27	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218814	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5221601	2017/10/19	2017/10/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5218409	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Ammonia-N	LACH/NH4	5222430	N/A	2017/10/21	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk

TEST SUMMARY

Maxxam ID: FIQ046
Sample ID: WG-160900764-20171016-RD04
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5220082	N/A	2017/10/20	Denis Reid

Maxxam ID: FIQ047
Sample ID: WG-160900764-20171016-RD04A
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic

Maxxam ID: FIR304
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic

Maxxam ID: FIR305
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/23	Milijana Avramovic

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-1.3°C
Package 2	2.7°C
Package 3	7.7°C
Package 4	5.3°C
Package 5	7.7°C
Package 6	9.7°C
Package 7	3.3°C
Package 8	2.7°C
Package 9	2.7°C
Package 10	4.7°C

Sample FIQ040 [WG-160900764-20171016-RD01] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIQ042 [WG-160900764-20171016-RD02] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIR305 [FILTERED SPIKE] : ABN analysis: Data are reported as percentage recoveries.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217963	2,4,6-Tribromophenol	2017/10/22			76	50 - 130	40 (2)					
5217963	2-Fluorobiphenyl	2017/10/22			80	50 - 130	93	%				
5217963	D14-Terphenyl (FS)	2017/10/22			100	50 - 130	98	%				
5217963	D5-Nitrobenzene	2017/10/22			85	50 - 130	89	%				
5220082	4-Bromofluorobenzene	2017/10/20	100	70 - 130	102	70 - 130	88	%				
5220082	D4-1,2-Dichloroethane	2017/10/20	110	70 - 130	103	70 - 130	113	%				
5220082	D8-Toluene	2017/10/20	104	70 - 130	106	70 - 130	90	%				
5221417	Decachlorobiphenyl	2017/10/20	105	60 - 130	94	60 - 130	94	%				
5222613	o-Terphenyl	2017/10/22	106	60 - 130	104	60 - 130	100	%				
5216135	Turbidity	2017/10/18			100	85 - 115	<0.1	NTU	3.1	20		
5217140	Nitrate (N)	2017/10/20	92	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
5217140	Nitrite (N)	2017/10/20	106	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
5217178	Alkalinity (Total as CaCO3)	2017/10/18			98	85 - 115	<1.0	mg/L	0.90	20		
5217186	Conductivity	2017/10/18			99	85 - 115	<1.0	umho/cm	1.5	25		
5217187	pH	2017/10/18			102	98 - 103			0.27	N/A		
5217188	Fluoride (F-)	2017/10/18	90	80 - 120	98	80 - 120	<0.10	mg/L	19	20		
5217963	1,2,4-Trichlorobenzene	2017/10/22			64	40 - 130	<0.1	ug/L	26	30		
5217963	1-Methylnaphthalene	2017/10/22			87	50 - 130	<0.2	ug/L	27	30		
5217963	2,4,5-Trichlorophenol	2017/10/22			99	50 - 130	<0.2	ug/L	27	30		
5217963	2,4,6-Trichlorophenol	2017/10/22			95	50 - 130	<0.2	ug/L	25	30		
5217963	2,4-Dichlorophenol	2017/10/22			74	50 - 130	<0.1	ug/L	36 (1)	30		
5217963	2,4-Dimethylphenol	2017/10/22			47	30 - 130	<0.5	ug/L	28	30		
5217963	2,4-Dinitrophenol	2017/10/22			114	30 - 130	<2	ug/L	3.2	30		
5217963	2,4-Dinitrotoluene	2017/10/22			96	50 - 130	<0.3	ug/L	24	30		
5217963	2,6-Dinitrotoluene	2017/10/22			96	50 - 130	<0.3	ug/L	28	30		
5217963	2-Chlorophenol	2017/10/22			78	50 - 130	<0.1	ug/L	23	30		
5217963	2-Methylnaphthalene	2017/10/22			82	50 - 130	<0.2	ug/L	27	30		
5217963	3,3'-Dichlorobenzidine	2017/10/22			96	30 - 130	<0.5	ug/L	16	30		
5217963	Acenaphthene	2017/10/22			95	50 - 130	<0.2	ug/L	26	30		
5217963	Acenaphthylene	2017/10/22			92	50 - 130	<0.2	ug/L	28	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217963	Anthracene	2017/10/22			85	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(a)anthracene	2017/10/22			109	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(a)pyrene	2017/10/22			101	50 - 130	<0.01	ug/L	21	30		
5217963	Benzo(b/j)fluoranthene	2017/10/22			114	50 - 130	<0.05	ug/L	22	30		
5217963	Benzo(g,h,i)perylene	2017/10/22			110	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(k)fluoranthene	2017/10/22			99	50 - 130	<0.05	ug/L	23	30		
5217963	Biphenyl	2017/10/22			89	50 - 130	<0.1	ug/L	26	30		
5217963	Bis(2-chloroethyl)ether	2017/10/22			83	50 - 130	<0.5	ug/L	28	30		
5217963	Bis(2-chloroisopropyl)ether	2017/10/22			80	50 - 130	<0.5	ug/L	29	30		
5217963	Bis(2-ethylhexyl)phthalate	2017/10/22			115	50 - 130	<1	ug/L	21	30		
5217963	Chrysene	2017/10/22			103	50 - 130	<0.05	ug/L	21	30		
5217963	Dibenz(a,h)anthracene	2017/10/22			111	50 - 130	<0.1	ug/L	22	30		
5217963	Diethyl phthalate	2017/10/22			91	50 - 130	<0.1	ug/L	22	30		
5217963	Dimethyl phthalate	2017/10/22			90	50 - 130	<0.1	ug/L	24	30		
5217963	Fluoranthene	2017/10/22			96	50 - 130	<0.2	ug/L	19	30		
5217963	Fluorene	2017/10/22			83	50 - 130	<0.2	ug/L	26	30		
5217963	Indeno(1,2,3-cd)pyrene	2017/10/22			124	50 - 130	<0.1	ug/L	23	30		
5217963	Naphthalene	2017/10/22			78	50 - 130	<0.2	ug/L	29	30		
5217963	p-Chloroaniline	2017/10/22			87	30 - 130	<1	ug/L	15	30		
5217963	Pentachlorophenol	2017/10/22			63	50 - 130	<0.1	ug/L	11	30		
5217963	Phenanthrene	2017/10/22			90	50 - 130	<0.1	ug/L	22	30		
5217963	Phenol	2017/10/22			39	30 - 130	<0.5	ug/L	17	30		
5217963	Pyrene	2017/10/22			104	50 - 130	<0.05	ug/L	20	30		
5218409	Dissolved Aluminum (Al)	2017/10/20	107	80 - 120	102	80 - 120	<0.0050	mg/L				
5218409	Dissolved Antimony (Sb)	2017/10/20	109	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20		
5218409	Dissolved Arsenic (As)	2017/10/20	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
5218409	Dissolved Barium (Ba)	2017/10/20	105	80 - 120	100	80 - 120	<0.0020	mg/L	3.1	20		
5218409	Dissolved Beryllium (Be)	2017/10/20	106	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5218409	Dissolved Boron (B)	2017/10/20	NC	80 - 120	102	80 - 120	<0.010	mg/L	4.5	20		
5218409	Dissolved Cadmium (Cd)	2017/10/20	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
5218409	Dissolved Calcium (Ca)	2017/10/20	NC	80 - 120	98	80 - 120	<0.20	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5218409	Dissolved Chromium (Cr)	2017/10/20	101	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
5218409	Dissolved Cobalt (Co)	2017/10/20	98	80 - 120	99	80 - 120	<0.00050	mg/L	4.0	20		
5218409	Dissolved Copper (Cu)	2017/10/20	103	80 - 120	103	80 - 120	<0.0010	mg/L	5.7	20		
5218409	Dissolved Iron (Fe)	2017/10/20	100	80 - 120	100	80 - 120	<0.10	mg/L				
5218409	Dissolved Lead (Pb)	2017/10/20	95	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
5218409	Dissolved Magnesium (Mg)	2017/10/20	103	80 - 120	100	80 - 120	<0.050	mg/L				
5218409	Dissolved Manganese (Mn)	2017/10/20	102	80 - 120	101	80 - 120	<0.0020	mg/L				
5218409	Dissolved Molybdenum (Mo)	2017/10/20	107	80 - 120	102	80 - 120	<0.00050	mg/L	7.5	20		
5218409	Dissolved Nickel (Ni)	2017/10/20	98	80 - 120	98	80 - 120	<0.0010	mg/L	5.4	20		
5218409	Dissolved Phosphorus (P)	2017/10/20	117	80 - 120	107	80 - 120	<0.10	mg/L				
5218409	Dissolved Potassium (K)	2017/10/20	105	80 - 120	101	80 - 120	<0.20	mg/L				
5218409	Dissolved Selenium (Se)	2017/10/20	101	80 - 120	99	80 - 120	<0.0020	mg/L	NC	20		
5218409	Dissolved Silicon (Si)	2017/10/20	110	80 - 120	102	80 - 120	<0.050	mg/L				
5218409	Dissolved Silver (Ag)	2017/10/20	90	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		
5218409	Dissolved Sodium (Na)	2017/10/20	NC	80 - 120	100	80 - 120	<0.10	mg/L	3.1	20		
5218409	Dissolved Strontium (Sr)	2017/10/20	101	80 - 120	99	80 - 120	<0.0010	mg/L				
5218409	Dissolved Thallium (Tl)	2017/10/20	95	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
5218409	Dissolved Titanium (Ti)	2017/10/20	108	80 - 120	98	80 - 120	<0.0050	mg/L				
5218409	Dissolved Uranium (U)	2017/10/20	96	80 - 120	97	80 - 120	<0.00010	mg/L	3.0	20		
5218409	Dissolved Vanadium (V)	2017/10/20	103	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5218409	Dissolved Zinc (Zn)	2017/10/20	97	80 - 120	99	80 - 120	<0.0050	mg/L	4.0	20		
5218409	Dissolved Zirconium (Zr)	2017/10/20	110	80 - 120	105	80 - 120	<0.0010	mg/L				
5218814	Chromium (VI)	2017/10/19	102	80 - 120	101	80 - 120	<0.50	ug/L	NC	20		
5218954	Total Suspended Solids	2017/10/18					<10	mg/L	10	25	98	85 - 115
5219054	Dissolved Organic Carbon	2017/10/18	96	80 - 120	98	80 - 120	<0.20	mg/L	0.39	20		
5220082	1,1,1,2-Tetrachloroethane	2017/10/20	106	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
5220082	1,1,1-Trichloroethane	2017/10/20	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5220082	1,1,2,2-Tetrachloroethane	2017/10/20	112	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5220082	1,1,2-Trichloroethane	2017/10/20	108	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
5220082	1,1-Dichloroethane	2017/10/20	106	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5220082	1,1-Dichloroethylene	2017/10/20	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5220082	1,2-Dichlorobenzene	2017/10/20	95	70 - 130	91	70 - 130	<0.50	ug/L	NC	30		
5220082	1,2-Dichloroethane	2017/10/20	106	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5220082	1,2-Dichloropropane	2017/10/20	98	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5220082	1,3-Dichlorobenzene	2017/10/20	94	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
5220082	1,4-Dichlorobenzene	2017/10/20	91	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
5220082	Acetone (2-Propanone)	2017/10/20	108	60 - 140	96	60 - 140	<10	ug/L	NC	30		
5220082	Benzene	2017/10/20	101	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5220082	Bromodichloromethane	2017/10/20	102	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5220082	Bromoform	2017/10/20	111	70 - 130	102	70 - 130	<1.0	ug/L	NC	30		
5220082	Bromomethane	2017/10/20	102	60 - 140	101	60 - 140	<0.50	ug/L	NC	30		
5220082	Carbon Tetrachloride	2017/10/20	93	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5220082	Chlorobenzene	2017/10/20	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5220082	Chloroform	2017/10/20	100	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5220082	cis-1,2-Dichloroethylene	2017/10/20	101	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5220082	cis-1,3-Dichloropropene	2017/10/20	94	70 - 130	89	70 - 130	<0.30	ug/L	NC	30		
5220082	Dibromochloromethane	2017/10/20	107	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5220082	Dichlorodifluoromethane (FREON 12)	2017/10/20	76	60 - 140	82	60 - 140	<1.0	ug/L	NC	30		
5220082	Ethylbenzene	2017/10/20	84	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
5220082	Ethylene Dibromide	2017/10/20	111	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5220082	F1 (C6-C10) - BTEX	2017/10/20					<25	ug/L	NC	30		
5220082	F1 (C6-C10)	2017/10/20	95	60 - 140	100	60 - 140	<25	ug/L	NC	30		
5220082	Hexane	2017/10/20	95	70 - 130	100	70 - 130	<1.0	ug/L	NC	30		
5220082	Methyl Ethyl Ketone (2-Butanone)	2017/10/20	114	60 - 140	101	60 - 140	<10	ug/L	NC	30		
5220082	Methyl Isobutyl Ketone	2017/10/20	103	70 - 130	90	70 - 130	<5.0	ug/L	NC	30		
5220082	Methyl t-butyl ether (MTBE)	2017/10/20	90	70 - 130	87	70 - 130	<0.50	ug/L	NC	30		
5220082	Methylene Chloride(Dichloromethane)	2017/10/20	119	70 - 130	114	70 - 130	<2.0	ug/L	NC	30		
5220082	o-Xylene	2017/10/20	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
5220082	p+m-Xylene	2017/10/20	86	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
5220082	Styrene	2017/10/20	89	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
5220082	Tetrachloroethylene	2017/10/20	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5220082	Toluene	2017/10/20	96	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5220082	Total Xylenes	2017/10/20					<0.20	ug/L	NC	30		
5220082	trans-1,2-Dichloroethylene	2017/10/20	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5220082	trans-1,3-Dichloropropene	2017/10/20	106	70 - 130	97	70 - 130	<0.40	ug/L	NC	30		
5220082	Trichloroethylene	2017/10/20	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5220082	Trichlorofluoromethane (FREON 11)	2017/10/20	94	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5220082	Vinyl Chloride	2017/10/20	96	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5220334	WAD Cyanide (Free)	2017/10/20	102	80 - 120	101	80 - 120	<1	ug/L	NC	20		
5220449	Total Dissolved Solids	2017/10/20					<50	mg/L	5.4	25	102	90 - 110
5220611	Total Organic Carbon (TOC)	2017/10/20	96	80 - 120	99	80 - 120	<0.20	mg/L	1.0	20		
5221284	Total Suspended Solids	2017/10/20					<10	mg/L	NC	25	97	85 - 115
5221289	Total Dissolved Solids	2017/10/20					<50	mg/L	0.48	25	98	90 - 110
5221417	Aroclor 1242	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1248	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1254	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1260	2017/10/20	116	60 - 130	98	60 - 130	<0.05	ug/L	NC	30		
5221417	Total PCB	2017/10/20	116	60 - 130	98	60 - 130	<0.05	ug/L	NC	40		
5221601	Mercury (Hg)	2017/10/20	106	75 - 125	101	80 - 120	<0.1	ug/L	NC	20		
5221904	Dissolved Chloride (Cl)	2017/10/20	NC	80 - 120	104	80 - 120	<1.0	mg/L	0.25	20		
5221913	Dissolved Sulphate (SO4)	2017/10/20	NC	75 - 125	103	80 - 120	<1.0	mg/L	0.26	20		
5221927	Orthophosphate (P)	2017/10/20	111	75 - 125	99	80 - 120	<0.010	mg/L	4.8	25		
5222430	Total Ammonia-N	2017/10/21	94	80 - 120	98	85 - 115	<0.050	mg/L	0.17	20		
5222613	F2 (C10-C16 Hydrocarbons)	2017/10/22	NC	50 - 130	95	60 - 130	<100	ug/L	0.50	30		
5222613	F3 (C16-C34 Hydrocarbons)	2017/10/22	105	50 - 130	102	60 - 130	<200	ug/L	NC	30		
5222613	F4 (C34-C50 Hydrocarbons)	2017/10/22	109	50 - 130	105	60 - 130	<200	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5234504	Acidity	2017/10/27	78 (3)	80 - 120	103	80 - 120	<5.0	mg/L	14	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Surrogate recovery was below the lower control limit. This may represent a low bias in some results.

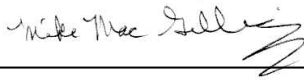
(3) Matrix spike recovery falls outside the 80-120% allowable limits. All other QC is acceptable, data accepted.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).




Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist



Mike MacGillivray, Scientific Specialist (Inorganics)

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



Maxxam Analytics International Corporation d/a Maxxam Analytics
6740 Campbell Road, Mississauga, Ontario Canada L5N 2L6 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

STANTEC

17-Oct-17 08:30

Deepthi Shaji
B7M9492

Page 1 of 1

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: #18379 Stantec Consulting Ltd	Quotation #: B48218	Task #: 200.500		
Contact Name: Accounts Payable	Contact Name: Report - 160900764	Project #: 160900764	KES ENV-1370		
Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Address: ON	Profit Centre: 1609	Site #: Clingington TS - Monitoring Well		
Phone: (519) 579-4410 x Fax: (519) 579-6733 x	Phone: Fax:	Site #: Clingington TS - Monitoring Well	Sampled By: Ryan Dineen		
Email: accounts.payable.invoices@stantec.com	Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co	Barcode: C#633339-01-01		Bottle Order #: 633339	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY				ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required				
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle):										Regular (Standard) TAT:		
<input checked="" type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw		Metals (Hg, Pb, V)	Acidity	Dr (V) & Free Cl	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCa ₄ - Comprehensive (Field Filter)	Reg 153 PCBs	Reg 153 VOCs and TL-14	SVOCS	Lab Filtered SVOCS	Regular (Standard) TAT: (will be applied if Rush TAT is not specified). Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw													Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)	
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality: _____														
<input type="checkbox"/> Table			<input type="checkbox"/> PWQO															
Include Criteria on Certificate of Analysis (Y/N)?																		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix													# of Bottles	Comments
1	WG-160900764-20171016 RD-1	Oct 16/17	12:01	GW		X	X	X	X	X	X	X	X	X	X	X	18	analyze per quote
2	WG-160900764-20171016 RD-1A		12:01	GW												X	2	
3	RD-2		13:51			X	X	X	X	X	X	X	X	X	X		18	
4	RD-2A		13:51													X	2	
5	RD-3		15:00			X	X	X	X	X	X	X	X	X	X		18	REC'D IN PORT HOPE
6	RD-3A		15:00													X	2	
7	RD-4		16:35			X	X	X	X	X	X	X	X	X	X		18	
8	RD-4A		16:35													X	2	
9																		ON ICE
10																		

* RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
<i>[Signature]</i>		17/10/16	1330	<i>[Signature]</i>		17/10/16	830AM		Time Sensitive	Temperature (°C) on Recd:	Custody Seal Present	Yes	No
				<i>[Signature]</i>		2017/10/17	12:40			18°C	Intact	Yes	No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

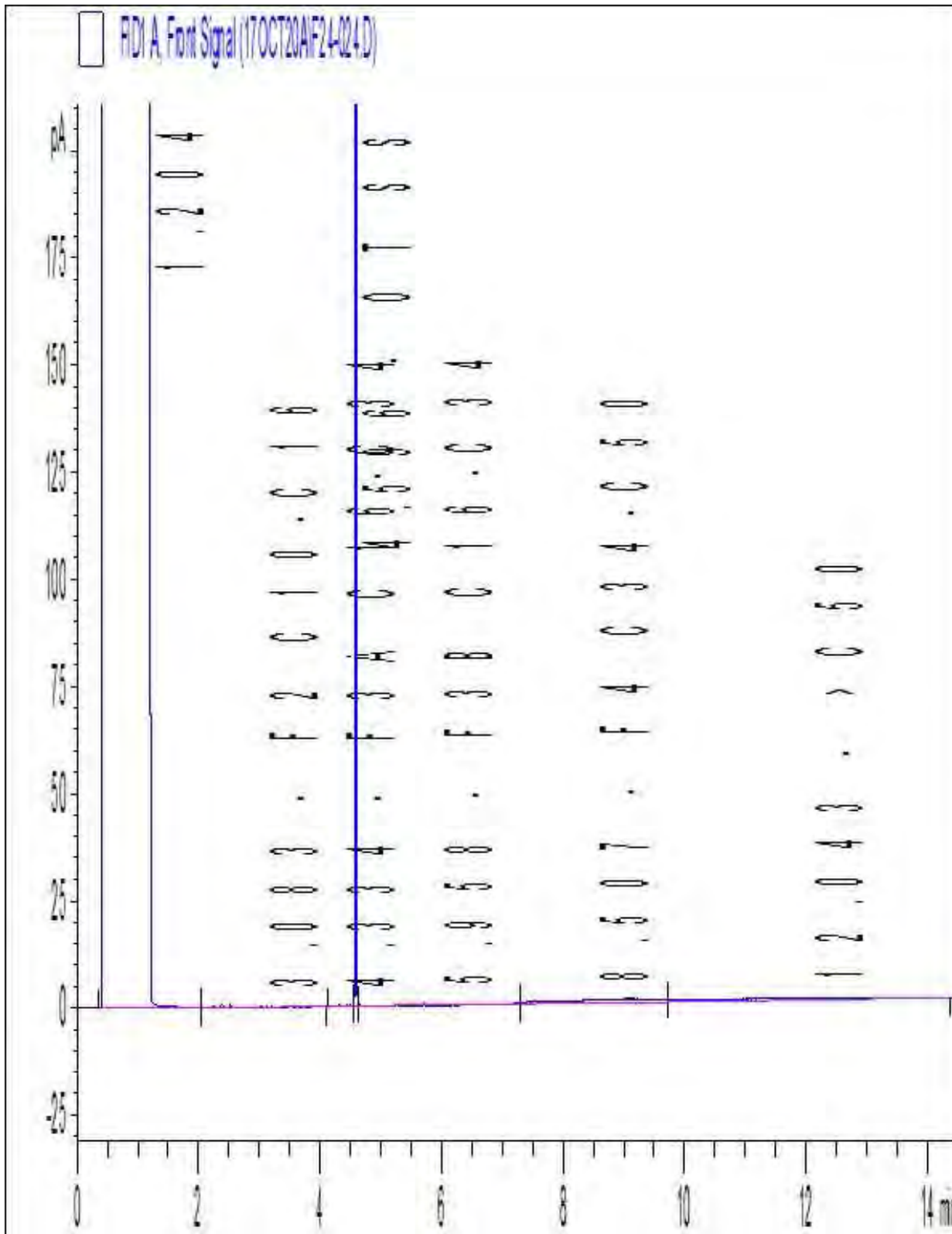
** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-CDC.PDF.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

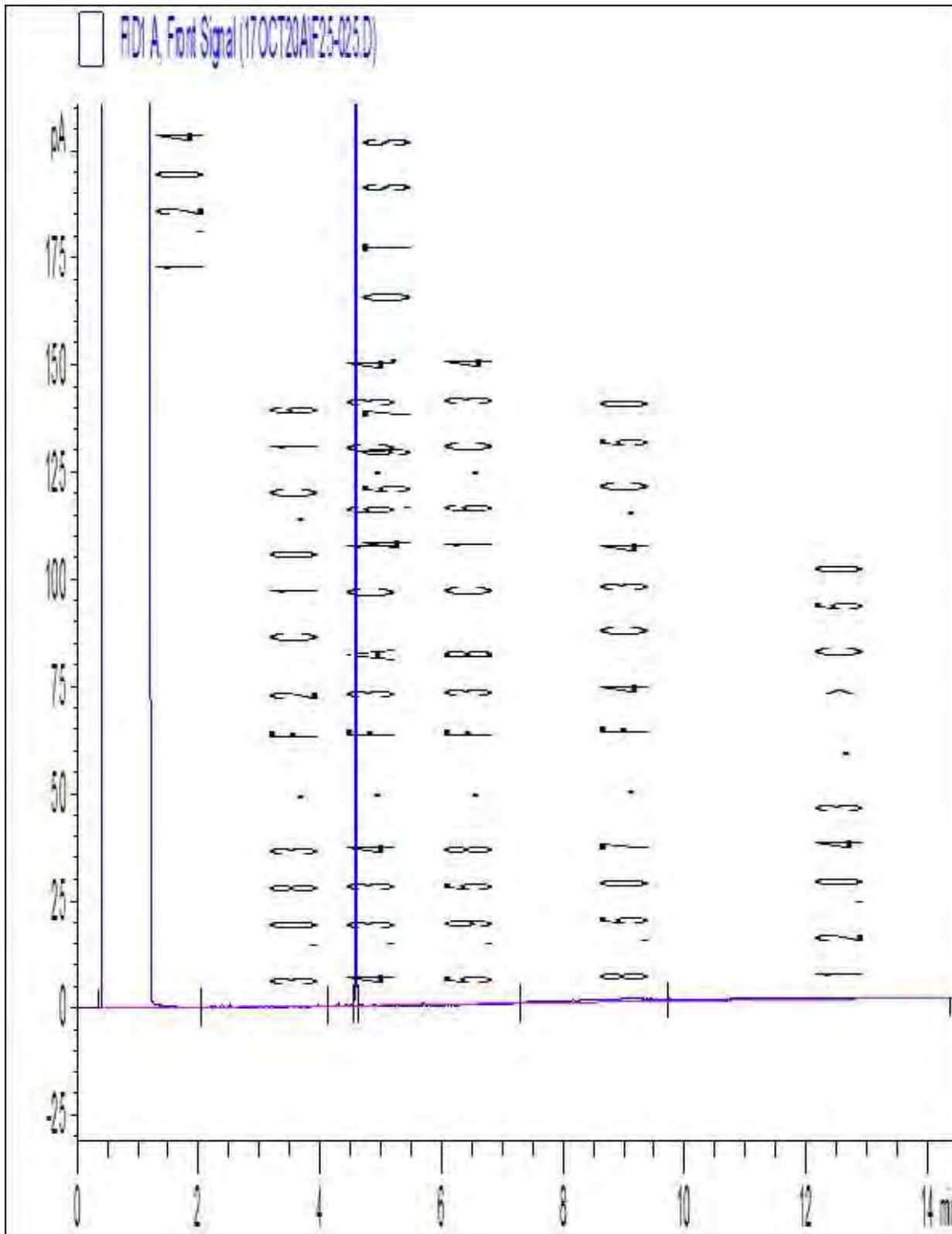
Refer to ACTR with 1389749

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



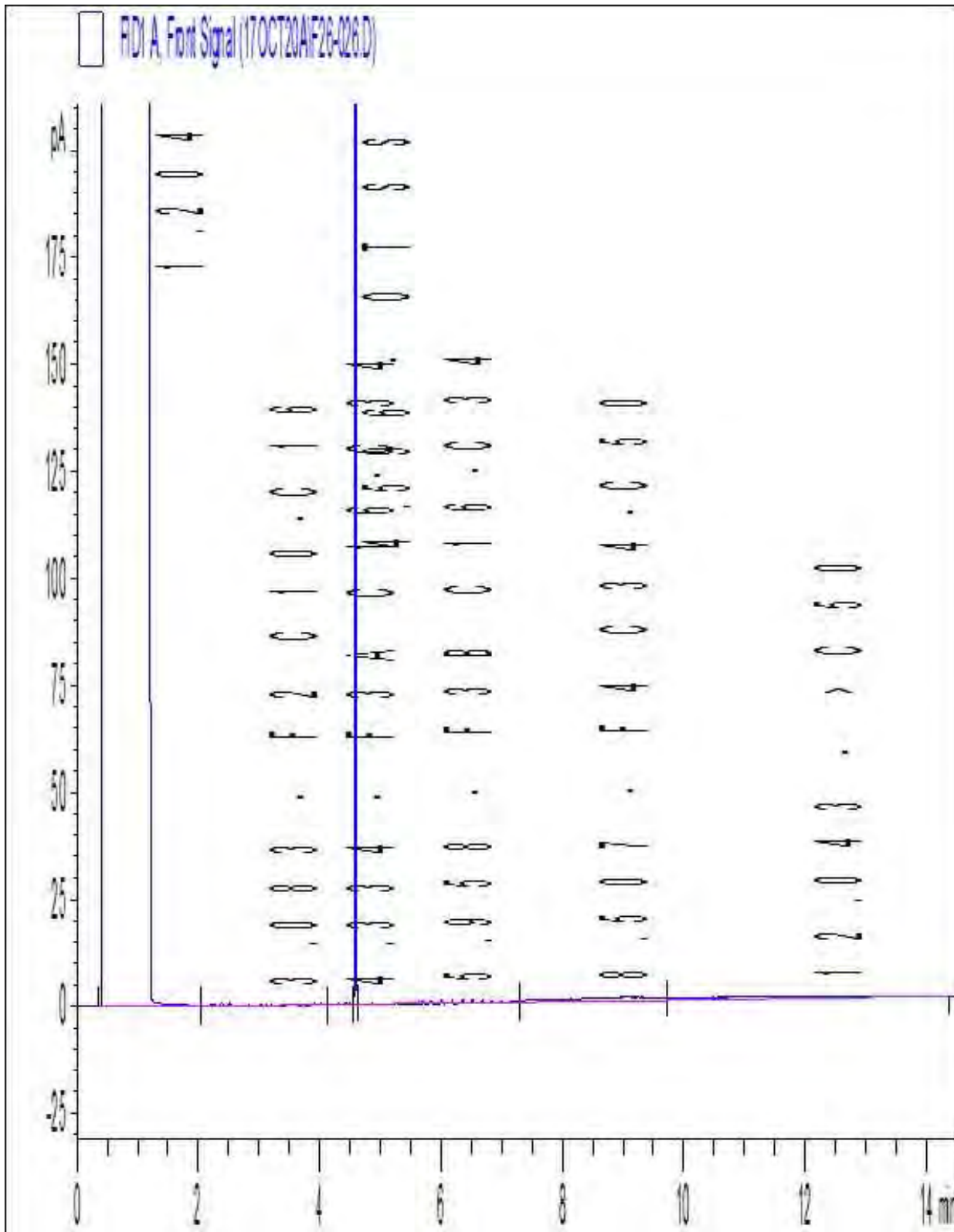
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



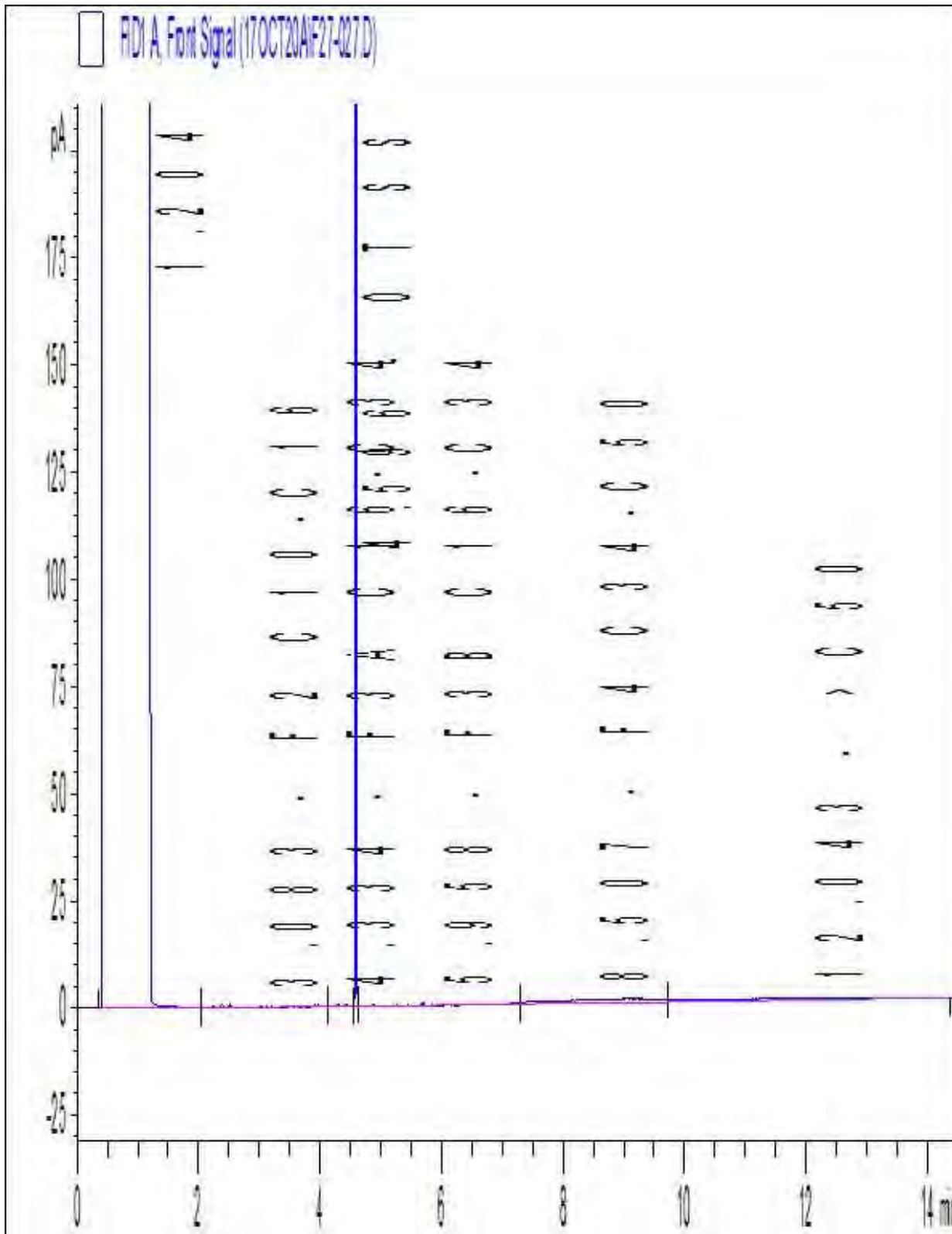
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 160900764
 Site Location: CLARINGTON TS - MONITORING WEL
 Your C.O.C. #: 63342-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/30
 Report #: R4812097
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0947

Received: 2017/10/17, 20:44

Sample Matrix: Water
 # Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	13	N/A	2017/10/25	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	1	N/A	2017/10/30	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	7	2017/10/23	2017/10/24	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	8	2017/10/27	2017/10/30	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	6	N/A	2017/10/25		SM 22 2310
Alkalinity	6	N/A	2017/10/20	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	6	N/A	2017/10/21	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	7	N/A	2017/10/23		EPA 8260C m
Chloride by Automated Colourimetry	6	N/A	2017/10/20	CAM SOP-00463	EPA 325.2 m
Conductivity	6	N/A	2017/10/20	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	6	N/A	2017/10/20	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	6	N/A	2017/10/20	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	6	N/A	2017/10/20	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	6	2017/10/22	2017/10/23	CAM SOP-00316	CCME PHC-CWS m
Fluoride	6	2017/10/19	2017/10/20	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2017/10/21	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	3	2017/10/20	2017/10/23	CAM SOP-00453	EPA 7470A m
Mercury	3	2017/10/21	2017/10/24	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	1	N/A	2017/10/20	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	5	N/A	2017/10/21	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	6	N/A	2017/10/21		
Anion and Cation Sum	6	N/A	2017/10/21		
Total Ammonia-N	6	N/A	2017/10/25	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	3	N/A	2017/10/21	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (4)	3	N/A	2017/10/24	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	6	2017/10/21	2017/10/21	CAM SOP-00309	EPA 8082A m
pH	6	N/A	2017/10/20	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	6	N/A	2017/10/20	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	6	N/A	2017/10/21		

Your Project #: 160900764
 Site Location: CLARINGTON TS - MONITORING WEL
 Your C.O.C. #: 63342-01-01

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 Clarington
 ON
 Canada

Report Date: 2017/10/30
 Report #: R4812097
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0947

Received: 2017/10/17, 20:44

Sample Matrix: Water
 # Samples Received: 15

Analyses	Date		Laboratory Method	Reference
	Quantity	Date Extracted		
Sat. pH and Langelier Index (@ 4C)	6	N/A	2017/10/21	
Sulphate by Automated Colourimetry	6	N/A	2017/10/20 CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	6	N/A	2017/10/21	
Total Dissolved Solids	4	2017/10/19	2017/10/20 CAM SOP-00428	SM 22 2540C m
Total Dissolved Solids	2	2017/10/20	2017/10/23 CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (5)	6	N/A	2017/10/22 CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	4	2017/10/19	2017/10/20 CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	2	2017/10/20	2017/10/20 CAM SOP-00428	SM 22 2540D m
Turbidity	6	N/A	2017/10/20 CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	6	N/A	2017/10/21 CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	1	N/A	2017/10/22 CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 63342-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/30
Report #: R4812097
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0947

Received: 2017/10/17, 20:44

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (5) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY621	FIY623		FIY625		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47		2017/10/17 10:47		
COC Number		63342-01-01	63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	QC Batch	WG-160900764- 20171017-CF7	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L	8.18	4.72	5220480	4.73	N/A	5220480
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220	180	5220319	180	1.0	5220319
Calculated TDS	mg/L	460	250	5220337	250	1.0	5220337
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.5	2.2	5220319	2.3	1.0	5220319
Cation Sum	me/L	7.15	4.42	5220480	4.40	N/A	5220480
Hardness (CaCO3)	mg/L	340	190	5220487	190	1.0	5220487
Ion Balance (% Difference)	%	6.74	3.38	5220479	3.67	N/A	5220479
Langelier Index (@ 20C)	N/A	0.641	0.377	5220339	0.410		5220339
Langelier Index (@ 4C)	N/A	0.393	0.127	5220340	0.160		5220340
Saturation pH (@ 20C)	N/A	7.21	7.73	5220339	7.71		5220339
Saturation pH (@ 4C)	N/A	7.46	7.98	5220340	7.96		5220340

Inorganics

Total Ammonia-N	mg/L	<0.050	0.053	5225889	<0.050	0.050	5225889
Conductivity	umho/cm	730	420	5221976	420	1.0	5221976
Dissolved Organic Carbon	mg/L	0.91	0.62	5222461	0.63	0.20	5223087
Orthophosphate (P)	mg/L	<0.010	<0.010	5222001	<0.010	0.010	5222001
pH	pH	7.85	8.10	5221975	8.12		5221975
Dissolved Sulphate (SO4)	mg/L	100	27	5221996	27	1.0	5221996
Alkalinity (Total as CaCO3)	mg/L	220	190	5221974	190	1.0	5221974
Dissolved Chloride (Cl)	mg/L	24	15	5221994	16	1.0	5221994
Nitrite (N)	mg/L	0.067	<0.010	5222702	<0.010	0.010	5221878
Nitrate (N)	mg/L	13.4	<0.10	5222702	<0.10	0.10	5221878
Nitrate + Nitrite (N)	mg/L	13.5	<0.10	5222702	<0.10	0.10	5221878

Metals

Dissolved Aluminum (Al)	mg/L	<0.0050	<0.0050	5221033	<0.0050	0.0050	5221033
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	5221033	<0.00050	0.00050	5221033
Dissolved Arsenic (As)	mg/L	<0.0010	0.0013	5221033	0.0015	0.0010	5221033
Dissolved Barium (Ba)	mg/L	0.070	0.11	5221033	0.11	0.0020	5221033
Dissolved Beryllium (Be)	mg/L	<0.00050	<0.00050	5221033	<0.00050	0.00050	5221033
Dissolved Boron (B)	mg/L	0.016	0.031	5221033	0.031	0.010	5221033

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY621	FIY623		FIY625		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47		2017/10/17 10:47		
COC Number		63342-01-01	63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	QC Batch	WG-160900764- 20171017-CF7	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	<0.00010	5221033	<0.00010	0.00010	5221033
Dissolved Calcium (Ca)	mg/L	82	25	5221033	25	0.20	5221033
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	5221033	<0.0050	0.0050	5221033
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	5221033	<0.00050	0.00050	5221033
Dissolved Copper (Cu)	mg/L	<0.0010	<0.0010	5221033	<0.0010	0.0010	5221033
Dissolved Iron (Fe)	mg/L	<0.10	0.17	5221033	0.16	0.10	5221033
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	5221033	<0.00050	0.00050	5221033
Dissolved Magnesium (Mg)	mg/L	33	32	5221033	31	0.050	5221033
Dissolved Manganese (Mn)	mg/L	0.0038	0.0047	5221033	0.0047	0.0020	5221033
Dissolved Molybdenum (Mo)	mg/L	0.0037	0.0019	5221033	0.0018	0.00050	5221033
Dissolved Nickel (Ni)	mg/L	0.0011	<0.0010	5221033	<0.0010	0.0010	5221033
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	5221033	<0.10	0.10	5221033
Dissolved Potassium (K)	mg/L	3.9	2.4	5221033	2.4	0.20	5221033
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	5221033	<0.0020	0.0020	5221033
Dissolved Silicon (Si)	mg/L	7.4	11	5221033	11	0.050	5221033
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	5221033	<0.00010	0.00010	5221033
Dissolved Sodium (Na)	mg/L	5.9	11	5221033	11	0.10	5221033
Dissolved Strontium (Sr)	mg/L	0.34	0.61	5221033	0.59	0.0010	5221033
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	5221033	<0.000050	0.000050	5221033
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	5221033	<0.0050	0.0050	5221033
Dissolved Uranium (U)	mg/L	0.0029	<0.00010	5221033	<0.00010	0.00010	5221033
Dissolved Vanadium (V)	mg/L	<0.00050	<0.00050	5221033	<0.00050	0.00050	5221033
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	5221033	<0.0050	0.0050	5221033
Dissolved Zirconium (Zr)	mg/L	<0.0010	<0.0010	5221033	<0.0010	0.0010	5221033
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY627		FIY629		
Sampling Date		2017/10/17 13:45		2017/10/17 16:42		
COC Number		63342-01-01		63342-01-01		
	UNITS	WG-160900764-20171017-RD08	RDL	WG-160900764-20171017-RD09	RDL	QC Batch

Calculated Parameters						
Anion Sum	me/L	5.60	N/A	14.7	N/A	5220480
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	1.0	160	1.0	5220319
Calculated TDS	mg/L	310	1.0	950	1.0	5220337
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	1.0	1.5	1.0	5220319
Cation Sum	me/L	5.41	N/A	15.0	N/A	5220480
Hardness (CaCO3)	mg/L	250	1.0	370	1.0	5220487
Ion Balance (% Difference)	%	1.70	N/A	0.920	N/A	5220479
Langelier Index (@ 20C)	N/A	0.545		0.623		5220339
Langelier Index (@ 4C)	N/A	0.296		0.377		5220340
Saturation pH (@ 20C)	N/A	7.51		7.40		5220339
Saturation pH (@ 4C)	N/A	7.76		7.65		5220340
Inorganics						
Total Ammonia-N	mg/L	<0.050	0.050	<0.050	0.050	5225889
Conductivity	umho/cm	510	1.0	1400	1.0	5221976
Dissolved Organic Carbon	mg/L	0.77	0.20	1.3	0.20	5222461
Orthophosphate (P)	mg/L	<0.010	0.010	<0.010	0.010	5222001
pH	pH	8.06		8.02		5221975
Dissolved Sulphate (SO4)	mg/L	48	1.0	530	5.0	5221996
Alkalinity (Total as CaCO3)	mg/L	190	1.0	160	1.0	5221974
Dissolved Chloride (Cl)	mg/L	29	1.0	20	1.0	5221994
Nitrite (N)	mg/L	0.019	0.010	<0.010	0.010	5221878
Nitrate (N)	mg/L	0.51	0.10	0.19	0.10	5221878
Nitrate + Nitrite (N)	mg/L	0.53	0.10	0.19	0.10	5221878
Metals						
Dissolved Aluminum (Al)	mg/L	0.013	0.0050	0.011	0.0050	5221033
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	<0.00050	0.00050	5221033
Dissolved Arsenic (As)	mg/L	0.0014	0.0010	<0.0010	0.0010	5221033
Dissolved Barium (Ba)	mg/L	0.11	0.0020	0.019	0.0020	5221033
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	<0.00050	0.00050	5221033
Dissolved Boron (B)	mg/L	0.018	0.010	0.28	0.010	5221033
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
N/A = Not Applicable						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY627		FIY629		
Sampling Date		2017/10/17 13:45		2017/10/17 16:42		
COC Number		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD08	RDL	WG-160900764- 20171017-RD09	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	<0.00010	0.00010	5221033
Dissolved Calcium (Ca)	mg/L	44	0.20	89	0.20	5221033
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	<0.0050	0.0050	5221033
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	<0.00050	0.00050	5221033
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	<0.0010	0.0010	5221033
Dissolved Iron (Fe)	mg/L	<0.10	0.10	<0.10	0.10	5221033
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	<0.00050	0.00050	5221033
Dissolved Magnesium (Mg)	mg/L	33	0.050	36	0.050	5221033
Dissolved Manganese (Mn)	mg/L	0.014	0.0020	0.0068	0.0020	5221033
Dissolved Molybdenum (Mo)	mg/L	0.0020	0.00050	0.085	0.00050	5221033
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	0.0010	0.0010	5221033
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	<0.10	0.10	5221033
Dissolved Potassium (K)	mg/L	2.8	0.20	5.0	0.20	5221033
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	<0.0020	0.0020	5221033
Dissolved Silicon (Si)	mg/L	11	0.050	3.9	0.050	5221033
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	<0.00010	0.00010	5221033
Dissolved Sodium (Na)	mg/L	9.7	0.10	170	0.10	5221033
Dissolved Strontium (Sr)	mg/L	0.44	0.0010	1.6	0.0010	5221033
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	<0.000050	0.000050	5221033
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	<0.0050	0.0050	5221033
Dissolved Uranium (U)	mg/L	0.00089	0.00010	0.0048	0.00010	5221033
Dissolved Vanadium (V)	mg/L	<0.00050	0.00050	<0.00050	0.00050	5221033
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	<0.0050	0.0050	5221033
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	<0.0010	0.0010	5221033
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY631		
Sampling Date		2017/10/17 17:10		
COC Number		63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	RDL	QC Batch
Calculated Parameters				
Anion Sum	me/L	2.37	N/A	5220480
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	88	1.0	5220319
Calculated TDS	mg/L	130	1.0	5220337
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.9	1.0	5220319
Cation Sum	me/L	2.25	N/A	5220480
Hardness (CaCO3)	mg/L	16	1.0	5220487
Ion Balance (% Difference)	%	NC	N/A	5220479
Langelier Index (@ 20C)	N/A	-0.216		5220339
Langelier Index (@ 4C)	N/A	-0.467		5220340
Saturation pH (@ 20C)	N/A	8.77		5220339
Saturation pH (@ 4C)	N/A	9.02		5220340
Inorganics				
Total Ammonia-N	mg/L	<0.050	0.050	5225889
Conductivity	umho/cm	220	1.0	5221976
Dissolved Organic Carbon	mg/L	0.79	0.20	5222461
Orthophosphate (P)	mg/L	0.012	0.010	5222001
pH	pH	8.55		5221975
Dissolved Sulphate (SO4)	mg/L	20	1.0	5221996
Alkalinity (Total as CaCO3)	mg/L	91	1.0	5221974
Dissolved Chloride (Cl)	mg/L	2.3	1.0	5221994
Nitrite (N)	mg/L	<0.010	0.010	5222702
Nitrate (N)	mg/L	<0.10	0.10	5222702
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	5222702
Metals				
Dissolved Aluminum (Al)	mg/L	0.081	0.0050	5221033
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	5221033
Dissolved Arsenic (As)	mg/L	0.0028	0.0010	5221033
Dissolved Barium (Ba)	mg/L	0.0074	0.0020	5221033
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	5221033
Dissolved Boron (B)	mg/L	0.23	0.010	5221033
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable				

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FIY631		
Sampling Date		2017/10/17 17:10		
COC Number		63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	5221033
Dissolved Calcium (Ca)	mg/L	4.3	0.20	5221033
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	5221033
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	5221033
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	5221033
Dissolved Iron (Fe)	mg/L	<0.10	0.10	5221033
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	5221033
Dissolved Magnesium (Mg)	mg/L	1.4	0.050	5221033
Dissolved Manganese (Mn)	mg/L	<0.0020	0.0020	5221033
Dissolved Molybdenum (Mo)	mg/L	0.0076	0.00050	5221033
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	5221033
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	5221033
Dissolved Potassium (K)	mg/L	0.61	0.20	5221033
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	5221033
Dissolved Silicon (Si)	mg/L	3.1	0.050	5221033
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	5221033
Dissolved Sodium (Na)	mg/L	44	0.10	5221033
Dissolved Strontium (Sr)	mg/L	0.088	0.0010	5221033
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	5221033
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	5221033
Dissolved Uranium (U)	mg/L	0.00071	0.00010	5221033
Dissolved Vanadium (V)	mg/L	0.0012	0.00050	5221033
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	5221033
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	5221033
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIY621	FIY623	FIY623	FIY625		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47	2017/10/17 10:47	2017/10/17 10:47		
COC Number		63342-01-01	63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	WG-160900764- 20171017-RD06 Lab-Dup	WG-160900764- 20171017-CF7	RDL	QC Batch

Inorganics							
Acidity	mg/L	9.4	<5.0		<5.0	5.0	5229688
Total Dissolved Solids	mg/L	520	225		205	50	5221289
Fluoride (F-)	mg/L	0.15	0.28		0.27	0.10	5221971
Total Organic Carbon (TOC)	mg/L	1.2	0.66		0.65	0.20	5224995
Total Suspended Solids	mg/L	55	<10		<10	10	5221284
Turbidity	NTU	2.5	2.0	2.1	1.9	0.1	5221810
WAD Cyanide (Free)	ug/L	<1	<1		<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIY627	FIY627	FIY629		
Sampling Date		2017/10/17 13:45	2017/10/17 13:45	2017/10/17 16:42		
COC Number		63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-RD08	WG-160900764- 20171017-RD08 Lab-Dup	WG-160900764- 20171017-RD09	RDL	QC Batch

Inorganics							
Acidity	mg/L	<5.0			<5.0	5.0	5229688
Total Dissolved Solids	mg/L	310			995	50	5222628
Fluoride (F-)	mg/L	0.20			0.38	0.10	5221971
Total Organic Carbon (TOC)	mg/L	0.89			1.5	0.20	5224995
Total Suspended Solids	mg/L	43	43		16	10	5222616
Turbidity	NTU	6.3			3.7	0.1	5221810
WAD Cyanide (Free)	ug/L	<1			<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIY631		
Sampling Date		2017/10/17 17:10		
COC Number		63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	RDL	QC Batch
Inorganics				
Acidity	mg/L	<5.0	5.0	5229688
Total Dissolved Solids	mg/L	130	50	5221289
Fluoride (F-)	mg/L	1.5	0.10	5221971
Total Organic Carbon (TOC)	mg/L	0.92	0.20	5224995
Total Suspended Solids	mg/L	<10	10	5221284
Turbidity	NTU	1.9	0.1	5221810
WAD Cyanide (Free)	ug/L	<1	1	5221187
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FIY621		FIY623	FIY625		
Sampling Date		2017/10/17 10:26		2017/10/17 10:47	2017/10/17 10:47		
COC Number		63342-01-01		63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	QC Batch	WG-160900764- 20171017-RD06	WG-160900764- 20171017-CF7	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	5221231	<0.50	<0.50	0.50	5221231
Mercury (Hg)	ug/L	<0.1	5224733	<0.1	<0.1	0.1	5223870
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		FIY627	FIY627		FIY629		
Sampling Date		2017/10/17 13:45	2017/10/17 13:45		2017/10/17 16:42		
COC Number		63342-01-01	63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD08	WG-160900764- 20171017-RD08 Lab-Dup	QC Batch	WG-160900764- 20171017-RD09	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	5221231	<0.50	0.50	5221231
Mercury (Hg)	ug/L	<0.1		5223870	<0.1	0.1	5224733
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FIY631		
Sampling Date		2017/10/17 17:10		
COC Number		63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	RDL	QC Batch

Metals				
Chromium (VI)	ug/L	<0.50	0.50	5221231
Mercury (Hg)	ug/L	<0.1	0.1	5224733
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 PCBs (WATER)

Maxxam ID		FIY621	FIY623	FIY625	FIY627		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47	2017/10/17 10:47	2017/10/17 13:45		
COC Number		63342-01-01	63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	WG-160900764- 20171017-CF7	WG-160900764- 20171017-RD08	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278

Surrogate Recovery (%)							
Decachlorobiphenyl	%	94	92	86	87		5224278

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FIY629	FIY631		
Sampling Date		2017/10/17 16:42	2017/10/17 17:10		
COC Number		63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-RD09	WG-160900764- 20171017-CF10	RDL	QC Batch

PCBs					
Aroclor 1242	ug/L	<0.05	<0.05	0.05	5224278
Aroclor 1248	ug/L	<0.05	<0.05	0.05	5224278
Aroclor 1254	ug/L	<0.05	<0.05	0.05	5224278
Aroclor 1260	ug/L	<0.05	<0.05	0.05	5224278
Total PCB	ug/L	<0.05	<0.05	0.05	5224278

Surrogate Recovery (%)					
Decachlorobiphenyl	%	96	89		5224278

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY621	FIY623	FIY623		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47	2017/10/17 10:47		
COC Number		63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	WG-160900764- 20171017-RD06 Lab-Dup	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	5220377
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222323
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222323
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222323
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222323
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222323
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222323
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222323
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222323
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222323
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222323
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222323
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222323
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY621	FIY623	FIY623		
Sampling Date		2017/10/17 10:26	2017/10/17 10:47	2017/10/17 10:47		
COC Number		63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	WG-160900764- 20171017-RD06	WG-160900764- 20171017-RD06 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	522323
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	522323
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	522323
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	522323
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	522323
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	522323
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	522323
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	522323
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	522323
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	522323
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	522323
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	522323
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	522323
F1 (C6-C10)	ug/L	<25	<25	<25	25	522323
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	522323
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5225090
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5225090
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5225090
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5225090
Surrogate Recovery (%)						
o-Terphenyl	%	97	98	96		5225090
4-Bromofluorobenzene	%	93	91	93		522323
D4-1,2-Dichloroethane	%	110	112	111		522323
D8-Toluene	%	95	95	95		522323
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY625	FIY627	FIY629		
Sampling Date		2017/10/17 10:47	2017/10/17 13:45	2017/10/17 16:42		
COC Number		63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF7	WG-160900764- 20171017-RD08	WG-160900764- 20171017-RD09	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5220377
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222323
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222323
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222323
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222323
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222323
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222323
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222323
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222323
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222323
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222323
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222323
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222323

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY625	FIY627	FIY629		
Sampling Date		2017/10/17 10:47	2017/10/17 13:45	2017/10/17 16:42		
COC Number		63342-01-01	63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF7	WG-160900764- 20171017-RD08	WG-160900764- 20171017-RD09	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222323
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222323
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222323
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222323
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222323
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222323
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222323
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5225090
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5225090
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5225090
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5225090
Surrogate Recovery (%)						
o-Terphenyl	%	96	96	98		5225090
4-Bromofluorobenzene	%	90	92	89		5222323
D4-1,2-Dichloroethane	%	109	108	110		5222323
D8-Toluene	%	96	96	96		5222323
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY631	FIY633		
Sampling Date		2017/10/17 17:10	2017/10/17 16:50		
COC Number		63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	FIELD BLANK	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	5220377
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	5222323
Benzene	ug/L	<0.20	<0.20	0.20	5222323
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	5222323
Bromoform	ug/L	<1.0	<1.0	1.0	5222323
Bromomethane	ug/L	<0.50	<0.50	0.50	5222323
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	5222323
Chlorobenzene	ug/L	<0.20	<0.20	0.20	5222323
Chloroform	ug/L	<0.20	<0.20	0.20	5222323
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	5222323
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222323
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222323
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222323
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	5222323
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	5222323
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	5222323
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	5222323
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5222323
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5222323
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	5222323
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	5222323
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	5222323
Ethylbenzene	ug/L	<0.20	<0.20	0.20	5222323
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	5222323
Hexane	ug/L	<1.0	<1.0	1.0	5222323
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	5222323
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	5222323
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	5222323
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	5222323
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIY631	FIY633		
Sampling Date		2017/10/17 17:10	2017/10/17 16:50		
COC Number		63342-01-01	63342-01-01		
	UNITS	WG-160900764- 20171017-CF10	FIELD BLANK	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	0.50	5222323
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5222323
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5222323
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	5222323
Toluene	ug/L	<0.20	<0.20	0.20	5222323
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	5222323
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	5222323
Trichloroethylene	ug/L	<0.20	<0.20	0.20	5222323
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	5222323
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	5222323
p+m-Xylene	ug/L	<0.20	<0.20	0.20	5222323
o-Xylene	ug/L	<0.20	<0.20	0.20	5222323
Total Xylenes	ug/L	<0.20	<0.20	0.20	5222323
F1 (C6-C10)	ug/L	<25	<25	25	5222323
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	5222323
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100		100	5225090
F3 (C16-C34 Hydrocarbons)	ug/L	<200		200	5225090
F4 (C34-C50 Hydrocarbons)	ug/L	<200		200	5225090
Reached Baseline at C50	ug/L	Yes			5225090
Surrogate Recovery (%)					
o-Terphenyl	%	95			5225090
4-Bromofluorobenzene	%	91	92		5222323
D4-1,2-Dichloroethane	%	110	109		5222323
D8-Toluene	%	96	96		5222323
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY621		FIY622		FIY623		
Sampling Date		2017/10/17 10:26		2017/10/17 10:26		2017/10/17 10:47		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	QC Batch	WG-160900764- 20171017-CF05A	QC Batch	WG-160900764- 20171017-RD06	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
1-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
2,4,5-Trichlorophenol	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
2,4,6-Trichlorophenol	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
2,4-Dichlorophenol	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
2,4-Dimethylphenol	ug/L	<0.5	5225598	<0.5	5235580	<0.5	0.5	5225598
2,4-Dinitrophenol	ug/L	<2	5225598	<2	5235580	<2	2	5225598
2,4-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	5235580	<0.3	0.3	5225598
2,6-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	5235580	<0.3	0.3	5225598
2-Chlorophenol	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
2-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
3,3'-Dichlorobenzidine	ug/L	<0.5	5225598	<0.5	5235580	<0.5	0.5	5225598
Acenaphthene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
Acenaphthylene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
Anthracene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Benzo(a)anthracene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Benzo(a)pyrene	ug/L	<0.01	5225598	<0.01	5235580	<0.01	0.01	5225598
Benzo(b/j)fluoranthene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Benzo(g,h,i)perylene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Benzo(k)fluoranthene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Biphenyl	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Bis(2-chloroethyl)ether	ug/L	<0.5	5225598	<0.5	5235580	<0.5	0.5	5225598
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5225598	<0.5	5235580	<0.5	0.5	5225598
Bis(2-ethylhexyl)phthalate	ug/L	<1	5225598	<1	5235580	<1	1	5225598
Chrysene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Dibenz(a,h)anthracene	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Diethyl phthalate	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Dimethyl phthalate	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Fluoranthene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
Fluorene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY621		FIY622		FIY623		
Sampling Date		2017/10/17 10:26		2017/10/17 10:26		2017/10/17 10:47		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-CF05	QC Batch	WG-160900764- 20171017-CF05A	QC Batch	WG-160900764- 20171017-RD06	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Naphthalene	ug/L	<0.2	5225598	<0.2	5235580	<0.2	0.2	5225598
p-Chloroaniline	ug/L	<1	5225598	<1	5235580	<1	1	5225598
Pentachlorophenol	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Phenanthrene	ug/L	<0.1	5225598	<0.1	5235580	<0.1	0.1	5225598
Phenol	ug/L	<0.5	5225598	<0.5	5235580	<0.5	0.5	5225598
Pyrene	ug/L	<0.05	5225598	<0.05	5235580	<0.05	0.05	5225598
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5220375	<0.28	5220375	<0.28	0.28	5220375
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	72	5225598	36 (1)	5235580	64		5225598
2-Fluorobiphenyl	%	87	5225598	65	5235580	80		5225598
D14-Terphenyl (FS)	%	100	5225598	8.1 (1)	5235580	95		5225598
D5-Nitrobenzene	%	81	5225598	71	5235580	75		5225598
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY624		FIY625		FIY626		
Sampling Date		2017/10/17 10:47		2017/10/17 10:47		2017/10/17 10:47		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD06A	QC Batch	WG-160900764- 20171017-CF7	QC Batch	WG-160900764- 20171017-CF7A	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
1-Methylnaphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4,5-Trichlorophenol	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4,6-Trichlorophenol	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4-Dichlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
2,4-Dimethylphenol	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
2,4-Dinitrophenol	ug/L	<2	5235580	<2	5225598	<2	2	5235580
2,4-Dinitrotoluene	ug/L	<0.3	5235580	<0.3	5225598	<0.3	0.3	5235580
2,6-Dinitrotoluene	ug/L	<0.3	5235580	<0.3	5225598	<0.3	0.3	5235580
2-Chlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
2-Methylnaphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
3,3'-Dichlorobenzidine	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Acenaphthene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Acenaphthylene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Anthracene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(a)anthracene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(a)pyrene	ug/L	<0.01	5235580	<0.01	5225598	<0.01	0.01	5235580
Benzo(b/j)fluoranthene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(g,h,i)perylene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(k)fluoranthene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Biphenyl	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Bis(2-chloroethyl)ether	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Bis(2-ethylhexyl)phthalate	ug/L	<1	5235580	<1	5225598	<1	1	5235580
Chrysene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Dibenz(a,h)anthracene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Diethyl phthalate	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Dimethyl phthalate	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Fluoranthene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Fluorene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY624		FIY625		FIY626		
Sampling Date		2017/10/17 10:47		2017/10/17 10:47		2017/10/17 10:47		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD06A	QC Batch	WG-160900764- 20171017-CF7	QC Batch	WG-160900764- 20171017-CF7A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Naphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
p-Chloroaniline	ug/L	<1	5235580	<1	5225598	<1	1	5235580
Pentachlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Phenanthrene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Phenol	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Pyrene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5220375	<0.28	5220375	<0.28	0.28	5220375
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	51	5235580	69	5225598	35 (1)		5235580
2-Fluorobiphenyl	%	62	5235580	91	5225598	62		5235580
D14-Terphenyl (FS)	%	10 (1)	5235580	102	5225598	8.7 (1)		5235580
D5-Nitrobenzene	%	65	5235580	83	5225598	62		5235580
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY627		FIY628			FIY629		
Sampling Date		2017/10/17 13:45		2017/10/17 13:45			2017/10/17 16:42		
COC Number		63342-01-01		63342-01-01			63342-01-01		
	UNITS	WG-160900764- 20171017-RD08	QC Batch	WG-160900764- 20171017-RD08A	RDL	QC Batch	WG-160900764- 20171017-RD09	RDL	QC Batch

Semivolatile Organics									
1,2,4-Trichlorobenzene	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
1-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
2,4,5-Trichlorophenol	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
2,4,6-Trichlorophenol	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
2,4-Dichlorophenol	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
2,4-Dimethylphenol	ug/L	<0.5	5225598	<0.5	0.5	5235580	<0.5	0.5	5225598
2,4-Dinitrophenol	ug/L	<2	5225598	<2	2	5235580	<2	2	5225598
2,4-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	0.3	5235580	<0.3	0.3	5225598
2,6-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	0.3	5235580	<0.3	0.3	5225598
2-Chlorophenol	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
2-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
3,3'-Dichlorobenzidine	ug/L	<0.5	5225598	<0.5	0.5	5235580	<0.5	0.5	5225598
Acenaphthene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
Acenaphthylene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
Anthracene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.05	0.05	5225598
Benzo(a)anthracene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.05	0.05	5225598
Benzo(a)pyrene	ug/L	<0.01	5225598	<0.01	0.01	5235580	0.03	0.01	5225598
Benzo(b/j)fluoranthene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.05	0.05	5225598
Benzo(g,h,i)perylene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.1 (1)	0.1	5225598
Benzo(k)fluoranthene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.05	0.05	5225598
Biphenyl	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Bis(2-chloroethyl)ether	ug/L	<0.5	5225598	<0.5	0.5	5235580	<0.5	0.5	5225598
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5225598	<0.5	0.5	5235580	<0.5	0.5	5225598
Bis(2-ethylhexyl)phthalate	ug/L	<1	5225598	<1	1	5235580	4	1	5225598
Chrysene	ug/L	<0.05	5225598	<0.05	0.05	5235580	<0.05	0.05	5225598
Dibenz(a,h)anthracene	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Diethyl phthalate	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Dimethyl phthalate	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Fluoranthene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
Fluorene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Detection Limit was raised due to matrix interferences.

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY627		FIY628			FIY629		
Sampling Date		2017/10/17 13:45		2017/10/17 13:45			2017/10/17 16:42		
COC Number		63342-01-01		63342-01-01			63342-01-01		
	UNITS	WG-160900764- 20171017-RD08	QC Batch	WG-160900764- 20171017-RD08A	RDL	QC Batch	WG-160900764- 20171017-RD09	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Naphthalene	ug/L	<0.2	5225598	<0.2	0.2	5235580	<0.2	0.2	5225598
p-Chloroaniline	ug/L	<1	5225598	<1	1	5235580	<1	1	5225598
Pentachlorophenol	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Phenanthrene	ug/L	<0.1	5225598	<0.1	0.1	5235580	<0.1	0.1	5225598
Phenol	ug/L	<0.5	5225598	<0.5	0.5	5235580	<0.5	0.5	5225598
Pyrene	ug/L	<0.05	5225598	<0.05	0.05	5235580	0.07	0.05	5225598
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5220375	<0.28	0.28	5220375	<0.28	0.28	5220375
Surrogate Recovery (%)									
2,4,6-Tribromophenol	%	50	5225598	47 (1)		5235580	12 (1)		5225598
2-Fluorobiphenyl	%	88	5225598	64		5235580	92		5225598
D14-Terphenyl (FS)	%	99	5225598	55		5235580	99		5225598
D5-Nitrobenzene	%	79	5225598	69		5235580	80		5225598
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.									

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY630		FIY631		FIY632		
Sampling Date		2017/10/17 16:42		2017/10/17 17:10		2017/10/17 17:10		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD09A	QC Batch	WG-160900764- 20171017-CF10	QC Batch	WG-160900764- 20171017-CF10A	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
1-Methylnaphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4,5-Trichlorophenol	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4,6-Trichlorophenol	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
2,4-Dichlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
2,4-Dimethylphenol	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
2,4-Dinitrophenol	ug/L	<2	5235580	<2	5225598	<2	2	5235580
2,4-Dinitrotoluene	ug/L	<0.3	5235580	<0.3	5225598	<0.3	0.3	5235580
2,6-Dinitrotoluene	ug/L	<0.3	5235580	<0.3	5225598	<0.3	0.3	5235580
2-Chlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
2-Methylnaphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
3,3'-Dichlorobenzidine	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Acenaphthene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Acenaphthylene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Anthracene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(a)anthracene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(a)pyrene	ug/L	<0.01	5235580	<0.01	5225598	<0.01	0.01	5235580
Benzo(b,j)fluoranthene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(g,h,i)perylene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Benzo(k)fluoranthene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Biphenyl	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Bis(2-chloroethyl)ether	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Bis(2-ethylhexyl)phthalate	ug/L	<1	5235580	<1	5225598	<1	1	5235580
Chrysene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Dibenz(a,h)anthracene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Diethyl phthalate	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Dimethyl phthalate	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Fluoranthene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
Fluorene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY630		FIY631		FIY632		
Sampling Date		2017/10/17 16:42		2017/10/17 17:10		2017/10/17 17:10		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	WG-160900764- 20171017-RD09A	QC Batch	WG-160900764- 20171017-CF10	QC Batch	WG-160900764- 20171017-CF10A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Naphthalene	ug/L	<0.2	5235580	<0.2	5225598	<0.2	0.2	5235580
p-Chloroaniline	ug/L	<1	5235580	<1	5225598	<1	1	5235580
Pentachlorophenol	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Phenanthrene	ug/L	<0.1	5235580	<0.1	5225598	<0.1	0.1	5235580
Phenol	ug/L	<0.5	5235580	<0.5	5225598	<0.5	0.5	5235580
Pyrene	ug/L	<0.05	5235580	<0.05	5225598	<0.05	0.05	5235580
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5220375	<0.28	5220375	<0.28	0.28	5220375
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	50	5235580	36 (1)	5225598	9.3 (1)		5235580
2-Fluorobiphenyl	%	62	5235580	73	5225598	52		5235580
D14-Terphenyl (FS)	%	7.5 (1)	5235580	93	5225598	14 (1)		5235580
D5-Nitrobenzene	%	66	5235580	63	5225598	57		5235580
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY633		FKQ501		FKQ502		
Sampling Date		2017/10/17 16:50		2017/10/17 17:10		2017/10/17 17:10		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	FIELD BLANK	QC Batch	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	5225598	<0.1	0.1	73	1	5235580
1-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	0.2	91	1	5235580
2,4,5-Trichlorophenol	ug/L	<0.2	5225598	<0.2	0.2	96	1	5235580
2,4,6-Trichlorophenol	ug/L	<0.2	5225598	<0.2	0.2	90	1	5235580
2,4-Dichlorophenol	ug/L	<0.1	5225598	<0.1	0.1	83	1	5235580
2,4-Dimethylphenol	ug/L	<0.5	5225598	<0.5	0.5	36	1	5235580
2,4-Dinitrophenol	ug/L	<2	5225598	<2	2	72	1	5235580
2,4-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	0.3	92	1	5235580
2,6-Dinitrotoluene	ug/L	<0.3	5225598	<0.3	0.3	90	1	5235580
2-Chlorophenol	ug/L	<0.1	5225598	<0.1	0.1	79	1	5235580
2-Methylnaphthalene	ug/L	<0.2	5225598	<0.2	0.2	86	1	5235580
3,3'-Dichlorobenzidine	ug/L	<0.5	5225598	<0.5	0.5	90	1	5235580
Acenaphthene	ug/L	<0.2	5225598	<0.2	0.2	85	1	5235580
Acenaphthylene	ug/L	<0.2	5225598	<0.2	0.2	88	1	5235580
Anthracene	ug/L	<0.05	5225598	<0.05	0.05	31 (1)	1	5235580
Benzo(a)anthracene	ug/L	<0.05	5225598	<0.05	0.05	13 (1)	1	5235580
Benzo(a)pyrene	ug/L	<0.01	5225598	<0.01	0.01	8 (1)	1	5235580
Benzo(b,j)fluoranthene	ug/L	<0.05	5225598	<0.05	0.05	10 (1)	1	5235580
Benzo(g,h,i)perylene	ug/L	<0.05	5225598	<0.05	0.05	6 (1)	1	5235580
Benzo(k)fluoranthene	ug/L	<0.05	5225598	<0.05	0.05	9 (1)	1	5235580
Biphenyl	ug/L	<0.1	5225598	<0.1	0.1	84	1	5235580
Bis(2-chloroethyl)ether	ug/L	<0.5	5225598	<0.5	0.5	87	1	5235580
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5225598	<0.5	0.5	91	1	5235580
Bis(2-ethylhexyl)phthalate	ug/L	<1	5225598	<1	1	17 (1)	1	5235580
Chrysene	ug/L	<0.05	5225598	<0.05	0.05	12 (1)	1	5235580
Dibenz(a,h)anthracene	ug/L	<0.1	5225598	<0.1	0.1	6 (1)	1	5235580
Diethyl phthalate	ug/L	<0.1	5225598	<0.1	0.1	100	1	5235580
Dimethyl phthalate	ug/L	<0.1	5225598	<0.1	0.1	100	1	5235580
Fluoranthene	ug/L	<0.2	5225598	<0.2	0.2	32 (1)	1	5235580
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIY633		FKQ501		FKQ502		
Sampling Date		2017/10/17 16:50		2017/10/17 17:10		2017/10/17 17:10		
COC Number		63342-01-01		63342-01-01		63342-01-01		
	UNITS	FIELD BLANK	QC Batch	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Fluorene	ug/L	<0.2	5225598	<0.2	0.2	64	1	5235580
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5225598	<0.1	0.1	5 (1)	1	5235580
Naphthalene	ug/L	<0.2	5225598	<0.2	0.2	81	1	5235580
p-Chloroaniline	ug/L	<1	5225598	<1	1	84	1	5235580
Pentachlorophenol	ug/L	<0.1	5225598	<0.1	0.1	69	1	5235580
Phenanthrene	ug/L	<0.1	5225598	<0.1	0.1	52	1	5235580
Phenol	ug/L	<0.5	5225598	<0.5	0.5	37	1	5235580
Pyrene	ug/L	<0.05	5225598	<0.05	0.05	31 (1)	1	5235580
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5220375	<0.28	0.28			5232565
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	72	5225598	68		100		5235580
2-Fluorobiphenyl	%	82	5225598	65		76		5235580
D14-Terphenyl (FS)	%	103	5225598	12 (2)		30 (2)		5235580
D5-Nitrobenzene	%	75	5225598	67		88		5235580
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. (2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

TEST SUMMARY

Maxxam ID: FIY621
Sample ID: WG-160900764-20171017-CF05
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5222461	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5222702	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

Maxxam ID: FIY622
Sample ID: WG-160900764-20171017-CF05A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

TEST SUMMARY

Maxxam ID: FIY623
Sample ID: WG-160900764-20171017-RD06
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5222461	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5223870	2017/10/20	2017/10/23	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5222702	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

Maxxam ID: FIY623 Dup
Sample ID: WG-160900764-20171017-RD06
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

TEST SUMMARY

Maxxam ID: FIY624
Sample ID: WG-160900764-20171017-RD06A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FIY625
Sample ID: WG-160900764-20171017-CF7
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5223087	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5223870	2017/10/20	2017/10/23	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221878	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

TEST SUMMARY

Maxxam ID: FIY626
Sample ID: WG-160900764-20171017-CF7A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FIY627
Sample ID: WG-160900764-20171017-RD08
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5222461	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5223870	2017/10/20	2017/10/23	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221878	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5222628	2017/10/20	2017/10/23	Arpan Shah
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5222616	2017/10/20	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

TEST SUMMARY

Maxxam ID: FIY627 Dup
Sample ID: WG-160900764-20171017-RD08
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Total Suspended Solids	BAL	5222616	2017/10/20	2017/10/20	Shivani Desai

Maxxam ID: FIY628
Sample ID: WG-160900764-20171017-RD08A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FIY629
Sample ID: WG-160900764-20171017-RD09
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5222461	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221878	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5222628	2017/10/20	2017/10/23	Arpan Shah

TEST SUMMARY

Maxxam ID: FIY629
Sample ID: WG-160900764-20171017-RD09
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5222616	2017/10/20	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

Maxxam ID: FIY630
Sample ID: WG-160900764-20171017-RD09A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FIY631
Sample ID: WG-160900764-20171017-CF10
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221974	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5220319	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221994	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221976	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5222461	N/A	2017/10/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225090	2017/10/22	2017/10/23	(Kent) Maolin Li
Fluoride	ISE	5221971	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5220487	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5221033	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5220479	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5220480	N/A	2017/10/21	Automated Statchk
Total Ammonia-N	LACH/NH4	5225889	N/A	2017/10/25	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5222702	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221975	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5222001	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221996	N/A	2017/10/20	Alina Dobreanu

TEST SUMMARY

Maxxam ID: FIY631
Sample ID: WG-160900764-20171017-CF10
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5224995	N/A	2017/10/22	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5221810	N/A	2017/10/20	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/21	Manpreet Sarao

Maxxam ID: FIY632
Sample ID: WG-160900764-20171017-CF10A
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FIY633
Sample ID: FIELD BLANK
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5225598	2017/10/23	2017/10/24	Milijana Avramovic
1,3-Dichloropropene Sum	CALC	5220377	N/A	2017/10/23	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222323	N/A	2017/10/22	Manpreet Sarao

Maxxam ID: FKQ501
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5232565	N/A	2017/10/30	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

Maxxam ID: FKQ502
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	5235580	2017/10/27	2017/10/30	Milijana Avramovic

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C
Package 2	7.3°C
Package 3	6.0°C
Package 4	7.0°C
Package 5	8.0°C
Package 6	7.3°C
Package 7	6.0°C
Package 8	3.3°C
Package 9	3.3°C
Package 10	3.0°C
Package 11	6.0°C
Package 12	6.3°C
Package 13	5.0°C
Package 14	6.0°C
Package 15	7.0°C
Package 16	6.3°C

Sample FKQ502 [FILTERED SPIKE] : ABN analysis: Data are reported as percentage recoveries.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222323	4-Bromofluorobenzene	2017/10/21	100	70 - 130	100	70 - 130	94	%				
5222323	D4-1,2-Dichloroethane	2017/10/21	107	70 - 130	106	70 - 130	109	%				
5222323	D8-Toluene	2017/10/21	102	70 - 130	102	70 - 130	96	%				
5224278	Decachlorobiphenyl	2017/10/21	99	60 - 130	90	60 - 130	97	%				
5225090	o-Terphenyl	2017/10/23	100	60 - 130	100	60 - 130	98	%				
5225598	2,4,6-Tribromophenol	2017/10/23	47 (2)	50 - 130	75	50 - 130	62	%				
5225598	2-Fluorobiphenyl	2017/10/23	92	50 - 130	80	50 - 130	82	%				
5225598	D14-Terphenyl (FS)	2017/10/23	103	50 - 130	99	50 - 130	96	%				
5225598	D5-Nitrobenzene	2017/10/23	89	50 - 130	83	50 - 130	79	%				
5235580	2,4,6-Tribromophenol	2017/10/29			96	50 - 130	80	%				
5235580	2-Fluorobiphenyl	2017/10/29			76	50 - 130	84	%				
5235580	D14-Terphenyl (FS)	2017/10/29			96	50 - 130	100	%				
5235580	D5-Nitrobenzene	2017/10/29			81	50 - 130	83	%				
5221033	Dissolved Aluminum (Al)	2017/10/20	101	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5221033	Dissolved Antimony (Sb)	2017/10/20	108	80 - 120	107	80 - 120	<0.00050	mg/L				
5221033	Dissolved Arsenic (As)	2017/10/20	101	80 - 120	99	80 - 120	<0.0010	mg/L	0.64	20		
5221033	Dissolved Barium (Ba)	2017/10/20	NC	80 - 120	100	80 - 120	<0.0020	mg/L	1.1	20		
5221033	Dissolved Beryllium (Be)	2017/10/20	102	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5221033	Dissolved Boron (B)	2017/10/20	NC	80 - 120	97	80 - 120	<0.010	mg/L	2.3	20		
5221033	Dissolved Cadmium (Cd)	2017/10/20	101	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
5221033	Dissolved Calcium (Ca)	2017/10/20	NC	80 - 120	95	80 - 120	<0.20	mg/L	2.8	20		
5221033	Dissolved Chromium (Cr)	2017/10/20	96	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
5221033	Dissolved Cobalt (Co)	2017/10/20	94	80 - 120	96	80 - 120	<0.00050	mg/L	6.8	20		
5221033	Dissolved Copper (Cu)	2017/10/20	99	80 - 120	100	80 - 120	<0.0010	mg/L	9.0	20		
5221033	Dissolved Iron (Fe)	2017/10/20	97	80 - 120	99	80 - 120	<0.10	mg/L	0.45	20		
5221033	Dissolved Lead (Pb)	2017/10/20	94	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5221033	Dissolved Magnesium (Mg)	2017/10/20	NC	80 - 120	97	80 - 120	<0.050	mg/L	1.4	20		
5221033	Dissolved Manganese (Mn)	2017/10/20	97	80 - 120	98	80 - 120	<0.0020	mg/L	3.1	20		
5221033	Dissolved Molybdenum (Mo)	2017/10/20	104	80 - 120	101	80 - 120	<0.00050	mg/L	19	20		
5221033	Dissolved Nickel (Ni)	2017/10/20	93	80 - 120	96	80 - 120	<0.0010	mg/L	0.18	20		
5221033	Dissolved Phosphorus (P)	2017/10/20	111	80 - 120	107	80 - 120	<0.10	mg/L	10	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221033	Dissolved Potassium (K)	2017/10/20	NC	80 - 120	98	80 - 120	<0.20	mg/L	0.74	20		
5221033	Dissolved Selenium (Se)	2017/10/20	97	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20		
5221033	Dissolved Silicon (Si)	2017/10/20	104	80 - 120	99	80 - 120	<0.050	mg/L	3.2	20		
5221033	Dissolved Silver (Ag)	2017/10/20	67 (1)	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
5221033	Dissolved Sodium (Na)	2017/10/20	NC	80 - 120	97	80 - 120	<0.10	mg/L	1.8	20		
5221033	Dissolved Strontium (Sr)	2017/10/20	NC	80 - 120	98	80 - 120	<0.0010	mg/L	1.7	20		
5221033	Dissolved Thallium (Tl)	2017/10/20	92	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
5221033	Dissolved Titanium (Ti)	2017/10/20	99	80 - 120	101	80 - 120	<0.0050	mg/L	0.78	20		
5221033	Dissolved Uranium (U)	2017/10/20	95	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
5221033	Dissolved Vanadium (V)	2017/10/20	98	80 - 120	96	80 - 120	<0.00050	mg/L	1.6	20		
5221033	Dissolved Zinc (Zn)	2017/10/20	92	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
5221033	Dissolved Zirconium (Zr)	2017/10/20	109	80 - 120	103	80 - 120	<0.0010	mg/L	6.6	20		
5221187	WAD Cyanide (Free)	2017/10/20	99	80 - 120	100	80 - 120	<1	ug/L	NC	20		
5221231	Chromium (VI)	2017/10/20	102	80 - 120	103	80 - 120	<0.50	ug/L	NC	20		
5221284	Total Suspended Solids	2017/10/20					<10	mg/L	NC	25	97	85 - 115
5221289	Total Dissolved Solids	2017/10/20					<50	mg/L	0.48	25	98	90 - 110
5221810	Turbidity	2017/10/20			99	85 - 115	<0.1	NTU	6.0	20		
5221878	Nitrate (N)	2017/10/21	96	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
5221878	Nitrite (N)	2017/10/21	97	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
5221971	Fluoride (F-)	2017/10/20	103	80 - 120	103	80 - 120	<0.10	mg/L	1.9	20		
5221974	Alkalinity (Total as CaCO3)	2017/10/20			95	85 - 115	<1.0	mg/L	1.1	20		
5221975	pH	2017/10/20			102	98 - 103			0.64	N/A		
5221976	Conductivity	2017/10/20			100	85 - 115	<1.0	umho/cm	1.6	25		
5221994	Dissolved Chloride (Cl)	2017/10/20	85	80 - 120	106	80 - 120	<1.0	mg/L	NC	20		
5221996	Dissolved Sulphate (SO4)	2017/10/20	104	75 - 125	105	80 - 120	<1.0	mg/L	NC	20		
5222001	Orthophosphate (P)	2017/10/20	117	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
5222323	1,1,1,2-Tetrachloroethane	2017/10/21	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5222323	1,1,1-Trichloroethane	2017/10/21	93	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5222323	1,1,2,2-Tetrachloroethane	2017/10/21	104	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5222323	1,1,2-Trichloroethane	2017/10/21	106	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222323	1,1-Dichloroethane	2017/10/21	103	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
5222323	1,1-Dichloroethylene	2017/10/21	106	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5222323	1,2-Dichlorobenzene	2017/10/21	91	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
5222323	1,2-Dichloroethane	2017/10/21	112	70 - 130	110	70 - 130	<0.50	ug/L	NC	30		
5222323	1,2-Dichloropropane	2017/10/21	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222323	1,3-Dichlorobenzene	2017/10/21	95	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
5222323	1,4-Dichlorobenzene	2017/10/21	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5222323	Acetone (2-Propanone)	2017/10/21	101	60 - 140	100	60 - 140	<10	ug/L	NC	30		
5222323	Benzene	2017/10/21	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5222323	Bromodichloromethane	2017/10/21	98	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5222323	Bromoform	2017/10/21	104	70 - 130	103	70 - 130	<1.0	ug/L	NC	30		
5222323	Bromomethane	2017/10/21	101	60 - 140	102	60 - 140	<0.50	ug/L	NC	30		
5222323	Carbon Tetrachloride	2017/10/21	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
5222323	Chlorobenzene	2017/10/21	94	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5222323	Chloroform	2017/10/21	96	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5222323	cis-1,2-Dichloroethylene	2017/10/21	96	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
5222323	cis-1,3-Dichloropropene	2017/10/21	93	70 - 130	93	70 - 130	<0.30	ug/L	NC	30		
5222323	Dibromochloromethane	2017/10/21	102	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5222323	Dichlorodifluoromethane (FREON 12)	2017/10/21	108	60 - 140	108	60 - 140	<1.0	ug/L	NC	30		
5222323	Ethylbenzene	2017/10/21	92	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5222323	Ethylene Dibromide	2017/10/21	104	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
5222323	F1 (C6-C10) - BTEX	2017/10/21					<25	ug/L	NC	30		
5222323	F1 (C6-C10)	2017/10/21	93	60 - 140	97	60 - 140	<25	ug/L	NC	30		
5222323	Hexane	2017/10/21	102	70 - 130	101	70 - 130	<1.0	ug/L	NC	30		
5222323	Methyl Ethyl Ketone (2-Butanone)	2017/10/21	104	60 - 140	103	60 - 140	<10	ug/L	NC	30		
5222323	Methyl Isobutyl Ketone	2017/10/21	100	70 - 130	99	70 - 130	<5.0	ug/L	NC	30		
5222323	Methyl t-butyl ether (MTBE)	2017/10/21	96	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
5222323	Methylene Chloride(Dichloromethane)	2017/10/21	101	70 - 130	99	70 - 130	<2.0	ug/L	NC	30		
5222323	o-Xylene	2017/10/21	94	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5222323	p+m-Xylene	2017/10/21	94	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5222323	Styrene	2017/10/21	94	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222323	Tetrachloroethylene	2017/10/21	87	70 - 130	87	70 - 130	<0.20	ug/L	NC	30		
5222323	Toluene	2017/10/21	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
5222323	Total Xylenes	2017/10/21					<0.20	ug/L	NC	30		
5222323	trans-1,2-Dichloroethylene	2017/10/21	97	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5222323	trans-1,3-Dichloropropene	2017/10/21	99	70 - 130	101	70 - 130	<0.40	ug/L	NC	30		
5222323	Trichloroethylene	2017/10/21	92	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
5222323	Trichlorofluoromethane (FREON 11)	2017/10/21	97	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5222323	Vinyl Chloride	2017/10/21	105	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5222461	Dissolved Organic Carbon	2017/10/20	97	80 - 120	101	80 - 120	0.24, RDL=0.20	mg/L	1.2	20		
5222616	Total Suspended Solids	2017/10/20					<10	mg/L	0	25	95	85 - 115
5222628	Total Dissolved Solids	2017/10/23					<50	mg/L	3.7	25	102	90 - 110
5222702	Nitrate (N)	2017/10/24	99	80 - 120	99	80 - 120	<0.10	mg/L	0.0053	20		
5222702	Nitrite (N)	2017/10/24	101	80 - 120	102	80 - 120	<0.010	mg/L	7.4	20		
5223087	Dissolved Organic Carbon	2017/10/20	96	80 - 120	99	80 - 120	<0.20	mg/L	0.21	20		
5223870	Mercury (Hg)	2017/10/23	97	75 - 125	93	80 - 120	<0.1	ug/L	NC	20		
5224278	Aroclor 1242	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1248	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1254	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1260	2017/10/21	92	60 - 130	94	60 - 130	<0.05	ug/L	NC	30		
5224278	Total PCB	2017/10/21	92	60 - 130	94	60 - 130	<0.05	ug/L	NC	40		
5224733	Mercury (Hg)	2017/10/24	98	75 - 125	102	80 - 120	<0.1	ug/L	NC	20		
5224995	Total Organic Carbon (TOC)	2017/10/22	96	80 - 120	99	80 - 120	<0.20	mg/L	2.1	20		
5225090	F2 (C10-C16 Hydrocarbons)	2017/10/23	88	50 - 130	92	60 - 130	<100	ug/L	NC	30		
5225090	F3 (C16-C34 Hydrocarbons)	2017/10/23	93	50 - 130	98	60 - 130	<200	ug/L	NC	30		
5225090	F4 (C34-C50 Hydrocarbons)	2017/10/23	95	50 - 130	100	60 - 130	<200	ug/L	NC	30		
5225598	1,2,4-Trichlorobenzene	2017/10/23	71	40 - 130	56	40 - 130	<0.1	ug/L				
5225598	1-Methylnaphthalene	2017/10/23	88	50 - 130	80	50 - 130	<0.2	ug/L				
5225598	2,4,5-Trichlorophenol	2017/10/23	83	50 - 130	97	50 - 130	<0.2	ug/L				
5225598	2,4,6-Trichlorophenol	2017/10/23	106	50 - 130	93	50 - 130	<0.2	ug/L				
5225598	2,4-Dichlorophenol	2017/10/23	78	50 - 130	75	50 - 130	<0.1	ug/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5225598	2,4-Dimethylphenol	2017/10/23	14 (3)	30 - 130	45	30 - 130	<0.5	ug/L				
5225598	2,4-Dinitrophenol	2017/10/23	107	30 - 130	90	30 - 130	<2	ug/L				
5225598	2,4-Dinitrotoluene	2017/10/23	99	50 - 130	93	50 - 130	<0.3	ug/L				
5225598	2,6-Dinitrotoluene	2017/10/23	101	50 - 130	93	50 - 130	<0.3	ug/L				
5225598	2-Chlorophenol	2017/10/23	64	50 - 130	74	50 - 130	<0.1	ug/L				
5225598	2-Methylnaphthalene	2017/10/23	83	50 - 130	75	50 - 130	<0.2	ug/L				
5225598	3,3'-Dichlorobenzidine	2017/10/23	0.00 (1)	30 - 130	86	30 - 130	<0.5	ug/L				
5225598	Acenaphthene	2017/10/23	95	50 - 130	90	50 - 130	<0.2	ug/L				
5225598	Acenaphthylene	2017/10/23	91	50 - 130	87	50 - 130	<0.2	ug/L				
5225598	Anthracene	2017/10/23	82	50 - 130	83	50 - 130	<0.05	ug/L				
5225598	Benzo(a)anthracene	2017/10/23	102	50 - 130	101	50 - 130	<0.05	ug/L				
5225598	Benzo(a)pyrene	2017/10/24	94	50 - 130	96	50 - 130	<0.01	ug/L	NC	30		
5225598	Benzo(b,j)fluoranthene	2017/10/23	126	50 - 130	110	50 - 130	<0.05	ug/L				
5225598	Benzo(g,h,i)perylene	2017/10/23	70	50 - 130	92	50 - 130	<0.05	ug/L				
5225598	Benzo(k)fluoranthene	2017/10/23	104	50 - 130	92	50 - 130	<0.05	ug/L				
5225598	Biphenyl	2017/10/23	90	50 - 130	84	50 - 130	<0.1	ug/L				
5225598	Bis(2-chloroethyl)ether	2017/10/23	81	50 - 130	79	50 - 130	<0.5	ug/L				
5225598	Bis(2-chloroisopropyl)ether	2017/10/23	82	50 - 130	78	50 - 130	<0.5	ug/L				
5225598	Bis(2-ethylhexyl)phthalate	2017/10/23	111	50 - 130	111	50 - 130	<1	ug/L				
5225598	Chrysene	2017/10/23	97	50 - 130	95	50 - 130	<0.05	ug/L				
5225598	Dibenz(a,h)anthracene	2017/10/23	80	50 - 130	95	50 - 130	<0.1	ug/L				
5225598	Diethyl phthalate	2017/10/23	95	50 - 130	93	50 - 130	<0.1	ug/L				
5225598	Dimethyl phthalate	2017/10/23	94	50 - 130	91	50 - 130	<0.1	ug/L				
5225598	Fluoranthene	2017/10/23	93	50 - 130	88	50 - 130	<0.2	ug/L				
5225598	Fluorene	2017/10/23	87	50 - 130	82	50 - 130	<0.2	ug/L				
5225598	Indeno(1,2,3-cd)pyrene	2017/10/23	87	50 - 130	105	50 - 130	<0.1	ug/L				
5225598	Naphthalene	2017/10/23	95	50 - 130	87	50 - 130	<0.2	ug/L				
5225598	p-Chloroaniline	2017/10/23	1.0 (1)	30 - 130	78	30 - 130	<1	ug/L				
5225598	Pentachlorophenol	2017/10/24	234 (1)	50 - 130	67	50 - 130	<0.1	ug/L	NC	30		
5225598	Phenanthrene	2017/10/23	94	50 - 130	88	50 - 130	<0.1	ug/L				
5225598	Phenol	2017/10/23	32	30 - 130	36	30 - 130	<0.5	ug/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5225598	Pyrene	2017/10/23	107	50 - 130	101	50 - 130	<0.05	ug/L				
5225889	Total Ammonia-N	2017/10/25	94	80 - 120	101	85 - 115	<0.050	mg/L	NC	20		
5229688	Acidity	2017/10/25	89	80 - 120	105	80 - 120	<5.0	mg/L	NC	25		
5235580	1,2,4-Trichlorobenzene	2017/10/29			69	40 - 130	<0.1	ug/L	7.5	30		
5235580	1-Methylnaphthalene	2017/10/29			86	50 - 130	<0.2	ug/L	8.4	30		
5235580	2,4,5-Trichlorophenol	2017/10/29			91	50 - 130	<0.2	ug/L	0.85	30		
5235580	2,4,6-Trichlorophenol	2017/10/29			85	50 - 130	<0.2	ug/L	0.55	30		
5235580	2,4-Dichlorophenol	2017/10/29			80	50 - 130	<0.1	ug/L	6.2	30		
5235580	2,4-Dimethylphenol	2017/10/29			35	30 - 130	<0.5	ug/L	11	30		
5235580	2,4-Dinitrophenol	2017/10/29			127	30 - 130	<2	ug/L	2.2	30		
5235580	2,4-Dinitrotoluene	2017/10/29			92	50 - 130	<0.3	ug/L	0.84	30		
5235580	2,6-Dinitrotoluene	2017/10/29			85	50 - 130	<0.3	ug/L	1.7	30		
5235580	2-Chlorophenol	2017/10/29			76	50 - 130	<0.1	ug/L	8.9	30		
5235580	2-Methylnaphthalene	2017/10/29			82	50 - 130	<0.2	ug/L	8.7	30		
5235580	3,3'-Dichlorobenzidine	2017/10/29			95	30 - 130	<0.5	ug/L	3.7	30		
5235580	Acenaphthene	2017/10/29			94	50 - 130	<0.2	ug/L	4.2	30		
5235580	Acenaphthylene	2017/10/29			90	50 - 130	<0.2	ug/L	5.4	30		
5235580	Anthracene	2017/10/29			95	50 - 130	<0.05	ug/L	2.1	30		
5235580	Benzo(a)anthracene	2017/10/29			105	50 - 130	<0.05	ug/L	1.3	30		
5235580	Benzo(a)pyrene	2017/10/29			97	50 - 130	<0.01	ug/L	1.1	30		
5235580	Benzo(b/j)fluoranthene	2017/10/29			105	50 - 130	<0.05	ug/L	3.7	30		
5235580	Benzo(g,h,i)perylene	2017/10/29			103	50 - 130	<0.05	ug/L	0.22	30		
5235580	Benzo(k)fluoranthene	2017/10/29			110	50 - 130	<0.05	ug/L	3.9	30		
5235580	Biphenyl	2017/10/29			86	50 - 130	<0.1	ug/L	6.7	30		
5235580	Bis(2-chloroethyl)ether	2017/10/29			81	50 - 130	<0.5	ug/L	11	30		
5235580	Bis(2-chloroisopropyl)ether	2017/10/29			85	50 - 130	<0.5	ug/L	11	30		
5235580	Bis(2-ethylhexyl)phthalate	2017/10/29			103	50 - 130	<1	ug/L	1.3	30		
5235580	Chrysene	2017/10/29			109	50 - 130	<0.05	ug/L	0.76	30		
5235580	Dibenz(a,h)anthracene	2017/10/29			106	50 - 130	<0.1	ug/L	0.63	30		
5235580	Diethyl phthalate	2017/10/29			91	50 - 130	<0.1	ug/L	1.6	30		
5235580	Dimethyl phthalate	2017/10/29			100	50 - 130	<0.1	ug/L	0.54	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5235580	Fluoranthene	2017/10/29			100	50 - 130	<0.2	ug/L	1.9	30		
5235580	Fluorene	2017/10/29			93	50 - 130	<0.2	ug/L	0.28	30		
5235580	Indeno(1,2,3-cd)pyrene	2017/10/29			94	50 - 130	<0.1	ug/L	1.0	30		
5235580	Naphthalene	2017/10/29			74	50 - 130	<0.2	ug/L	11	30		
5235580	p-Chloroaniline	2017/10/29			81	30 - 130	<1	ug/L	6.2	30		
5235580	Pentachlorophenol	2017/10/29			63	50 - 130	<0.1	ug/L	4.6	30		
5235580	Phenanthrene	2017/10/29			101	50 - 130	<0.1	ug/L	1.8	30		
5235580	Phenol	2017/10/29			35	30 - 130	<0.5	ug/L	6.1	30		
5235580	Pyrene	2017/10/29			105	50 - 130	<0.05	ug/L	0.14	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.

(3) The recoveries for the flagged analytes in Matrix Spike were outside control limits. This may represent a bias in some results for the flagged analytes.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Cristina Carriere, Scientific Service Specialist



Ewa Pranjić, M.Sc., C.Chem, Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

started!
3 fridge
13 floor

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

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same!
HEAVY! 50lbs

COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 8 8 7
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 7 7 8
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 6 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 6 9
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 9 7 8
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 8 8 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 6 8
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 4
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 3 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3

MAXXAM JOB#:			
CUSTODY SEAL	YES	NO	COOLER ID
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 4 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 4 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 5 4
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 4 8
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 8 6 7
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 7 6 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3

*16 total
JW*

FCD IN PORT HOPE

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<i>Jenn Woodward</i>	2017/10/17	20:44



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 7 8
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID 2
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 6 6
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 0 2
CUSTODY SEAL	YES	NO	COOLER ID 3
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 0 2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 4 0 2
CUSTODY SEAL	YES	NO	COOLER ID 4
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 3
CUSTODY SEAL	YES	NO	COOLER ID 5
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 3
CUSTODY SEAL	YES	NO	COOLER ID 6
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 5 7
CUSTODY SEAL	YES	NO	COOLER ID 7
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 2 3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 2 3
CUSTODY SEAL	YES	NO	COOLER ID 8
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 1 3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 1 3
CUSTODY SEAL	YES	NO	COOLER ID 9
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 2 3
CUSTODY SEAL	YES	NO	COOLER ID 10
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 3 4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 3 4

MAXXAM JOB#:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 0
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
CUSTODY SEAL	YES	NO	COOLER ID 12
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 1 1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 1 1
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PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 0 0
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 0 0
CUSTODY SEAL	YES	NO	COOLER ID 14
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 1 3
CUSTODY SEAL	YES	NO	COOLER ID 15
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 4 2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 4 2
CUSTODY SEAL	YES	NO	COOLER ID 16
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 1 3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 0 1 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP

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<i>Ashlika Suman</i> ASHLIKA SUMAN	2012/10/18	12:58



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 6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-583-6266 Fax: (905) 817-5777 www.maxxam.ca

STAN

17-Oct-17 20:44

Augustyna Dobosz
 B7N0947

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INVOICE INFORMATION:
 Company Name: #9197 Stantec Consulting Ltd
 Contact Name: Accounts Payable
 Address: 300 Hagey Blvd Suite 100
 Waterloo ON N2L 0A4
 Phone: (519) 579-4410 x Fax: (519) 579-6733 x
 Email: accounts.payable.invoices@stantec.com

REPORT INFORMATION (it differs from invoice):
 Company Name: #18379 Stantec Consulting Ltd
 Contact Name: Report - 160900764
 Address: ON
 Phone: Fax:
 Email: aaron.warkentin@stantec.com, jamie.koch@stantec.com

PROJECT INFORMATION:
 Quotation #: B48218
 Task #: 200.500
 Project #: 160900764
 Profit Centre: 1609
 Site #: Clarington TS - Monitoring Wel
 Sampled By: *[Signature]*

KES ENV-1380
 COC #:

ly:
 Bottle Order #: 633342
 Project Manager: Deepthi Shaji

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)
 Table 1 Res/Park Medium/Fine
 Table 2 Ind/Comm Coarse
 Table 3 Agri/Other For RSC
 Table

Other Regulations
 CCME Sanitary Sewer Bylaw
 Reg 558 Storm Sewer Bylaw
 MISA Municipality
 PWQO
 Other

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix
1	WG-160900764-20171017- <i>CP-5A</i>	10:26	10:26	GW
2	WG-160900764-20171017- <i>CP-5A</i>	10:26	10:26	GW
3	WG-160900764-20171017- <i>CP-5A</i>	10:47	10:47	GW
4	WG-160900764-20171017- <i>CP-5A</i>	10:47	10:47	GW
5	WG-160900764-20171017- <i>CP-5A</i>	10:47	10:47	GW
6	WG-160900764-20171017- <i>CP-5A</i>	10:47	10:47	GW
7	WG-160900764-20171017- <i>CP-5A</i>	13:45	13:45	GW
8	WG-160900764-20171017- <i>CP-5A</i>	13:45	13:45	GW
9	WG-160900764-20171017- <i>CP-5A</i>	16:42	16:42	GW
10	WG-160900764-20171017- <i>CP-5A</i>	16:42	16:42	GW

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle):	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Manganese & TOC	TDS & TSS	RCAsp - Comprehensive: Field Filter	Reg 153 PCBs	Reg 153 VOCs & F1-F4	SVOCs	Lab Filtered SVOCs
Metals High (CP)	X	X	X	X	X	X	X	X	X	X
Field Filtered										

Turnaround Time (TAT) Required:
 Please provide advance notice for rush projects

Regular (Standard) TAT:
 (Will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are + 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
 Date Required: Time Required:
 Rush Confirmation Number: (call lab for #)

# of Bottles	Comments
18	
2	
18	
2	
18	
2	
18	
2	
18	
2	
18	
2	
18	
2	
18	
2	

REC'D IN PORT HOPE

ONICE

RELINQUISHED BY: (Signature/Print)
Janice Kuhl
 For Ryan Dong

Date: (YY/MM/DD) 17/10/17
Time 19:40

RECEIVED BY: (Signature/Print)
[Signature]
Date: (YY/MM/DD) 20/10/17
Time 20:04

Jars used and not submitted

Laboratory Use Only
 Time Sensitive
 Temperature (°C) on Receipt: *see note*

Custody Seal
 Present:
 Intact:
 Yes: No:

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

White: Maxxa Yellow: Client
 REFER TO ACTA

WBT# 306259

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: #18379 Stantec Consulting Ltd	Quotation #: B48218	Maxxam Job #:	Task #: 200.500	Bottle Order #:	633342	
Contact Name: Accounts Payable	Contact Name: Report - 160900764	Project #: 160900764	COC #:	Project Manager:	Deepti Shaji		
Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Address: ON	Profit Centre: 1609	Site #:	Clarington TS - Monitoring Wel		C#633342-02-01	
Phone: (519) 579-4410 x Fax: (519) 579-6733 x	Phone: Fax:	Sampled By: Ryan Dwyer					
Email: accounts.payable.invoices@stantec.com	Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co						

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011) <input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____		Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Other _____	Special Instructions
---	--	---	-------------------------------------

Include Criteria on Certificate of Analysis (Y/N)?					ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Nettle (Hg Cr V)	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAP - Comprehensive-Field Filter	Reg 153 PCBs	Reg 153 VOCs & FL-P4	SVOCs	Lab Filtered SVOCs	# of Bottles	Comments
1	WG-160900764-20171017-1017	2/17/17	17:10	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
2	WG-160900764-20171017-1017A	2/17/17	17:10	GW	1										X	2	
3	WG-160900764-201710			GW													
4	WG-160900764-201710			GW													
5	WG-160900764-201710			GW													
6	WG-160900764-201710			GW													
7	FIELD BLANK	2/17/17	1650	---									X	X		5	REC'D IN PORT HOPE
8																	
9																	
10																	once

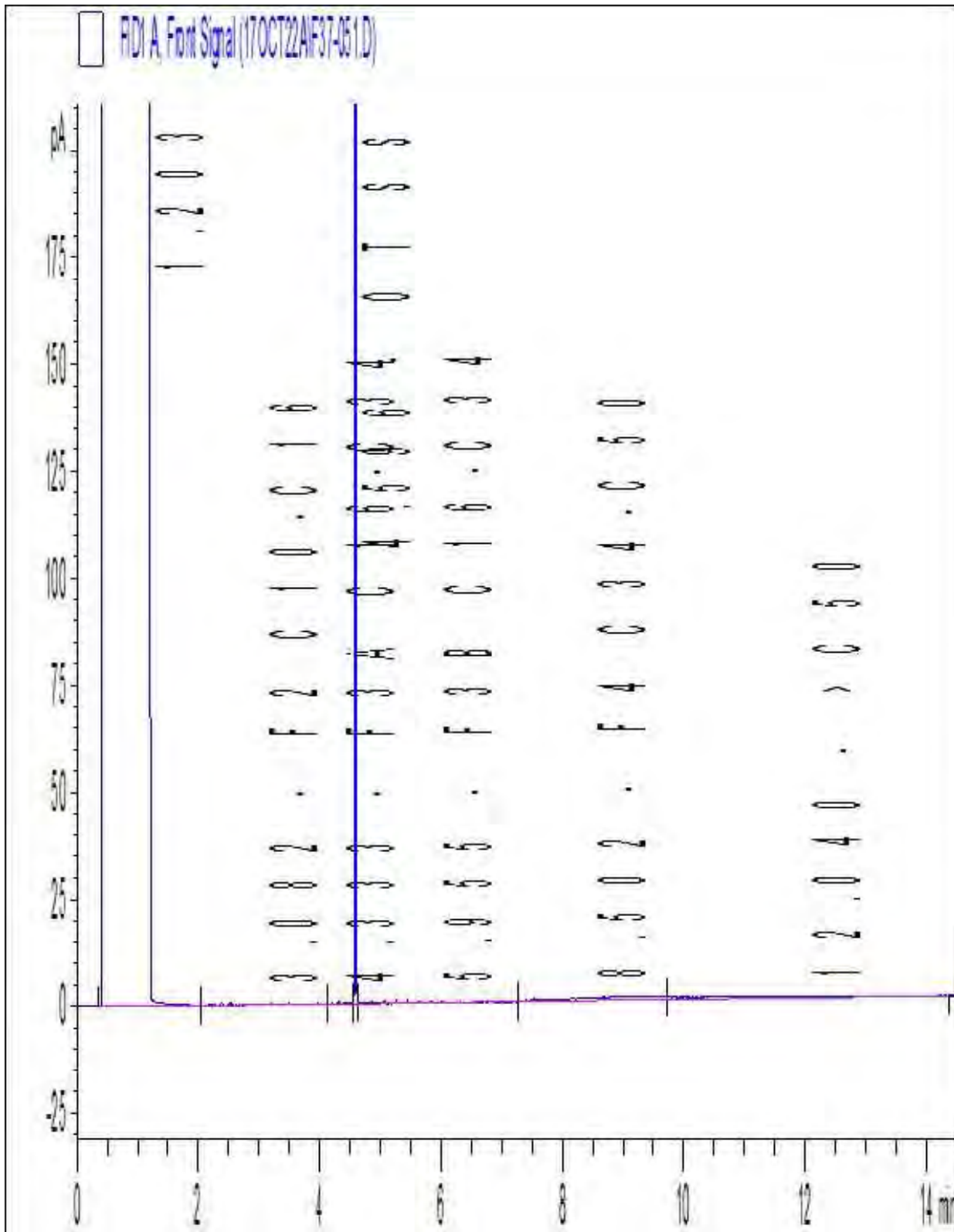
RELINQUISHED BY: (Signature/Print) Jamie Koch	Date: (YY/MM/DD) 17/10/17	Time 1940	RECEIVED BY: (Signature/Print) Ashish Kumar	Date: (YY/MM/DD) 17/10/17	Time 12:59	# jars used and not submitted	Laboratory Use Only		
						Time Sensitive	Temperature (°C) on Receipt see ACTR	Custody Seal Present Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

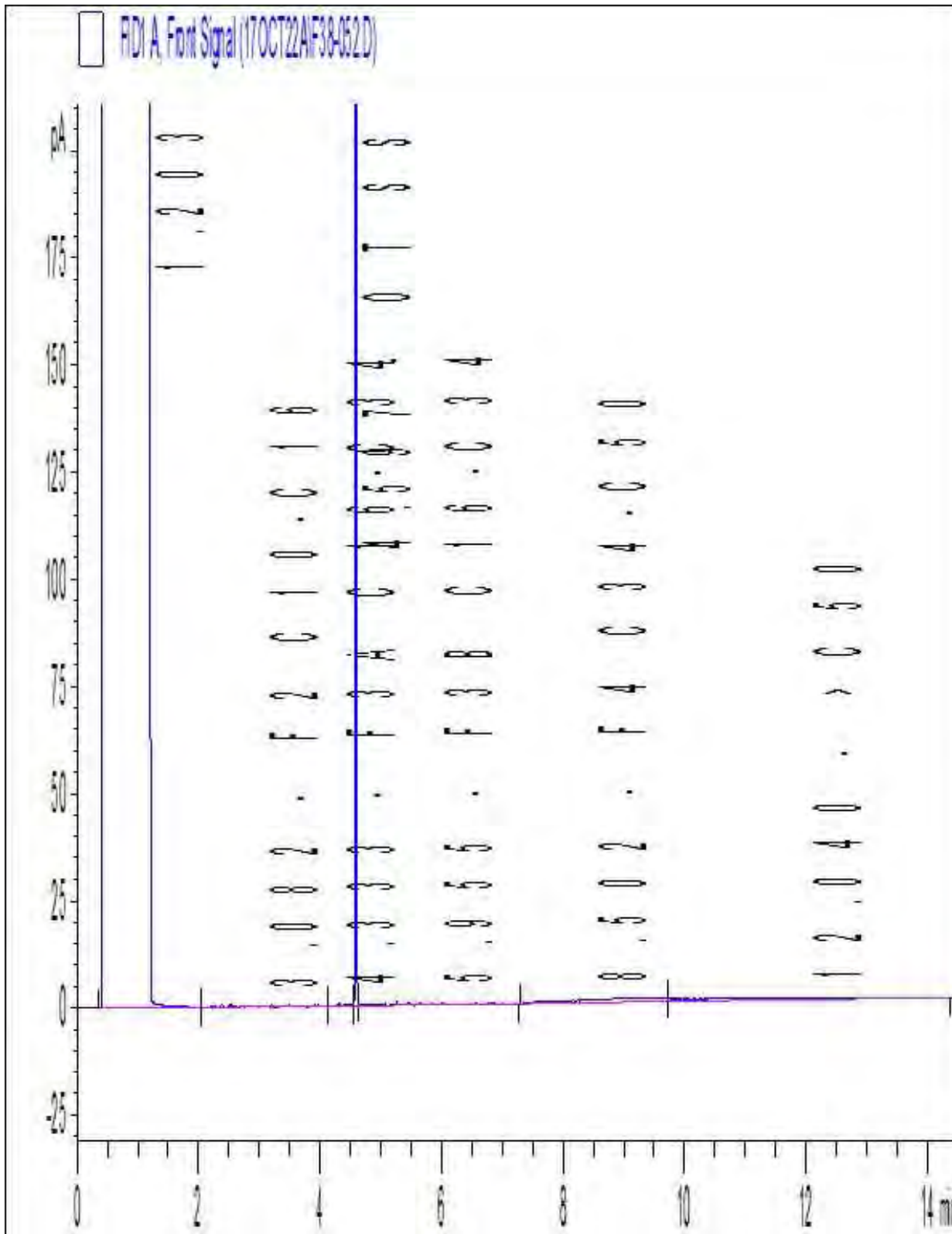
WB# 386259

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



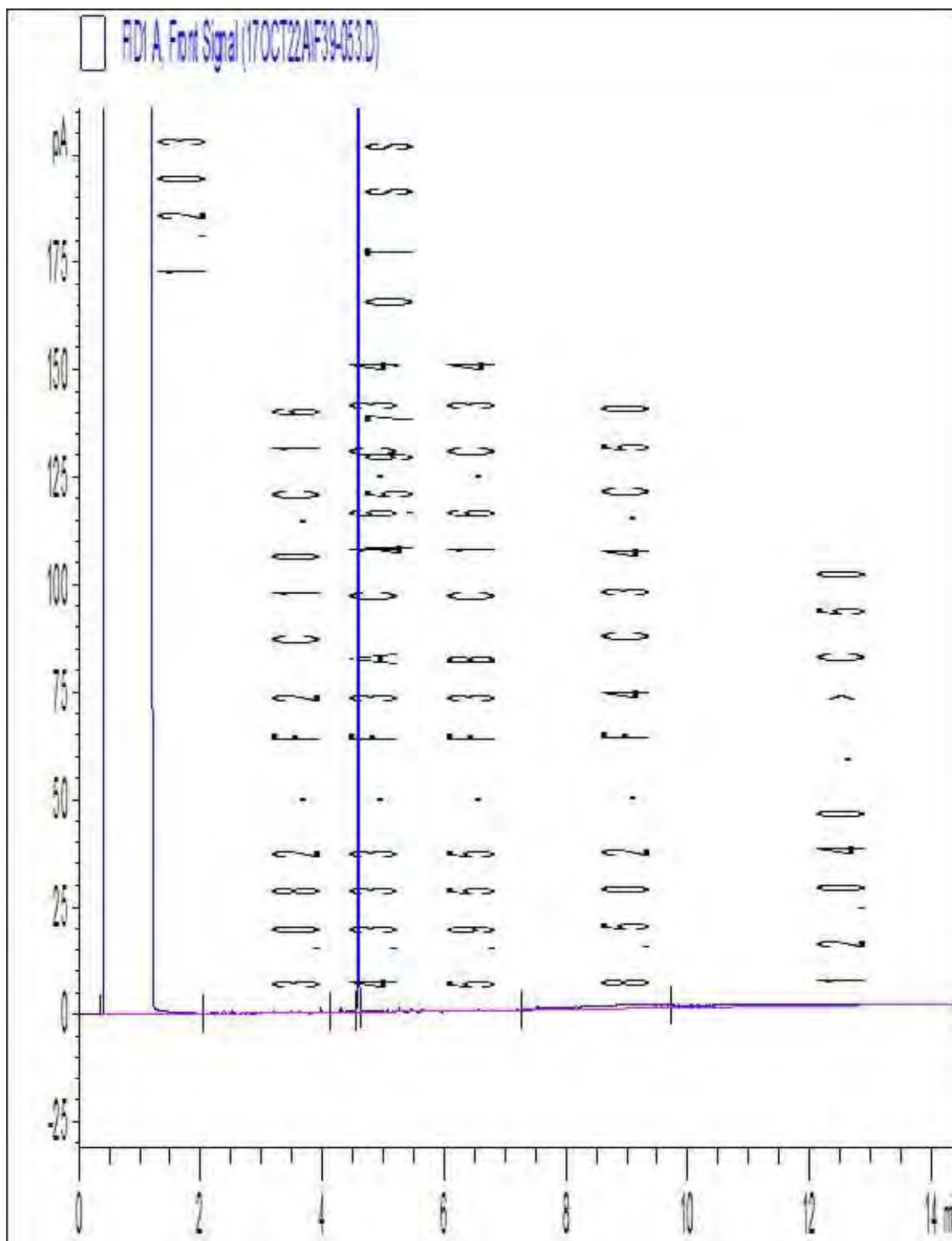
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



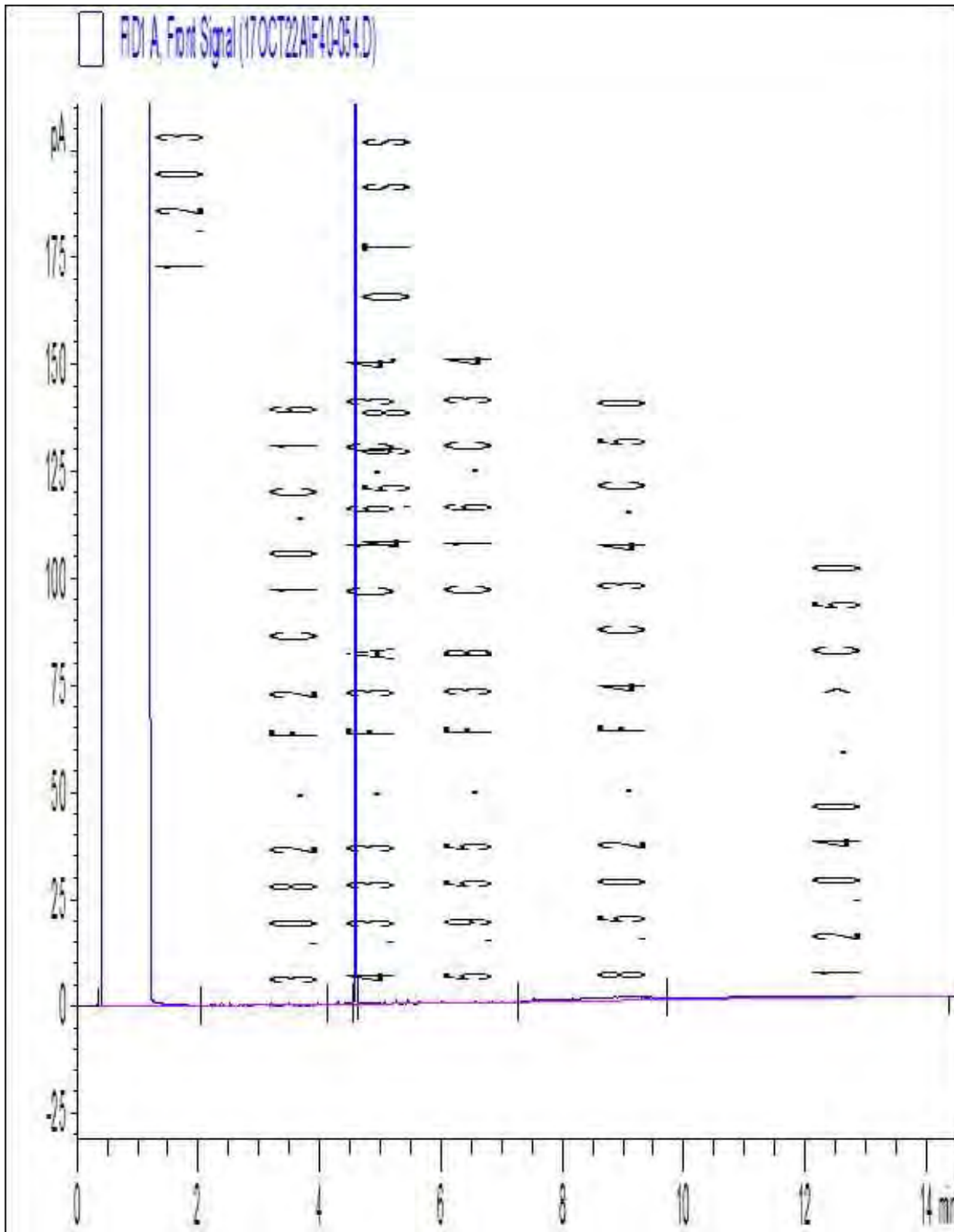
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



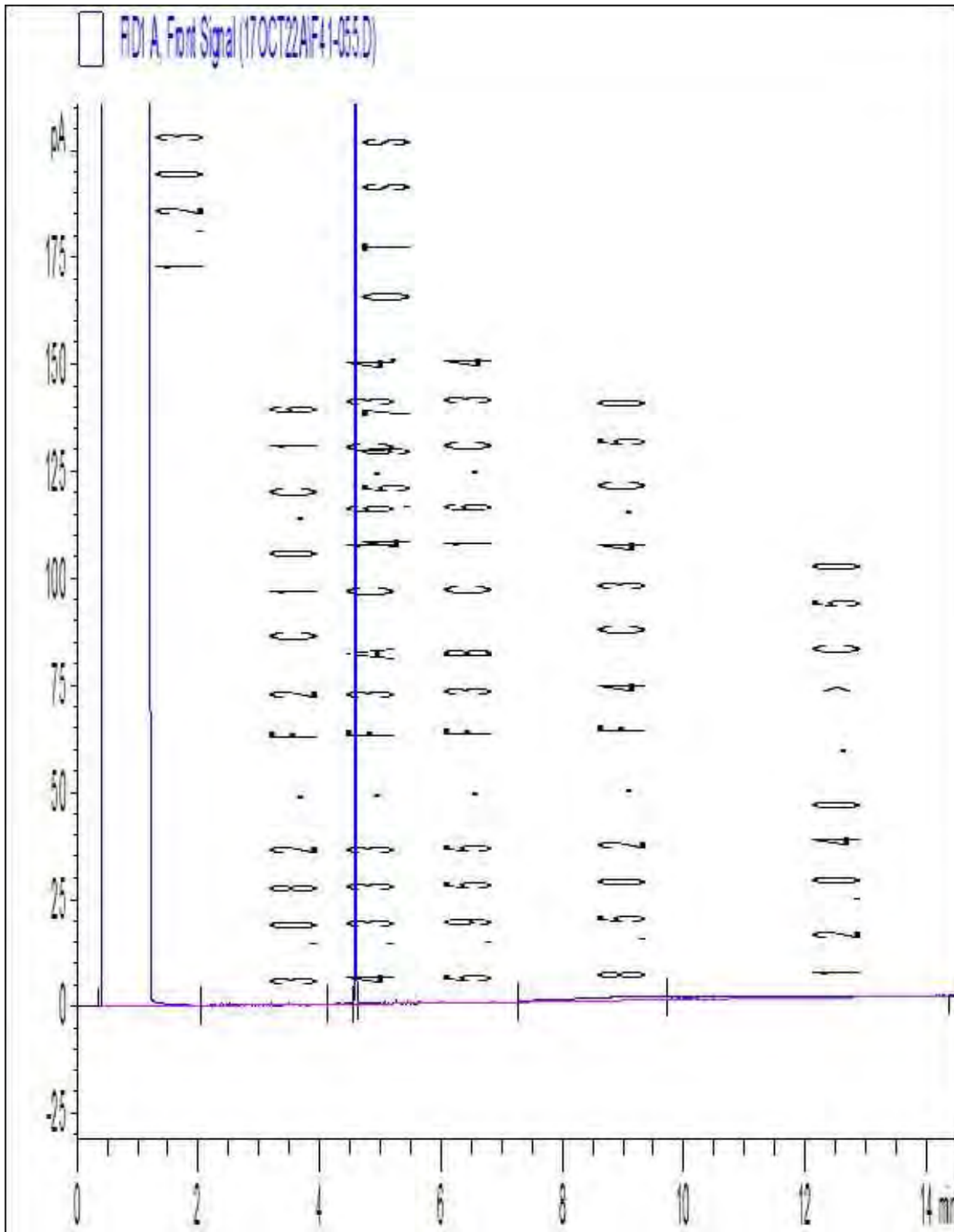
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



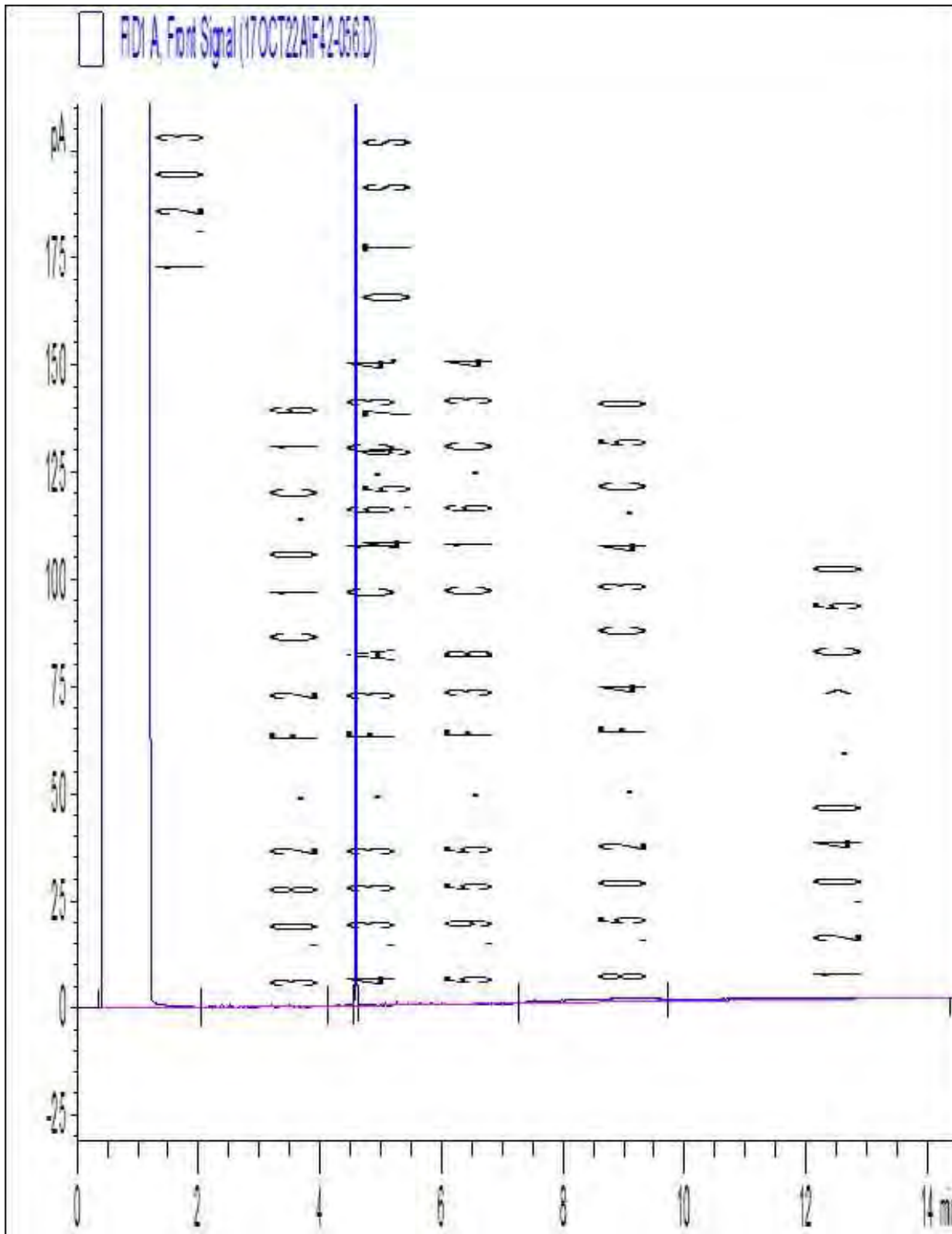
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



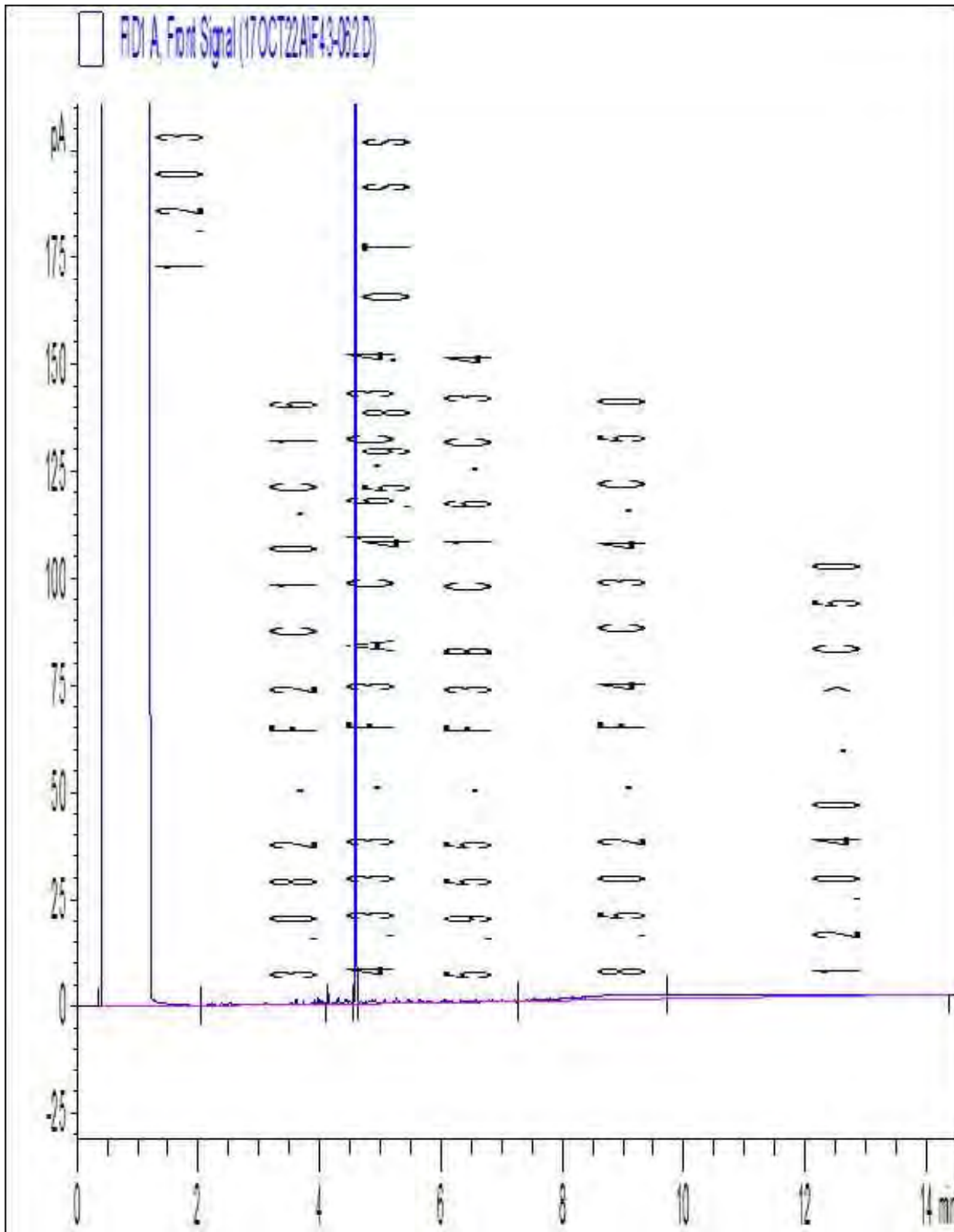
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 160900764
 Site Location: CLARINGTON TS - MONITORING WEL
 Your C.O.C. #: 633342-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/30

Report #: R4811565

Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2183

Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	14	N/A	2017/10/25	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	15	2017/10/24	2017/10/25	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	6	N/A	2017/10/26		SM 22 2310
Alkalinity	5	N/A	2017/10/22	CAM SOP-00448	SM 22 2320 B m
Alkalinity	1	N/A	2017/10/27	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	6	N/A	2017/10/23	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	7	N/A	2017/10/24		EPA 8260C m
Chloride by Automated Colourimetry	5	N/A	2017/10/23	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2017/10/27	CAM SOP-00463	EPA 325.2 m
Conductivity	6	N/A	2017/10/22	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	6	N/A	2017/10/25	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	6	N/A	2017/10/25	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	6	N/A	2017/10/21	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	6	2017/10/24	2017/10/25	CAM SOP-00316	CCME PHC-CWS m
Fluoride	6	2017/10/20	2017/10/22	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2017/10/23	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	5	2017/10/23	2017/10/25	CAM SOP-00453	EPA 7470A m
Mercury	1	2017/10/24	2017/10/25	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	3	N/A	2017/10/21	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	3	N/A	2017/10/23	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	6	N/A	2017/10/25		
Anion and Cation Sum	6	N/A	2017/10/23		
Total Ammonia-N	6	N/A	2017/10/26	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	6	N/A	2017/10/24	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	6	2017/10/24	2017/10/25	CAM SOP-00309	EPA 8082A m
pH	6	N/A	2017/10/22	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	6	N/A	2017/10/23	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	6	N/A	2017/10/25		
Sat. pH and Langelier Index (@ 4C)	6	N/A	2017/10/25		

Your Project #: 160900764
 Site Location: CLARINGTON TS - MONITORING WEL
 Your C.O.C. #: 633342-01-01

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Stantec Consulting Ltd
 Clarington
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Report Date: 2017/10/30
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2183

Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 15

Analyses	Quantity	Date		Laboratory Method	Reference
		Extracted	Analyzed		
Sulphate by Automated Colourimetry	5	N/A	2017/10/23	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2017/10/27	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	6	N/A	2017/10/25		
Total Dissolved Solids	6	2017/10/23	2017/10/24	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (5)	6	N/A	2017/10/25	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	6	2017/10/23	2017/10/23	CAM SOP-00428	SM 22 2540D m
Turbidity	6	N/A	2017/10/21	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	7	N/A	2017/10/24	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 633342-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/30
Report #: R4811565
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2183

Received: 2017/10/19, 13:01

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (5) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF443	FJF445		FJF447		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35		2017/10/18 12:54		
COC Number		633342-01-01	633342-01-01		633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD12	QC Batch	WG-160900764- 20171018-CF11	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	7.50	7.52	5221456	3.72	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	230	5221453	150	1.0	5221453
Calculated TDS	mg/L	420	420	5221590	180	1.0	5221590
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	2.1	5221453	4.8	1.0	5221453
Cation Sum	me/L	7.39	7.43	5221456	2.45	N/A	5221456
Hardness (CaCO3)	mg/L	360	360	5221587	21	1.0	5221587
Ion Balance (% Difference)	%	0.710	0.620	5221455	20.6	N/A	5221455
Langelier Index (@ 20C)	N/A	0.967	0.986	5221588	0.0270		5221588
Langelier Index (@ 4C)	N/A	0.719	0.737	5221589	-0.222		5221589
Saturation pH (@ 20C)	N/A	7.01	6.99	5221588	8.50		5221588
Saturation pH (@ 4C)	N/A	7.25	7.24	5221589	8.75		5221589
Inorganics							
Total Ammonia-N	mg/L	<0.050	<0.050	5228777	<0.050	0.050	5228777
Conductivity	umho/cm	710	710	5223932	230	1.0	5223932
Dissolved Organic Carbon	mg/L	0.87	0.88	5224649	1.1	0.20	5224649
Orthophosphate (P)	mg/L	<0.010	<0.010	5224854	0.011	0.010	5224854
pH	pH	7.97	7.98	5223934	8.53		5223934
Dissolved Sulphate (SO4)	mg/L	27	26	5224853	22	1.0	5234269
Alkalinity (Total as CaCO3)	mg/L	230	240	5223924	160	1.0	5234156
Dissolved Chloride (Cl)	mg/L	59	60	5224850	1.7	1.0	5234268
Nitrite (N)	mg/L	<0.010	<0.010	5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L	8.21	8.19	5223780	<0.10	0.10	5223780
Nitrate + Nitrite (N)	mg/L	8.21	8.19	5223780	<0.10	0.10	5223780
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0050	<0.0050	5224380	0.033	0.0050	5224380
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	5224380	<0.00050	0.00050	5224380
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	5224380	0.0018	0.0010	5224380
Dissolved Barium (Ba)	mg/L	0.034	0.035	5224380	0.0052	0.0020	5224380
Dissolved Beryllium (Be)	mg/L	<0.00050	<0.00050	5224380	<0.00050	0.00050	5224380
Dissolved Boron (B)	mg/L	<0.010	<0.010	5224380	0.23	0.010	5224380
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable							

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF443	FJF445		FJF447		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35		2017/10/18 12:54		
COC Number		633342-01-01	633342-01-01		633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD12	QC Batch	WG-160900764- 20171018-CF11	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	<0.00010	5224380	<0.00010	0.00010	5224380
Dissolved Calcium (Ca)	mg/L	120	120	5224380	5.1	0.20	5224380
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	5224380	<0.0050	0.0050	5224380
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	5224380	<0.00050	0.00050	5224380
Dissolved Copper (Cu)	mg/L	<0.0010	<0.0010	5224380	<0.0010	0.0010	5224380
Dissolved Iron (Fe)	mg/L	<0.10	<0.10	5224380	<0.10	0.10	5224380
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	5224380	<0.00050	0.00050	5224380
Dissolved Magnesium (Mg)	mg/L	13	13	5224380	2.1	0.050	5224380
Dissolved Manganese (Mn)	mg/L	<0.0020	<0.0020	5224380	0.0035	0.0020	5224380
Dissolved Molybdenum (Mo)	mg/L	<0.00050	<0.00050	5224380	0.0044	0.00050	5224380
Dissolved Nickel (Ni)	mg/L	<0.0010	<0.0010	5224380	<0.0010	0.0010	5224380
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	5224380	<0.10	0.10	5224380
Dissolved Potassium (K)	mg/L	1.0	1.0	5224380	0.46	0.20	5224380
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	5224380	<0.0020	0.0020	5224380
Dissolved Silicon (Si)	mg/L	6.0	5.9	5224380	3.5	0.050	5224380
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	5224380	<0.00010	0.00010	5224380
Dissolved Sodium (Na)	mg/L	4.3	4.3	5224380	46	0.10	5224380
Dissolved Strontium (Sr)	mg/L	0.23	0.23	5224380	0.11	0.0010	5224380
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	5224380	<0.000050	0.000050	5224380
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	5224380	<0.0050	0.0050	5224380
Dissolved Uranium (U)	mg/L	0.00063	0.00065	5224380	0.00035	0.00010	5224380
Dissolved Vanadium (V)	mg/L	<0.00050	<0.00050	5224380	<0.00050	0.00050	5224380
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	5224380	<0.0050	0.0050	5224380
Dissolved Zirconium (Zr)	mg/L	<0.0010	<0.0010	5224380	<0.0010	0.0010	5224380
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF447		FJF449		
Sampling Date		2017/10/18 12:54		2017/10/18 14:35		
COC Number		633342-01-01		633342-01-01		
	UNITS	WG-160900764- 20171018-CF11 Lab-Dup	QC Batch	WG-160900764- 20171018-RD13	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		5221456	2.02	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		5221453	90	1.0	5221453
Calculated TDS	mg/L		5221590	120	1.0	5221590
Carb. Alkalinity (calc. as CaCO3)	mg/L		5221453	1.9	1.0	5221453
Cation Sum	me/L		5221456	2.07	N/A	5221456
Hardness (CaCO3)	mg/L		5221587	45	1.0	5221587
Ion Balance (% Difference)	%		5221455	NC	N/A	5221455
Langelier Index (@ 20C)	N/A		5221588	-0.0640		5221588
Langelier Index (@ 4C)	N/A		5221589	-0.315		5221589
Saturation pH (@ 20C)	N/A		5221588	8.42		5221588
Saturation pH (@ 4C)	N/A		5221589	8.67		5221589

Inorganics

Total Ammonia-N	mg/L		5228777	<0.050	0.050	5228777
Conductivity	umho/cm		5223932	190	1.0	5223932
Dissolved Organic Carbon	mg/L		5224649	0.78	0.20	5224649
Orthophosphate (P)	mg/L	<0.010	5224854	<0.010	0.010	5224854
pH	pH		5223934	8.36		5223934
Dissolved Sulphate (SO4)	mg/L		5234269	6.3	1.0	5224853
Alkalinity (Total as CaCO3)	mg/L		5234156	92	1.0	5223924
Dissolved Chloride (Cl)	mg/L		5234268	<1.0	1.0	5224850
Nitrite (N)	mg/L		5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L		5223780	<0.10	0.10	5223780
Nitrate + Nitrite (N)	mg/L		5223780	<0.10	0.10	5223780

Metals

Dissolved Aluminum (Al)	mg/L		5224380	0.0066	0.0050	5224380
Dissolved Antimony (Sb)	mg/L		5224380	<0.00050	0.00050	5224380
Dissolved Arsenic (As)	mg/L		5224380	<0.0010	0.0010	5224380
Dissolved Barium (Ba)	mg/L		5224380	0.019	0.0020	5224380
Dissolved Beryllium (Be)	mg/L		5224380	<0.00050	0.00050	5224380

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF447		FJF449		
Sampling Date		2017/10/18 12:54		2017/10/18 14:35		
COC Number		633342-01-01		633342-01-01		
	UNITS	WG-160900764- 20171018-CF11 Lab-Dup	QC Batch	WG-160900764- 20171018-RD13	RDL	QC Batch
Dissolved Boron (B)	mg/L		5224380	0.13	0.010	5224380
Dissolved Cadmium (Cd)	mg/L		5224380	<0.00010	0.00010	5224380
Dissolved Calcium (Ca)	mg/L		5224380	9.2	0.20	5224380
Dissolved Chromium (Cr)	mg/L		5224380	<0.0050	0.0050	5224380
Dissolved Cobalt (Co)	mg/L		5224380	<0.00050	0.00050	5224380
Dissolved Copper (Cu)	mg/L		5224380	<0.0010	0.0010	5224380
Dissolved Iron (Fe)	mg/L		5224380	<0.10	0.10	5224380
Dissolved Lead (Pb)	mg/L		5224380	<0.00050	0.00050	5224380
Dissolved Magnesium (Mg)	mg/L		5224380	5.3	0.050	5224380
Dissolved Manganese (Mn)	mg/L		5224380	0.0031	0.0020	5224380
Dissolved Molybdenum (Mo)	mg/L		5224380	0.0038	0.00050	5224380
Dissolved Nickel (Ni)	mg/L		5224380	<0.0010	0.0010	5224380
Dissolved Phosphorus (P)	mg/L		5224380	<0.10	0.10	5224380
Dissolved Potassium (K)	mg/L		5224380	1.8	0.20	5224380
Dissolved Selenium (Se)	mg/L		5224380	<0.0020	0.0020	5224380
Dissolved Silicon (Si)	mg/L		5224380	4.9	0.050	5224380
Dissolved Silver (Ag)	mg/L		5224380	<0.00010	0.00010	5224380
Dissolved Sodium (Na)	mg/L		5224380	26	0.10	5224380
Dissolved Strontium (Sr)	mg/L		5224380	0.27	0.0010	5224380
Dissolved Thallium (Tl)	mg/L		5224380	<0.000050	0.000050	5224380
Dissolved Titanium (Ti)	mg/L		5224380	<0.0050	0.0050	5224380
Dissolved Uranium (U)	mg/L		5224380	<0.00010	0.00010	5224380
Dissolved Vanadium (V)	mg/L		5224380	<0.00050	0.00050	5224380
Dissolved Zinc (Zn)	mg/L		5224380	<0.0050	0.0050	5224380
Dissolved Zirconium (Zr)	mg/L		5224380	<0.0010	0.0010	5224380
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Lab-Dup = Laboratory Initiated Duplicate						

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF451		FJF453	FJF453		
Sampling Date		2017/10/18 15:03		2017/10/19 09:30	2017/10/19 09:30		
COC Number		633342-01-01		633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF14	QC Batch	WG-160900764- 20171019-RD15	WG-160900764- 20171019-RD15 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	4.41	5221456	4.96		N/A	5221456
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	190	5221453	190		1.0	5221453
Calculated TDS	mg/L	230	5221590	260		1.0	5221590
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.8	5221453	2.8		1.0	5221453
Cation Sum	me/L	4.05	5221456	4.78		N/A	5221456
Hardness (CaCO3)	mg/L	180	5221587	210		1.0	5221587
Ion Balance (% Difference)	%	4.23	5221455	1.85		N/A	5221455
Langelier Index (@ 20C)	N/A	0.579	5221588	0.582			5221588
Langelier Index (@ 4C)	N/A	0.328	5221589	0.332			5221589
Saturation pH (@ 20C)	N/A	7.63	5221588	7.62			5221588
Saturation pH (@ 4C)	N/A	7.88	5221589	7.87			5221589
Inorganics							
Total Ammonia-N	mg/L	0.064	5228777	<0.050	<0.050	0.050	5228777
Conductivity	umho/cm	370	5223932	450		1.0	5223932
Dissolved Organic Carbon	mg/L	0.79	5224649	0.89		0.20	5224649
Orthophosphate (P)	mg/L	<0.010	5224854	<0.010		0.010	5224854
pH	pH	8.21	5223934	8.20			5223934
Dissolved Sulphate (SO4)	mg/L	23	5224853	31		1.0	5224853
Alkalinity (Total as CaCO3)	mg/L	190	5223924	190		1.0	5223924
Dissolved Chloride (Cl)	mg/L	4.0	5224850	19		1.0	5224850
Nitrite (N)	mg/L	<0.010	5223780	<0.010		0.010	5223780
Nitrate (N)	mg/L	<0.10	5223780	<0.10		0.10	5223780
Nitrate + Nitrite (N)	mg/L	<0.10	5223780	<0.10		0.10	5223780
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0050	5224449	0.013		0.0050	5224380
Dissolved Antimony (Sb)	mg/L	<0.00050	5224449	<0.00050		0.00050	5224380
Dissolved Arsenic (As)	mg/L	<0.0010	5224449	<0.0010		0.0010	5224380
Dissolved Barium (Ba)	mg/L	0.069	5224449	0.071		0.0020	5224380
Dissolved Beryllium (Be)	mg/L	<0.00050	5224449	<0.00050		0.00050	5224380
Dissolved Boron (B)	mg/L	0.042	5224449	0.034		0.010	5224380

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		FJF451		FJF453	FJF453		
Sampling Date		2017/10/18 15:03		2017/10/19 09:30	2017/10/19 09:30		
COC Number		633342-01-01		633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF14	QC Batch	WG-160900764- 20171019-RD15	WG-160900764- 20171019-RD15 Lab-Dup	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.00010	5224449	<0.00010		0.00010	5224380
Dissolved Calcium (Ca)	mg/L	29	5224449	31		0.20	5224380
Dissolved Chromium (Cr)	mg/L	<0.0050	5224449	<0.0050		0.0050	5224380
Dissolved Cobalt (Co)	mg/L	<0.00050	5224449	<0.00050		0.00050	5224380
Dissolved Copper (Cu)	mg/L	<0.0010	5224449	<0.0010		0.0010	5224380
Dissolved Iron (Fe)	mg/L	<0.10	5224449	<0.10		0.10	5224380
Dissolved Lead (Pb)	mg/L	<0.00050	5224449	<0.00050		0.00050	5224380
Dissolved Magnesium (Mg)	mg/L	26	5224449	32		0.050	5224380
Dissolved Manganese (Mn)	mg/L	0.058	5224449	0.023		0.0020	5224380
Dissolved Molybdenum (Mo)	mg/L	0.0017	5224449	0.0028		0.00050	5224380
Dissolved Nickel (Ni)	mg/L	<0.0010	5224449	<0.0010		0.0010	5224380
Dissolved Phosphorus (P)	mg/L	<0.10	5224449	0.10		0.10	5224380
Dissolved Potassium (K)	mg/L	2.2	5224449	3.1		0.20	5224380
Dissolved Selenium (Se)	mg/L	<0.0020	5224449	<0.0020		0.0020	5224380
Dissolved Silicon (Si)	mg/L	8.0	5224449	9.6		0.050	5224380
Dissolved Silver (Ag)	mg/L	<0.00010	5224449	<0.00010		0.00010	5224380
Dissolved Sodium (Na)	mg/L	9.6	5224449	12		0.10	5224380
Dissolved Strontium (Sr)	mg/L	0.59	5224449	0.58		0.0010	5224380
Dissolved Thallium (Tl)	mg/L	<0.000050	5224449	<0.000050		0.000050	5224380
Dissolved Titanium (Ti)	mg/L	<0.0050	5224449	<0.0050		0.0050	5224380
Dissolved Uranium (U)	mg/L	0.00023	5224449	0.00098		0.00010	5224380
Dissolved Vanadium (V)	mg/L	<0.00050	5224449	<0.00050		0.00050	5224380
Dissolved Zinc (Zn)	mg/L	<0.0050	5224449	<0.0050		0.0050	5224380
Dissolved Zirconium (Zr)	mg/L	<0.0010	5224449	<0.0010		0.0010	5224380

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

RESULTS OF ANALYSES OF WATER

Maxxam ID		FJF443	FJF445	FJF447	FJF449		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35	2017/10/18 12:54	2017/10/18 14:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD12	WG-160900764- 20171018-CF11	WG-160900764- 20171018-RD13	RDL	QC Batch

Inorganics							
Acidity	mg/L	12	13	<5.0	<5.0	5.0	5232793
Total Dissolved Solids	mg/L	480	445	255	115	10	5226003
Fluoride (F-)	mg/L	<0.10	<0.10	1.3	0.81	0.10	5223930
Total Organic Carbon (TOC)	mg/L	0.90	0.90	1.9	0.83	0.20	5228881
Total Suspended Solids	mg/L	<10	<10	90	<10	10	5226002
Turbidity	NTU	1.0	1.1	210	11	0.1	5223350
WAD Cyanide (Free)	ug/L	<1	<1	<1	<1	1	5222618

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FJF449	FJF451	FJF453	FJF453		
Sampling Date		2017/10/18 14:35	2017/10/18 15:03	2017/10/19 09:30	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD13 Lab-Dup	WG-160900764- 20171018-CF14	WG-160900764- 20171019-RD15	WG-160900764- 20171019-RD15 Lab-Dup	RDL	QC Batch

Inorganics							
Acidity	mg/L		<5.0	<5.0		5.0	5232793
Total Dissolved Solids	mg/L	125	145	205		10	5226003
Fluoride (F-)	mg/L		0.30	0.30		0.10	5223930
Total Organic Carbon (TOC)	mg/L		0.85	0.91		0.20	5228881
Total Suspended Solids	mg/L		<10	26	25	10	5226002
Turbidity	NTU		3.0	2.2		0.1	5223350
WAD Cyanide (Free)	ug/L		<1	<1		1	5222618

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FJF443		FJF445		FJF447		
Sampling Date		2017/10/18 09:35		2017/10/18 09:35		2017/10/18 12:54		
COC Number		633342-01-01		633342-01-01		633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	QC Batch	WG-160900764- 20171018-RD12	QC Batch	WG-160900764- 20171018-CF11	RDL	QC Batch

Metals								
Chromium (VI)	ug/L	0.81	5226437	0.87	5226437	<0.50	0.50	5226437
Mercury (Hg)	ug/L	<0.1	5226290	<0.1	5227555	<0.1	0.1	5226290
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								

Maxxam ID		FJF449	FJF451	FJF453		
Sampling Date		2017/10/18 14:35	2017/10/18 15:03	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD13	WG-160900764- 20171018-CF14	WG-160900764- 20171019-RD15	RDL	QC Batch

Metals						
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	0.50	5226437
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	0.1	5226290
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

VOLATILE ORGANICS BY GC/MS (WATER)

Maxxam ID		FJF455		
Sampling Date		2017/10/19		
COC Number		633342-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	5222393
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	5224731
Benzene	ug/L	<0.20	0.20	5224731
Bromodichloromethane	ug/L	<0.50	0.50	5224731
Bromoform	ug/L	<1.0	1.0	5224731
Bromomethane	ug/L	<0.50	0.50	5224731
Carbon Tetrachloride	ug/L	<0.20	0.20	5224731
Chlorobenzene	ug/L	<0.20	0.20	5224731
Chloroform	ug/L	<0.20	0.20	5224731
Dibromochloromethane	ug/L	<0.50	0.50	5224731
1,2-Dichlorobenzene	ug/L	<0.50	0.50	5224731
1,3-Dichlorobenzene	ug/L	<0.50	0.50	5224731
1,4-Dichlorobenzene	ug/L	<0.50	0.50	5224731
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	5224731
1,1-Dichloroethane	ug/L	<0.20	0.20	5224731
1,2-Dichloroethane	ug/L	<0.50	0.50	5224731
1,1-Dichloroethylene	ug/L	<0.20	0.20	5224731
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	5224731
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	5224731
1,2-Dichloropropane	ug/L	<0.20	0.20	5224731
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	5224731
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	5224731
Ethylbenzene	ug/L	<0.20	0.20	5224731
Ethylene Dibromide	ug/L	<0.20	0.20	5224731
Hexane	ug/L	<1.0	1.0	5224731
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	5224731
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	5224731
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	5224731
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	5224731
Styrene	ug/L	<0.50	0.50	5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

VOLATILE ORGANICS BY GC/MS (WATER)

Maxxam ID		FJF455		
Sampling Date		2017/10/19		
COC Number		633342-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	5224731
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	5224731
Tetrachloroethylene	ug/L	<0.20	0.20	5224731
Toluene	ug/L	<0.20	0.20	5224731
1,1,1-Trichloroethane	ug/L	<0.20	0.20	5224731
1,1,2-Trichloroethane	ug/L	<0.50	0.50	5224731
Trichloroethylene	ug/L	<0.20	0.20	5224731
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	5224731
Vinyl Chloride	ug/L	<0.20	0.20	5224731
p+m-Xylene	ug/L	<0.20	0.20	5224731
o-Xylene	ug/L	<0.20	0.20	5224731
Total Xylenes	ug/L	<0.20	0.20	5224731
F1 (C6-C10)	ug/L	<25	25	5224731
F1 (C6-C10) - BTEX	ug/L	<25	25	5224731
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	87		5224731
D4-1,2-Dichloroethane	%	124		5224731
D8-Toluene	%	90		5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 PCBs (WATER)

Maxxam ID		FJF443	FJF445	FJF447	FJF449		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35	2017/10/18 12:54	2017/10/18 14:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD12	WG-160900764- 20171018-CF11	WG-160900764- 20171018-RD13	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5227890

Surrogate Recovery (%)							
Decachlorobiphenyl	%	87	92	94	79		5227890

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FJF451	FJF453		
Sampling Date		2017/10/18 15:03	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF14	WG-160900764- 20171019-RD15	RDL	QC Batch

PCBs					
Aroclor 1242	ug/L	<0.05	<0.05	0.05	5227890
Aroclor 1248	ug/L	<0.05	<0.05	0.05	5227890
Aroclor 1254	ug/L	<0.05	<0.05	0.05	5227890
Aroclor 1260	ug/L	<0.05	<0.05	0.05	5227890
Total PCB	ug/L	<0.05	<0.05	0.05	5227890

Surrogate Recovery (%)					
Decachlorobiphenyl	%	84	90		5227890

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJF443		FJF445	FJF447		
Sampling Date		2017/10/18 09:35		2017/10/18 09:35	2017/10/18 12:54		
COC Number		633342-01-01		633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	QC Batch	WG-160900764- 20171018-RD12	WG-160900764- 20171018-CF11	RDL	QC Batch

Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	5221980	<0.50	<0.50	0.50	5222646
Volatile Organics							
Acetone (2-Propanone)	ug/L	<10	5224731	<10	<10	10	5224731
Benzene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Bromodichloromethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Bromoform	ug/L	<1.0	5224731	<1.0	<1.0	1.0	5224731
Bromomethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Carbon Tetrachloride	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Chlorobenzene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Chloroform	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Dibromochloromethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,2-Dichlorobenzene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,3-Dichlorobenzene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,4-Dichlorobenzene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	5224731	<1.0	<1.0	1.0	5224731
1,1-Dichloroethane	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
1,2-Dichloroethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,1-Dichloroethylene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
cis-1,2-Dichloroethylene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
trans-1,2-Dichloroethylene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,2-Dichloropropane	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
cis-1,3-Dichloropropane	ug/L	<0.30	5224731	<0.30	<0.30	0.30	5224731
trans-1,3-Dichloropropane	ug/L	<0.40	5224731	<0.40	<0.40	0.40	5224731
Ethylbenzene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Ethylene Dibromide	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Hexane	ug/L	<1.0	5224731	<1.0	<1.0	1.0	5224731
Methylene Chloride(Dichloromethane)	ug/L	<2.0	5224731	<2.0	<2.0	2.0	5224731
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	5224731	<10	<10	10	5224731
Methyl Isobutyl Ketone	ug/L	<5.0	5224731	<5.0	<5.0	5.0	5224731
Methyl t-butyl ether (MTBE)	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJF443		FJF445	FJF447		
Sampling Date		2017/10/18 09:35		2017/10/18 09:35	2017/10/18 12:54		
COC Number		633342-01-01		633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	QC Batch	WG-160900764- 20171018-RD12	WG-160900764- 20171018-CF11	RDL	QC Batch
Styrene	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,1,1,2-Tetrachloroethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
1,1,2,2-Tetrachloroethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Tetrachloroethylene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Toluene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
1,1,1-Trichloroethane	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
1,1,2-Trichloroethane	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Trichloroethylene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	5224731	<0.50	<0.50	0.50	5224731
Vinyl Chloride	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
p+m-Xylene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
o-Xylene	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
Total Xylenes	ug/L	<0.20	5224731	<0.20	<0.20	0.20	5224731
F1 (C6-C10)	ug/L	<25	5224731	<25	<25	25	5224731
F1 (C6-C10) - BTEX	ug/L	<25	5224731	<25	<25	25	5224731
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	5228604	<100	<100	100	5228604
F3 (C16-C34 Hydrocarbons)	ug/L	<200	5228604	<200	<200	200	5228604
F4 (C34-C50 Hydrocarbons)	ug/L	<200	5228604	<200	<200	200	5228604
Reached Baseline at C50	ug/L	Yes	5228604	Yes	Yes		5228604
Surrogate Recovery (%)							
o-Terphenyl	%	98	5228604	102	98		5228604
4-Bromofluorobenzene	%	88	5224731	88	88		5224731
D4-1,2-Dichloroethane	%	123	5224731	123	123		5224731
D8-Toluene	%	90	5224731	89	89		5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJF449	FJF451	FJF453		
Sampling Date		2017/10/18 14:35	2017/10/18 15:03	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD13	WG-160900764- 20171018-CF14	WG-160900764- 20171019-RD15	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5222646
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5224731
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5224731
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5224731
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5224731
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5224731
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5224731
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5224731
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5224731
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5224731
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5224731

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJF449	FJF451	FJF453		
Sampling Date		2017/10/18 14:35	2017/10/18 15:03	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD13	WG-160900764- 20171018-CF14	WG-160900764- 20171019-RD15	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5224731
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5224731
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5224731
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5224731
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5224731
F1 (C6-C10)	ug/L	<25	<25	<25	25	5224731
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5224731
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5228604
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5228604
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5228604
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5228604
Surrogate Recovery (%)						
o-Terphenyl	%	99	102	100		5228604
4-Bromofluorobenzene	%	88	87	87		5224731
D4-1,2-Dichloroethane	%	122	127	126		5224731
D8-Toluene	%	90	90	90		5224731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF443	FJF444	FJF445	FJF446		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35	2017/10/18 09:35	2017/10/18 09:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD11A	WG-160900764- 20171018-RD12	WG-160900764- 20171018-RD12A	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5228066
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5228066
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5228066
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF443	FJF444	FJF445	FJF446		
Sampling Date		2017/10/18 09:35	2017/10/18 09:35	2017/10/18 09:35	2017/10/18 09:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-RD11	WG-160900764- 20171018-RD11A	WG-160900764- 20171018-RD12	WG-160900764- 20171018-RD12A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5228066
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5221594
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	63	72	57	51		5228066
2-Fluorobiphenyl	%	83	50	60	43 (1)		5228066
D14-Terphenyl (FS)	%	101	15 (1)	101	11 (1)		5228066
D5-Nitrobenzene	%	88	74	83	62		5228066
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF447	FJF448	FJF449	FJF450		
Sampling Date		2017/10/18 12:54	2017/10/18 12:54	2017/10/18 14:35	2017/10/18 14:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF11	WG-160900764- 20171018-CF11A	WG-160900764- 20171018-RD13	WG-160900764- 20171018-RD13A	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5228066
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5228066
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5228066
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF447	FJF448	FJF449	FJF450		
Sampling Date		2017/10/18 12:54	2017/10/18 12:54	2017/10/18 14:35	2017/10/18 14:35		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF11	WG-160900764- 20171018-CF11A	WG-160900764- 20171018-RD13	WG-160900764- 20171018-RD13A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5228066
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5221594
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	67	63	59	78		5228066
2-Fluorobiphenyl	%	64	54	44 (1)	50		5228066
D14-Terphenyl (FS)	%	100	16 (1)	102	15 (1)		5228066
D5-Nitrobenzene	%	90	85	61	77		5228066
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF451	FJF452	FJF453	FJF454		
Sampling Date		2017/10/18 15:03	2017/10/18 15:03	2017/10/19 09:30	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF14	WG-160900764- 20171018-CF14A	WG-160900764- 20171019-RD15	WG-160900764- 20171019-RD15A	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5228066
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5228066
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5228066
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5228066
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF451	FJF452	FJF453	FJF454		
Sampling Date		2017/10/18 15:03	2017/10/18 15:03	2017/10/19 09:30	2017/10/19 09:30		
COC Number		633342-01-01	633342-01-01	633342-01-01	633342-01-01		
	UNITS	WG-160900764- 20171018-CF14	WG-160900764- 20171018-CF14A	WG-160900764- 20171019-RD15	WG-160900764- 20171019-RD15A	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5228066
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5228066
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5228066
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5228066
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5228066
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5221594
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	62	51	62	57		5228066
2-Fluorobiphenyl	%	82	45 (1)	56	43 (1)		5228066
D14-Terphenyl (FS)	%	100	16 (1)	100	14 (1)		5228066
D5-Nitrobenzene	%	86	71	75	76		5228066
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF455	FJH851		FJH853		
Sampling Date		2017/10/19	2017/10/19		2017/10/19		
COC Number		633342-01-01	633342-01-01		633342-01-01		
	UNITS	TRIP BLANK	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	0.1	37 (1)	1	5228066
1-Methylnaphthalene	ug/L	<0.2	<0.2	0.2	70	1	5228066
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	0.2	100	1	5228066
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	0.2	93	1	5228066
2,4-Dichlorophenol	ug/L	<0.1	<0.1	0.1	81	1	5228066
2,4-Dimethylphenol	ug/L	<0.5	<0.5	0.5	37	1	5228066
2,4-Dinitrophenol	ug/L	<2	<2	2	89	1	5228066
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	0.3	97	1	5228066
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	0.3	95	1	5228066
2-Chlorophenol	ug/L	<0.1	<0.1	0.1	78	1	5228066
2-Methylnaphthalene	ug/L	<0.2	<0.2	0.2	65	1	5228066
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	0.5	75	1	5228066
Acenaphthene	ug/L	<0.2	<0.2	0.2	82	1	5228066
Acenaphthylene	ug/L	<0.2	<0.2	0.2	81	1	5228066
Anthracene	ug/L	<0.05	<0.05	0.05	63	1	5228066
Benzo(a)anthracene	ug/L	<0.05	<0.05	0.05	60	1	5228066
Benzo(a)pyrene	ug/L	<0.01	<0.01	0.01	55	1	5228066
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	0.05	59	1	5228066
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	0.05	47 (1)	1	5228066
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	0.05	60	1	5228066
Biphenyl	ug/L	<0.1	<0.1	0.1	73	1	5228066
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	0.5	78	1	5228066
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	0.5	78	1	5228066
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	1	37 (1)	1	5228066
Chrysene	ug/L	<0.05	<0.05	0.05	63	1	5228066
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	0.1	51	1	5228066
Diethyl phthalate	ug/L	<0.1	<0.1	0.1	89	1	5228066
Dimethyl phthalate	ug/L	<0.1	<0.1	0.1	99	1	5228066
Fluoranthene	ug/L	<0.2	<0.2	0.2	66	1	5228066
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJF455	FJH851		FJH853		
Sampling Date		2017/10/19	2017/10/19		2017/10/19		
COC Number		633342-01-01	633342-01-01		633342-01-01		
	UNITS	TRIP BLANK	FILTERED BLANK	RDL	FILTERED SPIKE	RDL	QC Batch
Fluorene	ug/L	<0.2	<0.2	0.2	84	1	5228066
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	0.1	44 (1)	1	5228066
Naphthalene	ug/L	<0.2	<0.2	0.2	57	1	5228066
p-Chloroaniline	ug/L	<1	<1	1	80	1	5228066
Pentachlorophenol	ug/L	<0.1	<0.1	0.1	80	1	5228066
Phenanthrene	ug/L	<0.1	<0.1	0.1	77	1	5228066
Phenol	ug/L	<0.5	<0.5	0.5	36	1	5228066
Pyrene	ug/L	<0.05	<0.05	0.05	70	1	5228066
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	0.28			5221594
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	67	59		97		5228066
2-Fluorobiphenyl	%	55	71		65		5228066
D14-Terphenyl (FS)	%	100	14 (2)		54		5228066
D5-Nitrobenzene	%	80	82		85		5228066
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. (2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

TEST SUMMARY

Maxxam ID: FJF443
Sample ID: WG-160900764-20171018-RD11
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221980	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224850	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224380	N/A	2017/10/23	John Bowman
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224853	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJF444
Sample ID: WG-160900764-20171018-RD11A
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

TEST SUMMARY

Maxxam ID: FJF445
Sample ID: WG-160900764-20171018-RD12
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5222646	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224850	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5227555	2017/10/24	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224380	N/A	2017/10/23	John Bowman
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224853	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJF446
Sample ID: WG-160900764-20171018-RD12A
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

TEST SUMMARY

Maxxam ID: FJF447
Sample ID: WG-160900764-20171018-CF11
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5234156	N/A	2017/10/27	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5222646	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5234268	N/A	2017/10/27	Alina Dobreanu
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224380	N/A	2017/10/21	John Bowman
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5234269	N/A	2017/10/27	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJF447 Dup
Sample ID: WG-160900764-20171018-CF11
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu

TEST SUMMARY

Maxxam ID: FJF448
Sample ID: WG-160900764-20171018-CF11A
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

Maxxam ID: FJF449
Sample ID: WG-160900764-20171018-RD13
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5222646	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224850	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224380	N/A	2017/10/21	John Bowman
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224853	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

TEST SUMMARY

Maxxam ID: FJF449 Dup
Sample ID: WG-160900764-20171018-RD13
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang

Maxxam ID: FJF450
Sample ID: WG-160900764-20171018-RD13A
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

Maxxam ID: FJF451
Sample ID: WG-160900764-20171018-CF14
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5222646	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224850	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224449	N/A	2017/10/23	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224853	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov

TEST SUMMARY

Maxxam ID: FJF451
Sample ID: WG-160900764-20171018-CF14
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJF452
Sample ID: WG-160900764-20171018-CF14A
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

Maxxam ID: FJF453
Sample ID: WG-160900764-20171019-RD15
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5222646	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224850	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5226437	N/A	2017/10/25	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228604	2017/10/24	2017/10/25	Atoosa Keshavarz
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5224380	N/A	2017/10/21	John Bowman
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5227890	2017/10/24	2017/10/25	Dawn Alarie
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224854	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224853	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk

TEST SUMMARY

Maxxam ID: FJF453
Sample ID: WG-160900764-20171019-RD15
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228881	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJF453 Dup
Sample ID: WG-160900764-20171019-RD15
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	5228777	N/A	2017/10/26	Charles Opoku-Ware
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang

Maxxam ID: FJF454
Sample ID: WG-160900764-20171019-RD15A
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

Maxxam ID: FJF455
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic
1,3-Dichloropropene Sum	CALC	5222393	N/A	2017/10/24	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5224731	N/A	2017/10/24	Denis Reid

Maxxam ID: FJH851
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5221594	N/A	2017/10/25	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

Maxxam Job #: B7N2183
Report Date: 2017/10/30

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: FJH853
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	5228066	2017/10/24	2017/10/25	Milijana Avramovic

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.3°C
Package 2	7.3°C
Package 3	6.7°C
Package 4	5.7°C

Sample FJF443 [WG-160900764-20171018-RD11] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJF445 [WG-160900764-20171018-RD12] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJF447 [WG-160900764-20171018-CF11] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Elevated ion balance result was confirmed by re-analysis.

Sample FJH853 [FILTERED SPIKE] : ABN analysis: Data are reported as percentage recoveries.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224731	4-Bromofluorobenzene	2017/10/24	98	70 - 130	100	70 - 130	89	%				
5224731	D4-1,2-Dichloroethane	2017/10/24	111	70 - 130	110	70 - 130	119	%				
5224731	D8-Toluene	2017/10/24	105	70 - 130	106	70 - 130	90	%				
5227890	Decachlorobiphenyl	2017/10/25	103	60 - 130	93	60 - 130	85	%				
5228066	2,4,6-Tribromophenol	2017/10/25			101	50 - 130	62	%				
5228066	2-Fluorobiphenyl	2017/10/25			72	50 - 130	80	%				
5228066	D14-Terphenyl (FS)	2017/10/25			99	50 - 130	97	%				
5228066	D5-Nitrobenzene	2017/10/25			96	50 - 130	90	%				
5228604	o-Terphenyl	2017/10/25	100	60 - 130	106	60 - 130	103	%				
5222618	WAD Cyanide (Free)	2017/10/25	97	80 - 120	101	80 - 120	<1	ug/L	NC	20		
5223350	Turbidity	2017/10/21			101	85 - 115	<0.1	NTU	NC	20		
5223780	Nitrate (N)	2017/10/24	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.41	20		
5223780	Nitrite (N)	2017/10/24	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
5223924	Alkalinity (Total as CaCO3)	2017/10/22			97	85 - 115	<1.0	mg/L	0.33	20		
5223930	Fluoride (F-)	2017/10/22	107	80 - 120	105	80 - 120	<0.10	mg/L	1.9	20		
5223932	Conductivity	2017/10/22			101	85 - 115	<1.0	umho/cm	0.34	25		
5223934	pH	2017/10/22			101	98 - 103			0.025	N/A		
5224380	Dissolved Aluminum (Al)	2017/10/21	107	80 - 120	99	80 - 120	<0.0050	mg/L				
5224380	Dissolved Antimony (Sb)	2017/10/21	109	80 - 120	105	80 - 120	<0.00050	mg/L				
5224380	Dissolved Arsenic (As)	2017/10/21	104	80 - 120	100	80 - 120	<0.0010	mg/L				
5224380	Dissolved Barium (Ba)	2017/10/21	101	80 - 120	96	80 - 120	<0.0020	mg/L				
5224380	Dissolved Beryllium (Be)	2017/10/21	110	80 - 120	101	80 - 120	<0.00050	mg/L				
5224380	Dissolved Boron (B)	2017/10/21	108	80 - 120	99	80 - 120	<0.010	mg/L				
5224380	Dissolved Cadmium (Cd)	2017/10/21	102	80 - 120	101	80 - 120	<0.00010	mg/L				
5224380	Dissolved Calcium (Ca)	2017/10/21	NC	80 - 120	96	80 - 120	<0.20	mg/L				
5224380	Dissolved Chromium (Cr)	2017/10/21	98	80 - 120	94	80 - 120	<0.0050	mg/L				
5224380	Dissolved Cobalt (Co)	2017/10/21	106	80 - 120	99	80 - 120	<0.00050	mg/L				
5224380	Dissolved Copper (Cu)	2017/10/21	108	80 - 120	99	80 - 120	<0.0010	mg/L				
5224380	Dissolved Iron (Fe)	2017/10/21	102	80 - 120	100	80 - 120	<0.10	mg/L				
5224380	Dissolved Lead (Pb)	2017/10/21	96	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224380	Dissolved Magnesium (Mg)	2017/10/21	NC	80 - 120	98	80 - 120	<0.050	mg/L				
5224380	Dissolved Manganese (Mn)	2017/10/21	99	80 - 120	97	80 - 120	<0.0020	mg/L				
5224380	Dissolved Molybdenum (Mo)	2017/10/21	107	80 - 120	99	80 - 120	<0.00050	mg/L				
5224380	Dissolved Nickel (Ni)	2017/10/21	97	80 - 120	97	80 - 120	<0.0010	mg/L				
5224380	Dissolved Phosphorus (P)	2017/10/21	109	80 - 120	115	80 - 120	<0.10	mg/L				
5224380	Dissolved Potassium (K)	2017/10/21	105	80 - 120	99	80 - 120	<0.20	mg/L				
5224380	Dissolved Selenium (Se)	2017/10/21	100	80 - 120	100	80 - 120	<0.0020	mg/L				
5224380	Dissolved Silicon (Si)	2017/10/21	111	80 - 120	100	80 - 120	<0.050	mg/L				
5224380	Dissolved Silver (Ag)	2017/10/21	84	80 - 120	98	80 - 120	<0.00010	mg/L				
5224380	Dissolved Sodium (Na)	2017/10/21	NC	80 - 120	98	80 - 120	<0.10	mg/L				
5224380	Dissolved Strontium (Sr)	2017/10/21	NC	80 - 120	100	80 - 120	<0.0010	mg/L				
5224380	Dissolved Thallium (Tl)	2017/10/21	95	80 - 120	104	80 - 120	<0.000050	mg/L				
5224380	Dissolved Titanium (Ti)	2017/10/21	107	80 - 120	100	80 - 120	<0.0050	mg/L				
5224380	Dissolved Uranium (U)	2017/10/21	98	80 - 120	100	80 - 120	<0.00010	mg/L				
5224380	Dissolved Vanadium (V)	2017/10/21	100	80 - 120	92	80 - 120	<0.00050	mg/L				
5224380	Dissolved Zinc (Zn)	2017/10/21	97	80 - 120	99	80 - 120	<0.0050	mg/L				
5224380	Dissolved Zirconium (Zr)	2017/10/21	109	80 - 120	99	80 - 120	<0.0010	mg/L				
5224449	Dissolved Aluminum (Al)	2017/10/23	86	80 - 120	94	80 - 120	<0.0050	mg/L	NC	20		
5224449	Dissolved Antimony (Sb)	2017/10/23	94	80 - 120	99	80 - 120	<0.00050	mg/L	6.8	20		
5224449	Dissolved Arsenic (As)	2017/10/23	89	80 - 120	96	80 - 120	<0.0010	mg/L	6.0	20		
5224449	Dissolved Barium (Ba)	2017/10/23	86	80 - 120	93	80 - 120	<0.0020	mg/L	7.5	20		
5224449	Dissolved Beryllium (Be)	2017/10/23	89	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
5224449	Dissolved Boron (B)	2017/10/23	87	80 - 120	94	80 - 120	<0.010	mg/L	3.7	20		
5224449	Dissolved Cadmium (Cd)	2017/10/23	89	80 - 120	97	80 - 120	<0.00010	mg/L	9.5	20		
5224449	Dissolved Calcium (Ca)	2017/10/23	NC	80 - 120	95	80 - 120	<0.20	mg/L	0.32	20		
5224449	Dissolved Chromium (Cr)	2017/10/23	86	80 - 120	95	80 - 120	<0.0050	mg/L	NC	20		
5224449	Dissolved Cobalt (Co)	2017/10/23	85	80 - 120	94	80 - 120	<0.00050	mg/L	4.7	20		
5224449	Dissolved Copper (Cu)	2017/10/23	87	80 - 120	95	80 - 120	<0.0010	mg/L	1.2	20		
5224449	Dissolved Iron (Fe)	2017/10/23	88	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
5224449	Dissolved Lead (Pb)	2017/10/23	86	80 - 120	92	80 - 120	<0.00050	mg/L	NC	20		
5224449	Dissolved Magnesium (Mg)	2017/10/23	NC	80 - 120	96	80 - 120	<0.050	mg/L	1.5	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224449	Dissolved Manganese (Mn)	2017/10/23	NC	80 - 120	94	80 - 120	<0.0020	mg/L	3.0	20		
5224449	Dissolved Molybdenum (Mo)	2017/10/23	93	80 - 120	96	80 - 120	<0.00050	mg/L	2.5	20		
5224449	Dissolved Nickel (Ni)	2017/10/23	85	80 - 120	94	80 - 120	<0.0010	mg/L	3.6	20		
5224449	Dissolved Phosphorus (P)	2017/10/23	88	80 - 120	104	80 - 120	<0.10	mg/L	0.94	20		
5224449	Dissolved Potassium (K)	2017/10/23	87	80 - 120	96	80 - 120	<0.20	mg/L	2.0	20		
5224449	Dissolved Selenium (Se)	2017/10/23	89	80 - 120	94	80 - 120	<0.0020	mg/L	1.4	20		
5224449	Dissolved Silicon (Si)	2017/10/23	87	80 - 120	94	80 - 120	<0.050	mg/L	0.049	20		
5224449	Dissolved Silver (Ag)	2017/10/23	70 (1)	80 - 120	93	80 - 120	<0.00010	mg/L	NC	20		
5224449	Dissolved Sodium (Na)	2017/10/23	NC	80 - 120	95	80 - 120	<0.10	mg/L	0.97	20		
5224449	Dissolved Strontium (Sr)	2017/10/23	NC	80 - 120	95	80 - 120	<0.0010	mg/L	1.4	20		
5224449	Dissolved Thallium (Tl)	2017/10/23	86	80 - 120	92	80 - 120	<0.000050	mg/L	NC	20		
5224449	Dissolved Titanium (Ti)	2017/10/23	88	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
5224449	Dissolved Uranium (U)	2017/10/23	86	80 - 120	90	80 - 120	<0.00010	mg/L	0.015	20		
5224449	Dissolved Vanadium (V)	2017/10/23	86	80 - 120	94	80 - 120	<0.00050	mg/L	6.1	20		
5224449	Dissolved Zinc (Zn)	2017/10/23	87	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
5224449	Dissolved Zirconium (Zr)	2017/10/23	94	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
5224649	Dissolved Organic Carbon	2017/10/21	91	80 - 120	96	80 - 120	0.23, RDL=0.20	mg/L	0.97	20		
5224731	1,1,1,2-Tetrachloroethane	2017/10/24	105	70 - 130	108	70 - 130	<0.50	ug/L	NC	30		
5224731	1,1,1-Trichloroethane	2017/10/24	95	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	1,1,2,2-Tetrachloroethane	2017/10/24	109	70 - 130	109	70 - 130	<0.50	ug/L	NC	30		
5224731	1,1,2-Trichloroethane	2017/10/24	105	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
5224731	1,1-Dichloroethane	2017/10/24	106	70 - 130	110	70 - 130	<0.20	ug/L	NC	30		
5224731	1,1-Dichloroethylene	2017/10/24	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5224731	1,2-Dichlorobenzene	2017/10/24	89	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
5224731	1,2-Dichloroethane	2017/10/24	103	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
5224731	1,2-Dichloropropane	2017/10/24	97	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	1,3-Dichlorobenzene	2017/10/24	88	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
5224731	1,4-Dichlorobenzene	2017/10/24	84	70 - 130	85	70 - 130	<0.50	ug/L	NC	30		
5224731	Acetone (2-Propanone)	2017/10/24	107	60 - 140	103	60 - 140	<10	ug/L	NC	30		
5224731	Benzene	2017/10/24	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224731	Bromodichloromethane	2017/10/24	100	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5224731	Bromoform	2017/10/24	109	70 - 130	109	70 - 130	<1.0	ug/L	NC	30		
5224731	Bromomethane	2017/10/24	107	60 - 140	110	60 - 140	<0.50	ug/L	NC	30		
5224731	Carbon Tetrachloride	2017/10/24	94	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5224731	Chlorobenzene	2017/10/24	90	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5224731	Chloroform	2017/10/24	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5224731	cis-1,2-Dichloroethylene	2017/10/24	98	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5224731	cis-1,3-Dichloropropene	2017/10/24	84	70 - 130	83	70 - 130	<0.30	ug/L	NC	30		
5224731	Dibromochloromethane	2017/10/24	106	70 - 130	107	70 - 130	<0.50	ug/L	NC	30		
5224731	Dichlorodifluoromethane (FREON 12)	2017/10/24	110	60 - 140	116	60 - 140	<1.0	ug/L	NC	30		
5224731	Ethylbenzene	2017/10/24	79	70 - 130	81	70 - 130	<0.20	ug/L	NC	30		
5224731	Ethylene Dibromide	2017/10/24	108	70 - 130	107	70 - 130	<0.20	ug/L	NC	30		
5224731	F1 (C6-C10) - BTEX	2017/10/24					<25	ug/L	NC	30		
5224731	F1 (C6-C10)	2017/10/24	97	60 - 140	92	60 - 140	<25	ug/L	NC	30		
5224731	Hexane	2017/10/24	97	70 - 130	101	70 - 130	<1.0	ug/L	NC	30		
5224731	Methyl Ethyl Ketone (2-Butanone)	2017/10/24	111	60 - 140	107	60 - 140	<10	ug/L	NC	30		
5224731	Methyl Isobutyl Ketone	2017/10/24	97	70 - 130	94	70 - 130	<5.0	ug/L	NC	30		
5224731	Methyl t-butyl ether (MTBE)	2017/10/24	89	70 - 130	87	70 - 130	<0.50	ug/L	0.64	30		
5224731	Methylene Chloride(Dichloromethane)	2017/10/24	118	70 - 130	120	70 - 130	<2.0	ug/L	NC	30		
5224731	o-Xylene	2017/10/24	82	70 - 130	84	70 - 130	<0.20	ug/L	NC	30		
5224731	p+m-Xylene	2017/10/24	79	70 - 130	82	70 - 130	<0.20	ug/L	NC	30		
5224731	Styrene	2017/10/24	82	70 - 130	84	70 - 130	<0.50	ug/L	NC	30		
5224731	Tetrachloroethylene	2017/10/24	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5224731	Toluene	2017/10/24	92	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5224731	Total Xylenes	2017/10/24					<0.20	ug/L	NC	30		
5224731	trans-1,2-Dichloroethylene	2017/10/24	96	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5224731	trans-1,3-Dichloropropene	2017/10/24	94	70 - 130	93	70 - 130	<0.40	ug/L	NC	30		
5224731	Trichloroethylene	2017/10/24	90	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5224731	Trichlorofluoromethane (FREON 11)	2017/10/24	100	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
5224731	Vinyl Chloride	2017/10/24	107	70 - 130	112	70 - 130	<0.20	ug/L	NC	30		
5224850	Dissolved Chloride (Cl)	2017/10/23	107	80 - 120	101	80 - 120	<1.0	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224853	Dissolved Sulphate (SO4)	2017/10/23	NC	75 - 125	100	80 - 120	<1.0	mg/L				
5224854	Orthophosphate (P)	2017/10/23	96	75 - 125	98	80 - 120	<0.010	mg/L	8.0	25		
5226002	Total Suspended Solids	2017/10/23					<10	mg/L	3.9	25	100	85 - 115
5226003	Total Dissolved Solids	2017/10/24					<10	mg/L	8.3	25	95	90 - 110
5226290	Mercury (Hg)	2017/10/25	101	75 - 125	98	80 - 120	<0.1	ug/L	NC	20		
5226437	Chromium (VI)	2017/10/25	99	80 - 120	102	80 - 120	<0.50	ug/L	NC	20		
5227555	Mercury (Hg)	2017/10/25	99	75 - 125	95	80 - 120	<0.1	ug/L	NC	20		
5227890	Aroclor 1242	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1248	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1254	2017/10/25					<0.05	ug/L	NC	30		
5227890	Aroclor 1260	2017/10/25	116	60 - 130	97	60 - 130	<0.05	ug/L	NC	30		
5227890	Total PCB	2017/10/25	116	60 - 130	97	60 - 130	<0.05	ug/L	NC	40		
5228066	1,2,4-Trichlorobenzene	2017/10/25			56	40 - 130	<0.1	ug/L	10	30		
5228066	1-Methylnaphthalene	2017/10/25			88	50 - 130	<0.2	ug/L	0.14	30		
5228066	2,4,5-Trichlorophenol	2017/10/25			104	50 - 130	<0.2	ug/L	1.8	30		
5228066	2,4,6-Trichlorophenol	2017/10/25			97	50 - 130	<0.2	ug/L	3.3	30		
5228066	2,4-Dichlorophenol	2017/10/25			88	50 - 130	<0.1	ug/L	0.76	30		
5228066	2,4-Dimethylphenol	2017/10/25			60	30 - 130	<0.5	ug/L	2.4	30		
5228066	2,4-Dinitrophenol	2017/10/25			92	30 - 130	<2	ug/L	11	30		
5228066	2,4-Dinitrotoluene	2017/10/25			101	50 - 130	<0.3	ug/L	0.53	30		
5228066	2,6-Dinitrotoluene	2017/10/25			98	50 - 130	<0.3	ug/L	1.8	30		
5228066	2-Chlorophenol	2017/10/25			84	50 - 130	<0.1	ug/L	0.89	30		
5228066	2-Methylnaphthalene	2017/10/25			84	50 - 130	<0.2	ug/L	0.060	30		
5228066	3,3'-Dichlorobenzidine	2017/10/25			88	30 - 130	<0.5	ug/L	8.1	30		
5228066	Acenaphthene	2017/10/25			97	50 - 130	<0.2	ug/L	1.6	30		
5228066	Acenaphthylene	2017/10/25			93	50 - 130	<0.2	ug/L	0.96	30		
5228066	Anthracene	2017/10/25			95	50 - 130	<0.05	ug/L	2.4	30		
5228066	Benzo(a)anthracene	2017/10/25			100	50 - 130	<0.05	ug/L	3.0	30		
5228066	Benzo(a)pyrene	2017/10/25			95	50 - 130	<0.01	ug/L	1.1	30		
5228066	Benzo(b,j)fluoranthene	2017/10/25			99	50 - 130	<0.05	ug/L	1.1	30		
5228066	Benzo(g,h,i)perylene	2017/10/25			82	50 - 130	<0.05	ug/L	1.8	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228066	Benzo(k)fluoranthene	2017/10/25			104	50 - 130	<0.05	ug/L	2.8	30		
5228066	Biphenyl	2017/10/25			88	50 - 130	<0.1	ug/L	1.1	30		
5228066	Bis(2-chloroethyl)ether	2017/10/25			87	50 - 130	<0.5	ug/L	1.8	30		
5228066	Bis(2-chloroisopropyl)ether	2017/10/25			88	50 - 130	<0.5	ug/L	0.65	30		
5228066	Bis(2-ethylhexyl)phthalate	2017/10/25			100	50 - 130	<1	ug/L	1.5	30		
5228066	Chrysene	2017/10/25			105	50 - 130	<0.05	ug/L	1.8	30		
5228066	Dibenz(a,h)anthracene	2017/10/25			88	50 - 130	<0.1	ug/L	2.1	30		
5228066	Diethyl phthalate	2017/10/25			90	50 - 130	<0.1	ug/L	2.5	30		
5228066	Dimethyl phthalate	2017/10/25			103	50 - 130	<0.1	ug/L	2.1	30		
5228066	Fluoranthene	2017/10/25			95	50 - 130	<0.2	ug/L	3.0	30		
5228066	Fluorene	2017/10/25			103	50 - 130	<0.2	ug/L	0.39	30		
5228066	Indeno(1,2,3-cd)pyrene	2017/10/25			79	50 - 130	<0.1	ug/L	2.9	30		
5228066	Naphthalene	2017/10/25			73	50 - 130	<0.2	ug/L	0.29	30		
5228066	p-Chloroaniline	2017/10/25			93	30 - 130	<1	ug/L	12	30		
5228066	Pentachlorophenol	2017/10/25			84	50 - 130	<0.1	ug/L	16	30		
5228066	Phenanthrene	2017/10/25			99	50 - 130	<0.1	ug/L	2.4	30		
5228066	Phenol	2017/10/25			40	30 - 130	<0.5	ug/L	1.9	30		
5228066	Pyrene	2017/10/25			101	50 - 130	<0.05	ug/L	2.9	30		
5228604	F2 (C10-C16 Hydrocarbons)	2017/10/25	95	50 - 130	97	60 - 130	<100	ug/L	NC	30		
5228604	F3 (C16-C34 Hydrocarbons)	2017/10/25	96	50 - 130	100	60 - 130	<200	ug/L	NC	30		
5228604	F4 (C34-C50 Hydrocarbons)	2017/10/25	99	50 - 130	98	60 - 130	<200	ug/L	NC	30		
5228777	Total Ammonia-N	2017/10/26	93	80 - 120	97	85 - 115	<0.050	mg/L	NC	20		
5228881	Total Organic Carbon (TOC)	2017/10/25	96	80 - 120	99	80 - 120	<0.20	mg/L	1.1	20		
5232793	Acidity	2017/10/26	84	80 - 120	102	80 - 120	<5.0	mg/L	NC	25		
5234156	Alkalinity (Total as CaCO3)	2017/10/27			101	85 - 115	<1.0	mg/L	2.3	20		
5234268	Dissolved Chloride (Cl)	2017/10/27	NC	80 - 120	102	80 - 120	<1.0	mg/L	1.9	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5234269	Dissolved Sulphate (SO4)	2017/10/27	115	75 - 125	101	80 - 120	<1.0	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Cristina Carriere, Scientific Service Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID #
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 8 8 9
CUSTODY SEAL	YES	NO	COOLER ID 2
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INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 7 6 9
CUSTODY SEAL	YES	NO	COOLER ID 3
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 6 7 7
CUSTODY SEAL	YES	NO	COOLER ID 4
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 10 4 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3

MAXXAM JOB#:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>Ashli M. Sakhani</i>	2017/10/19	13:01

STANTEC

19-Oct-17 13:01

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INVOICE INFORMATION:

Company Name: #9197 Stantec Consulting Ltd
 Contact Name: Accounts Payable
 Address: 300 Hagey Blvd Suite 100
 Waterloo ON N2L 0A4
 Phone: (519) 579-4410 x Fax: (519) 579-6733 x
 Email: accounts.payable.invoices@stantec.com

REPORT INFORMATION (if differs from invoice):

Company Name: #18379 Stantec Consulting Ltd
 Contact Name: Report - 160900764
 Address: ON
 Phone: Fax:
 Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co

PROJECT INFORMATION:

Quotation #: B48218
 Task #: 200.500
 Project #: 160900764
 Profit Centre: 1609
 Site #: Clarington TS - Monitoring Wel
 Sampled By: *[Signature]*

Deepthi Shaji
 B7N2183
 KES ENV-1326
 Barcode: G#633342-01-01

Bottle Order #: 633342
 Project Manager: Deepthi Shaji

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)

Table 1 Res/Park Medium/Fine
 Table 2 Ind/Comm Coarse
 Table 3 Agr/Other For RSC
 Table

Other Regulations

CCME Sanitary Sewer Bylaw
 Reg 558 Storm Sewer Bylaw
 MISA Municipality _____
 PWQO
 Other _____

Special Instructions

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle): Metals (Fig. Cr V)	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAp - Comprehensive: Field Filter	Reg 153 PCBs	Reg 153 VOCs & F-HA	SVOCS	Lab Filtered SVOCS
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Turnaround Time (TAT) Required:

Please provide advance notice for rush projects

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified):
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
 Rush Required: _____ Time Required: _____
 Rush Confirmation Number: _____ (call lab for #)

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals (Fig. Cr V)	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAp - Comprehensive: Field Filter	Reg 153 PCBs	Reg 153 VOCs & F-HA	SVOCS	Lab Filtered SVOCS	# of Bottles	Comments
1	WG-160900764-20171018-R011	Oct 18/17	9:35	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
2	WG-160900764-20171018-R01A		9:35	GW	-										X	2	
3	WG-160900764-20171018-R01C		9:35	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
4	WG-160900764-20171018-R01E		9:35	GW	-										X	2	
5	WG-160900764-20171018-CF11		12:54	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
6	WG-160900764-20171018-CF11A		12:54	GW	-										X	2	
7	WG-160900764-20171018-R03		14:35	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
8	WG-160900764-20171018-R03A		14:35	GW	-										X	2	
9	WG-160900764-20171018-CF14		15:08	GW	Y	X	X	X	X	X	X	X	X	X	X	18	
10	WG-160900764-20171018-CF14A		15:03	GW	-										X	2	

RELINQUISHED BY: (Signature/Print) <i>[Signature]</i>	Date: (YY/MM/DD) 17/10/19	Time 13:00	RECEIVED BY: (Signature/Print) <i>[Signature]</i>	Date: (YY/MM/DD) 2019/10/19	Time 13:01	# jars used and not submitted	Laboratory Use Only			
						Type Sensitive 3/19/19	Temperature (°C) on Receiving REFER INVOICE	Custody Seal Present Intact	Yes	No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF

White: Maxxa Yellow: Client

7/6/7
10/4/3
6/7/7



Maxxam Analytics International Corporation o/a Maxxam Analytics
 6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6286 Fax:(905) 817-5777 www.maxxam.ca

STANTEC CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: #18379 Stantec Consulting Ltd	Quotation #: B48218	Maxxam Job #:	Task #: 200.500	Bottle Order #:		
Contact Name: Accounts Payable	Contact Name: Report - 160900764	Project #: 160900764	CDC #:	Project #: 1609	Project Manager:		
Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Address: ON	Site #: Clarington TS - Monitoring Wel	Project Manager:	Sampled By: <i>Kyan D...</i>	Project Manager:	Deepti Shaji	
Phone: (519) 579-4410 x Fax: (519) 579-6733 x	Phone: Fax:	Sampled By:					
Email: accounts.payable.invoices@stantec.com	Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co	CM633342-02-01					

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required Please provide advance notice for rush projects		
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle): Metals / Hg / Cr / V	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAP - Comprehensive Field Filter	Reg 153 PCBs	Reg 155 VOCs & FIF4	SVOCs	Lab Filtered SVOCs	Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests.	
<input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Table	<input type="checkbox"/> Res/Park <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Agri/Other	<input type="checkbox"/> Medium/Fine <input type="checkbox"/> Coarse <input type="checkbox"/> For RSC	<input type="checkbox"/> CCME <input type="checkbox"/> Reg 558 <input type="checkbox"/> MISA <input type="checkbox"/> PWQO <input type="checkbox"/> Other	<input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> Municipality													<input type="checkbox"/> CCME <input type="checkbox"/> Reg 558 <input type="checkbox"/> MISA <input type="checkbox"/> PWQO <input type="checkbox"/> Other	
Include Criteria on Certificate of Analysis (Y/N)?																Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix												# of Bottles	Comments	
1	WG-160900764-20171019-RD19	Oct 19/17	9:30	GW	Y	X	X	X	X	X	X	X	X	X	X	18		
2	WG-160900764-20171019-LD19A	Oct 19/17	9:30	GW	1										X	2		
3	WG-160900764-201710			GW														
4	WG-160900764-201710			GW														
5	WG-160900764-201710			GW														
6	WG-160900764-201710			GW														
7	TRIP BLANK	-	-	-	-									X	X	5		
8																		
9																		
10																		

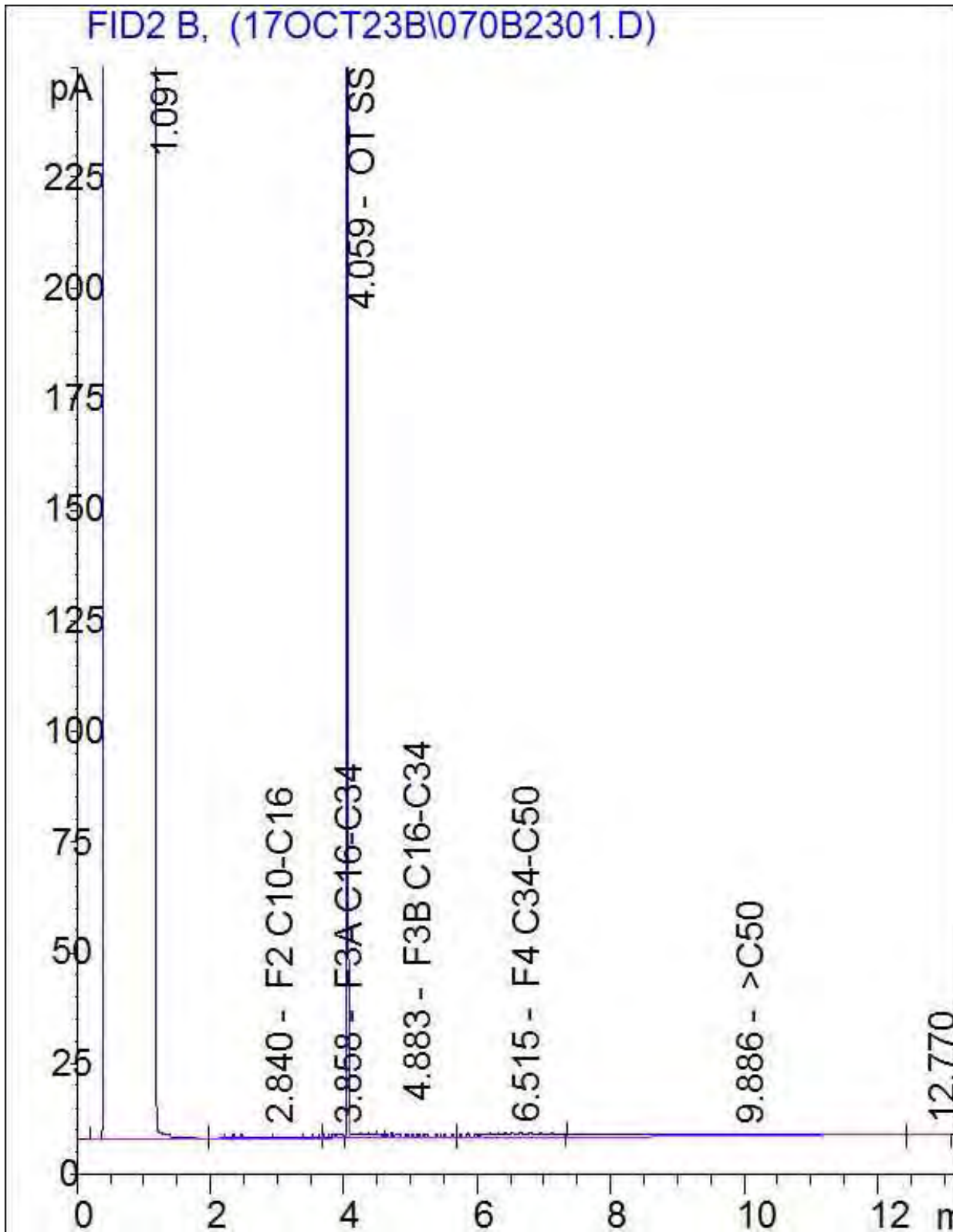
* RELINQUISHED BY: (Signature/Print) <i>Jamie Koch</i>		Date: (YY/MM/DD) 17/10/19	Time 13:00	RECEIVED BY: (Signature/Print) <i>Deepti Shaji</i>		Date: (YY/MM/DD) 201710/19	Time 13:01	# Jars used and not submitted	Laboratory Use Only			
								Time Sensitive 7/8/4	Temperature (°C) on Receipt REFLECTO MCR	Custody Seal Present Intact	Yes	No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.
 ** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 *** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

Maxxam Analytics International Corporation o/a Maxxam Analytics

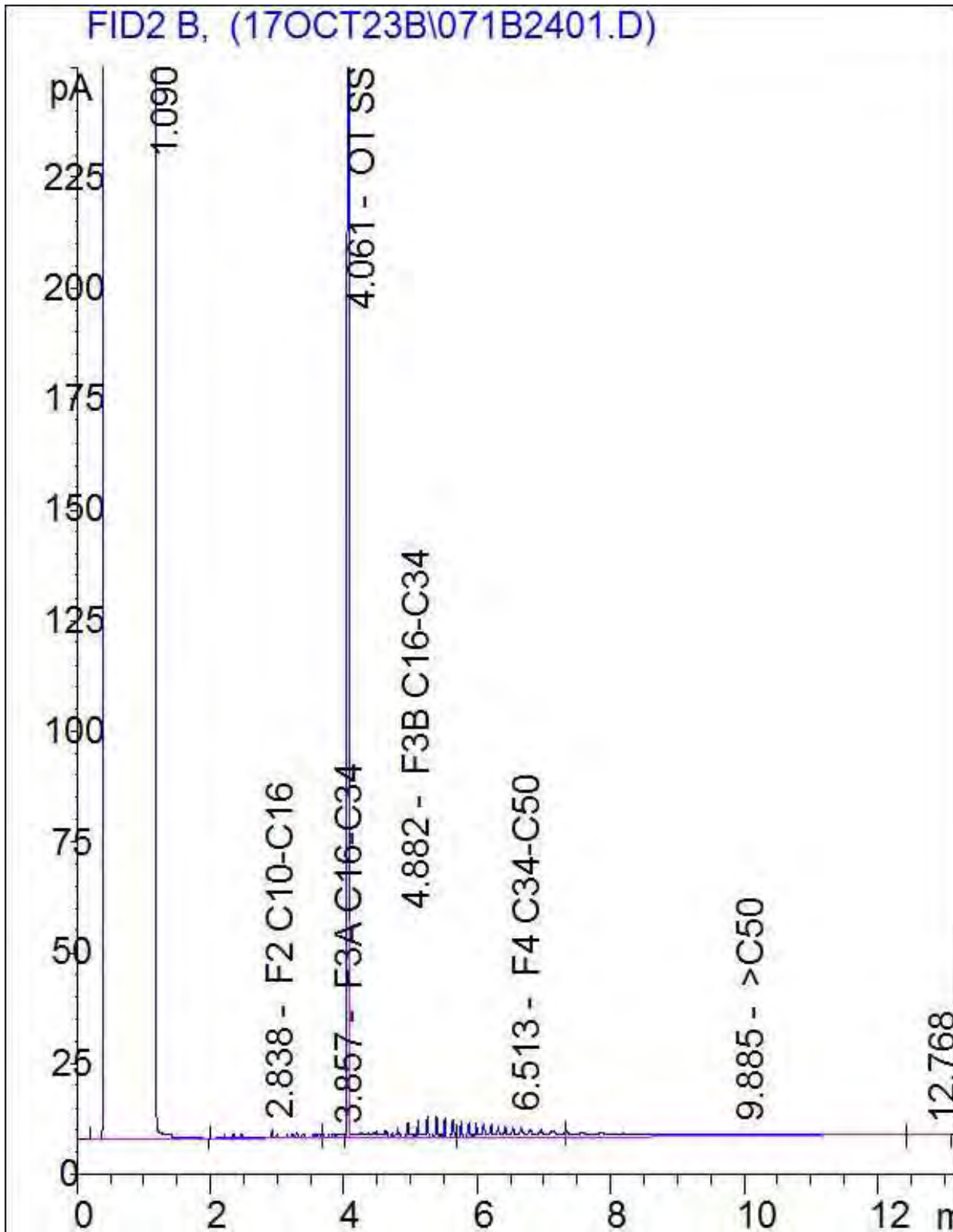
7/6/17 6/7/17
10/4/3

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



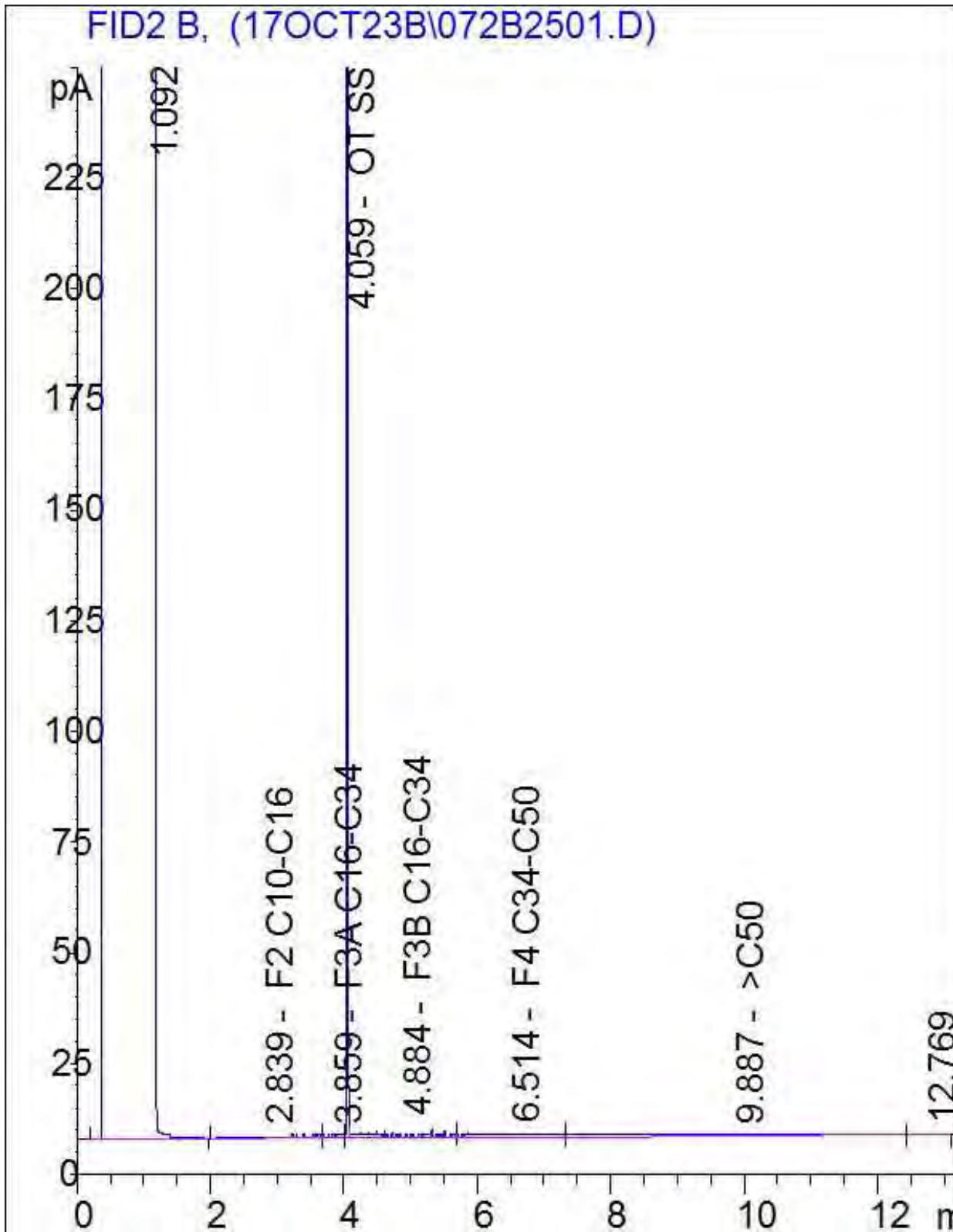
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



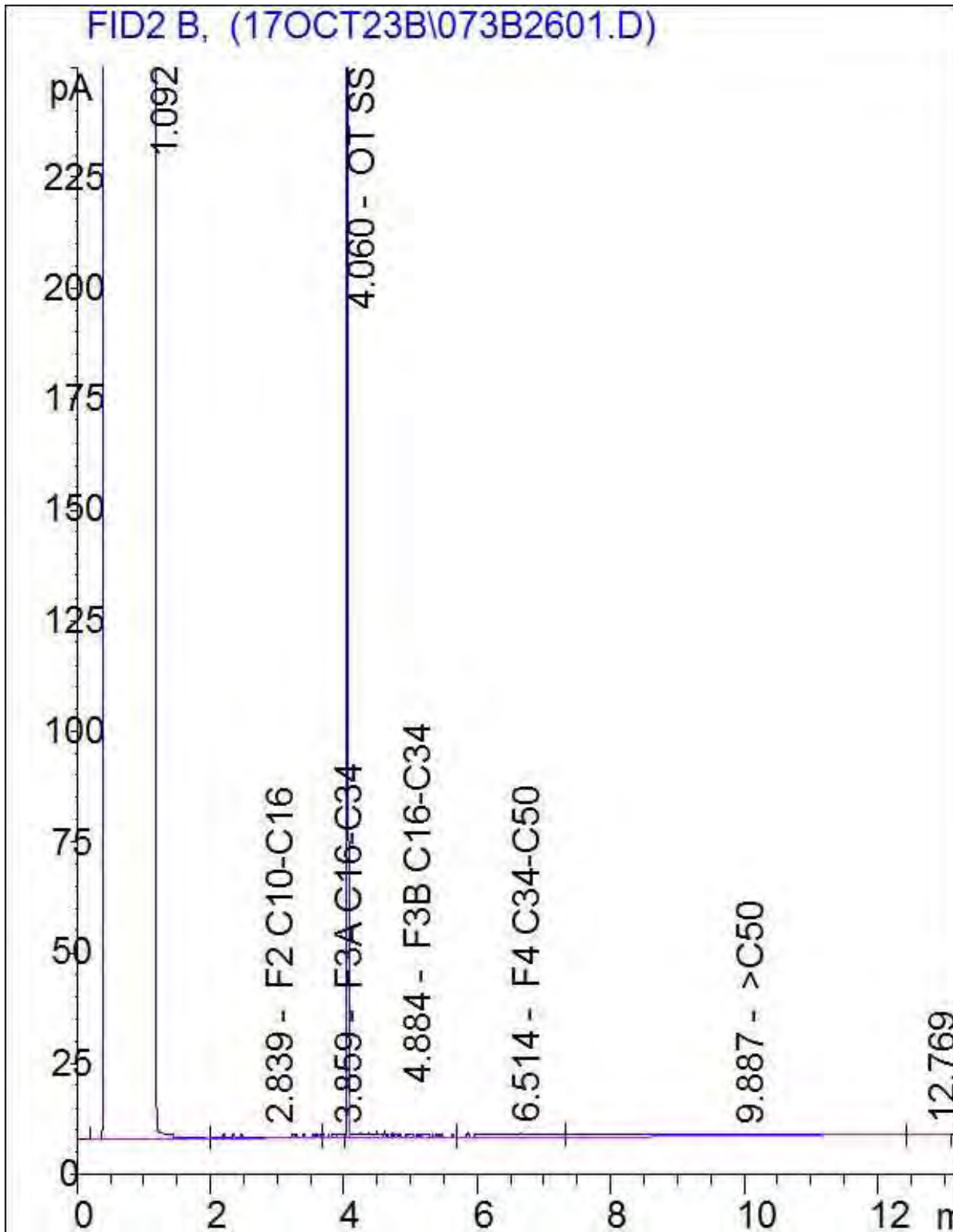
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



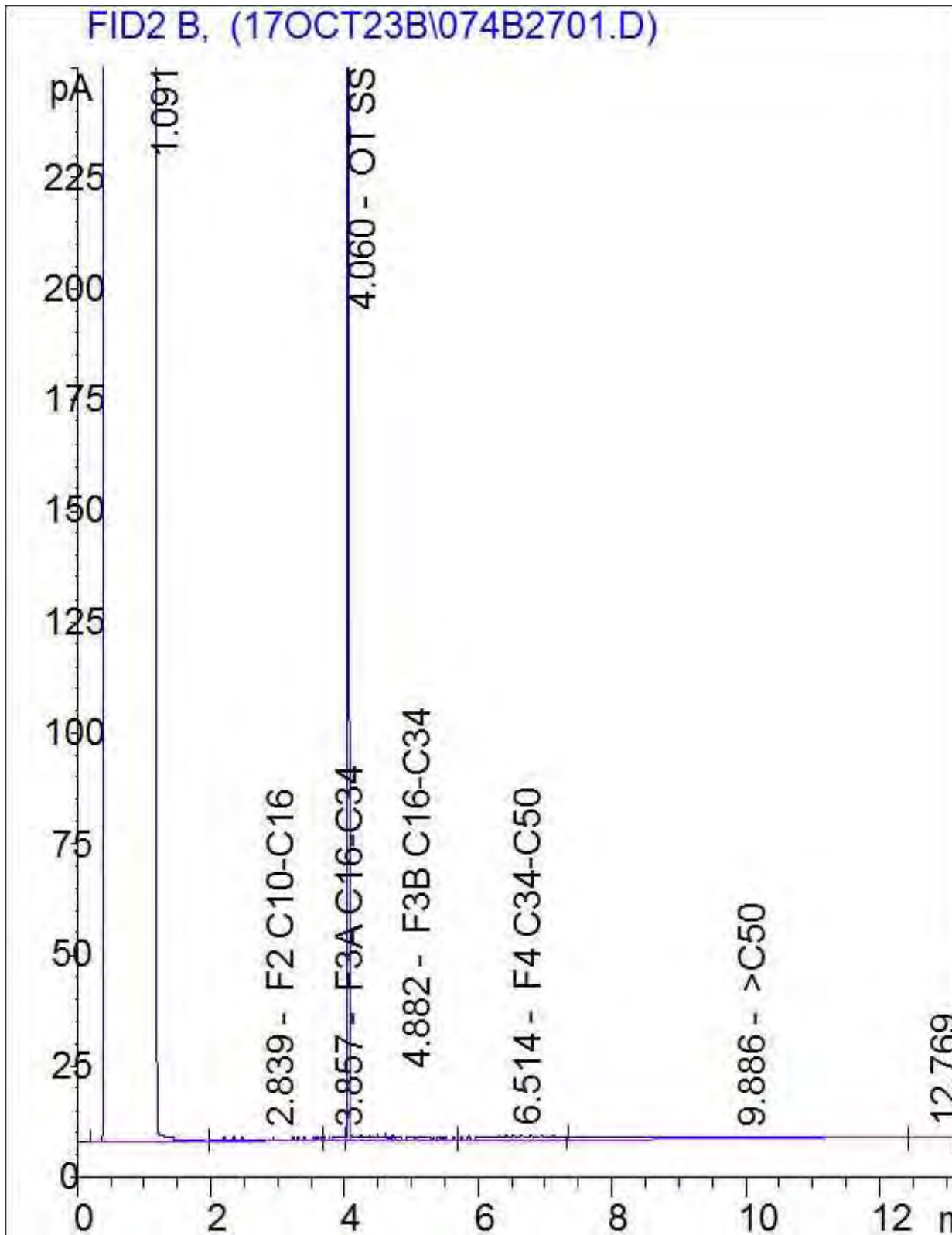
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



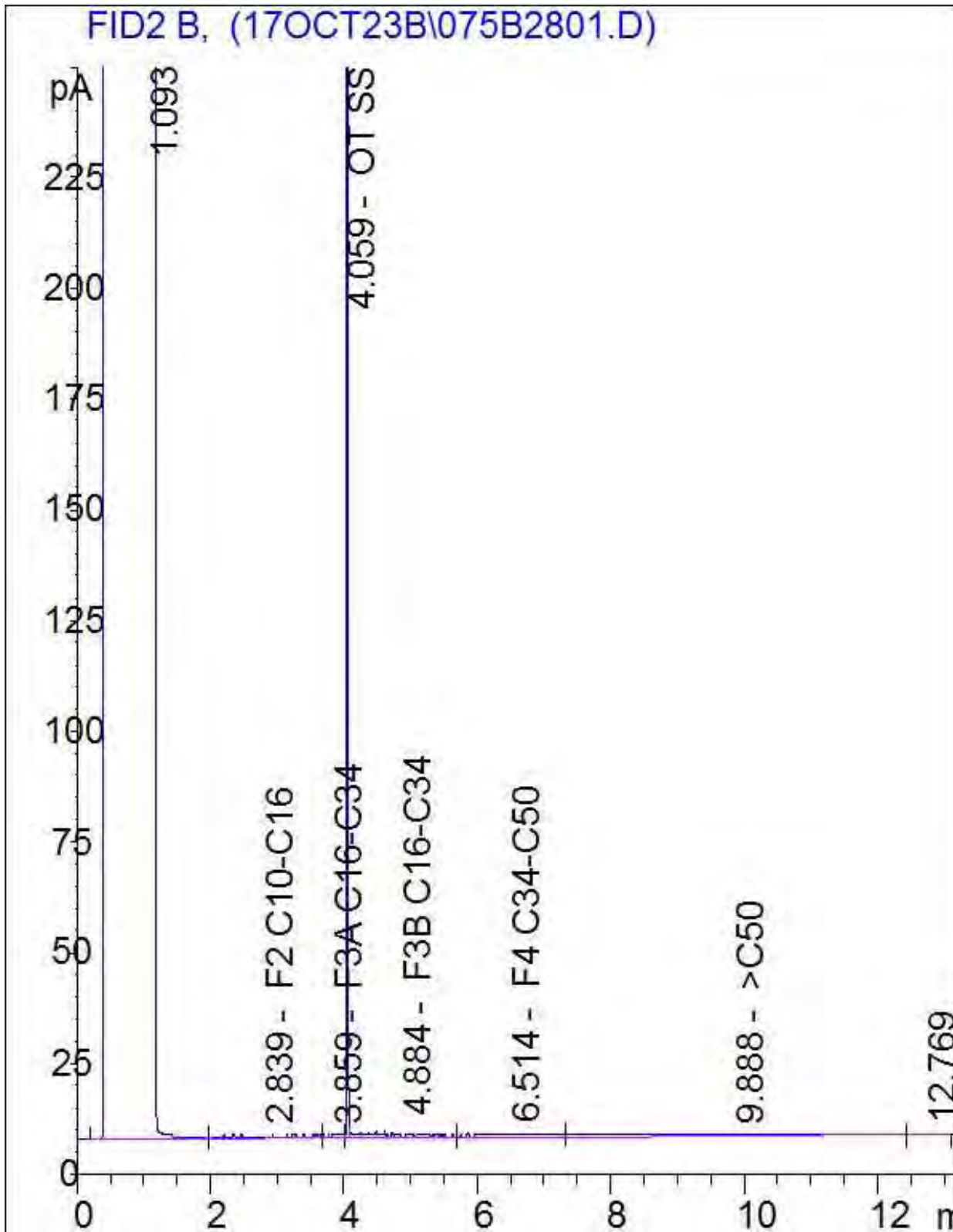
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633340-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/24

Report #: R4800896

Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9357

Received: 2017/10/17, 08:30

Sample Matrix: Water
 # Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	8	N/A	2017/10/23	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	8	2017/10/18	2017/10/22	CAM SOP-00301	EPA 8270 m
Acidity (CaCO ₃) in water (1)	8	N/A	2017/10/23		SM 22 2310
Alkalinity	5	N/A	2017/10/18	CAM SOP-00448	SM 22 2320 B m
Alkalinity	3	N/A	2017/10/20	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2017/10/18	CAM SOP-00102	APHA 4500-CO ₂ D
Carbonate, Bicarbonate and Hydroxide	4	N/A	2017/10/19	CAM SOP-00102	APHA 4500-CO ₂ D
Carbonate, Bicarbonate and Hydroxide	3	N/A	2017/10/21	CAM SOP-00102	APHA 4500-CO ₂ D
1,3-Dichloropropene Sum	8	N/A	2017/10/20		EPA 8260C m
Chloride by Automated Colourimetry	4	N/A	2017/10/19	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	4	N/A	2017/10/20	CAM SOP-00463	EPA 325.2 m
Conductivity	5	N/A	2017/10/18	CAM SOP-00414	SM 22 2510 m
Conductivity	3	N/A	2017/10/20	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	8	N/A	2017/10/19	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	6	N/A	2017/10/19	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	2	N/A	2017/10/20	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	2	N/A	2017/10/18	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (2)	6	N/A	2017/10/19	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	4	2017/10/20	2017/10/21	CAM SOP-00316	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (3)	4	2017/10/20	2017/10/22	CAM SOP-00316	CCME PHC-CWS m
Fluoride	5	2017/10/17	2017/10/18	CAM SOP-00449	SM 22 4500-F C m
Fluoride	3	2017/10/19	2017/10/20	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO ₃)	7	N/A	2017/10/20	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	1	N/A	2017/10/23	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	8	2017/10/20	2017/10/23	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (4)	7	N/A	2017/10/19	CAM SOP-00447	EPA 6020B m
Metals Analysis by ICPMS (as received) (4)	1	N/A	2017/10/21	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	4	N/A	2017/10/20		
Ion Balance (% Difference)	3	N/A	2017/10/21		

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633340-01-01

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Stantec Consulting Ltd
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 Canada

Report Date: 2017/10/24
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9357

Received: 2017/10/17, 08:30

Sample Matrix: Water
 # Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Ion Balance (% Difference)	1	N/A	2017/10/23		
Anion and Cation Sum	4	N/A	2017/10/20		
Anion and Cation Sum	3	N/A	2017/10/21		
Anion and Cation Sum	1	N/A	2017/10/23		
Total Coliforms/ E. coli, CFU/100mL	8	N/A	2017/10/17	CAM SOP-00551	MOE E3407
Total Ammonia-N	8	N/A	2017/10/20	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	3	N/A	2017/10/19	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (5)	5	N/A	2017/10/20	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	8	2017/10/19	2017/10/20	CAM SOP-00309	EPA 8082A m
pH	5	N/A	2017/10/18	CAM SOP-00413	SM 4500H+ B m
pH	3	N/A	2017/10/20	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	4	N/A	2017/10/19	CAM SOP-00461	EPA 365.1 m
Orthophosphate	4	N/A	2017/10/20	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	4	N/A	2017/10/20		
Sat. pH and Langelier Index (@ 20C)	3	N/A	2017/10/21		
Sat. pH and Langelier Index (@ 20C)	1	N/A	2017/10/23		
Sat. pH and Langelier Index (@ 4C)	4	N/A	2017/10/20		
Sat. pH and Langelier Index (@ 4C)	3	N/A	2017/10/21		
Sat. pH and Langelier Index (@ 4C)	1	N/A	2017/10/23		
Sulphate by Automated Colourimetry	4	N/A	2017/10/19	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	4	N/A	2017/10/20	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	4	N/A	2017/10/20		
Total Dissolved Solids (TDS calc)	3	N/A	2017/10/21		
Total Dissolved Solids (TDS calc)	1	N/A	2017/10/23		
Total Dissolved Solids	8	2017/10/19	2017/10/20	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (6)	8	N/A	2017/10/20	CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	1	2017/10/18	2017/10/18	CAM SOP-00428	SM 22 2540D m
Total Suspended Solids	7	2017/10/19	2017/10/20	CAM SOP-00428	SM 22 2540D m
Turbidity	8	N/A	2017/10/18	CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	8	N/A	2017/10/20	CAM SOP-00230	EPA 8260C m

Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
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ON
Canada

Report Date: 2017/10/24
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7M9357

Received: 2017/10/17, 08:30

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Metals analysis was performed on the sample 'as received'.
- (5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (6) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Deepthi Shaji, Project Manager

Email: dshaji@maxxam.ca

Phone# (905)817-5700 Ext:5807

=====
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total Cover Pages : 3

Page 3 of 57

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP271	FIP271		FIP272		
Sampling Date		2017/10/16 10:12	2017/10/16 10:12		2017/10/16 10:50		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK1 Lab-Dup	QC Batch	WG-160900764- 20171016-JK2	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L	9.51		5216334	5.64	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	330		5216331	210	1.0	5216331
Calculated TDS	mg/L	510		5216337	300	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.5		5216331	2.2	1.0	5216331
Cation Sum	me/L	9.33		5216334	5.61	N/A	5216334
Hardness (CaCO3)	mg/L	380		5215470	260	1.0	5215470
Ion Balance (% Difference)	%	0.970		5216333	0.240	N/A	5216333
Langelier Index (@ 20C)	N/A	0.818		5216335	0.814		5216335
Langelier Index (@ 4C)	N/A	0.570		5216336	0.565		5216336
Saturation pH (@ 20C)	N/A	6.86		5216335	7.23		5216335
Saturation pH (@ 4C)	N/A	7.11		5216336	7.48		5216336

Inorganics

Total Ammonia-N	mg/L	0.099		5219482	<0.050	0.050	5219482
Conductivity	umho/cm	860	860	5217163	510	1.0	5221047
Dissolved Organic Carbon	mg/L	1.0		5219054	0.62	0.20	5219059
Orthophosphate (P)	mg/L	<0.010		5221927	<0.010	0.010	5221927
pH	pH	7.68	7.66	5217135	8.05		5221050
Dissolved Sulphate (SO4)	mg/L	37		5221913	53	1.0	5221913
Alkalinity (Total as CaCO3)	mg/L	330	330	5217152	210	1.0	5221048
Dissolved Chloride (Cl)	mg/L	67		5221904	12	1.0	5221904
Nitrite (N)	mg/L	0.012		5217140	<0.010	0.010	5217140
Nitrate (N)	mg/L	4.23		5217140	<0.10	0.10	5217140

Metals

. Aluminum (Al)	mg/L	<0.0050		5218426	<0.0050	0.0050	5218426
. Antimony (Sb)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Arsenic (As)	mg/L	<0.0010		5218426	<0.0010	0.0010	5218426
. Barium (Ba)	mg/L	0.050		5218426	0.080	0.0020	5218426
. Beryllium (Be)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Boron (B)	mg/L	0.022		5218426	<0.010	0.010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP271	FIP271		FIP272		
Sampling Date		2017/10/16 10:12	2017/10/16 10:12		2017/10/16 10:50		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK1 Lab-Dup	QC Batch	WG-160900764- 20171016-JK2	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010		5218426	<0.00010	0.00010	5218426
. Calcium (Ca)	mg/L	120		5218426	73	0.20	5218426
. Chromium (Cr)	mg/L	<0.0050		5218426	<0.0050	0.0050	5218426
. Cobalt (Co)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Copper (Cu)	mg/L	0.016		5218426	0.0012	0.0010	5218426
. Iron (Fe)	mg/L	<0.10		5218426	2.3	0.10	5218426
. Lead (Pb)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Magnesium (Mg)	mg/L	17		5218426	20	0.050	5218426
. Manganese (Mn)	mg/L	<0.0020		5218426	0.049	0.0020	5218426
. Molybdenum (Mo)	mg/L	<0.00050		5218426	0.0010	0.00050	5218426
. Nickel (Ni)	mg/L	0.0011		5218426	<0.0010	0.0010	5218426
. Phosphorus (P)	mg/L	<0.10		5218426	<0.10	0.10	5218426
. Potassium (K)	mg/L	1.0		5218426	1.1	0.20	5218426
. Selenium (Se)	mg/L	<0.0020		5218426	<0.0020	0.0020	5218426
. Silicon (Si)	mg/L	6.1		5218426	4.8	0.050	5218426
. Silver (Ag)	mg/L	<0.00010		5218426	<0.00010	0.00010	5218426
. Sodium (Na)	mg/L	39		5218426	4.8	0.10	5218426
. Strontium (Sr)	mg/L	0.27		5218426	0.23	0.0010	5218426
. Thallium (Tl)	mg/L	<0.000050		5218426	<0.000050	0.000050	5218426
. Titanium (Ti)	mg/L	<0.0050		5218426	<0.0050	0.0050	5218426
. Uranium (U)	mg/L	0.0015		5218426	<0.00010	0.00010	5218426
. Vanadium (V)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Zinc (Zn)	mg/L	0.043		5218426	0.0055	0.0050	5218426
. Zirconium (Zr)	mg/L	<0.0010		5218426	<0.0010	0.0010	5218426

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP273	FIP273		FIP274		
Sampling Date		2017/10/16 11:53	2017/10/16 11:53		2017/10/16 14:40		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK3 Lab-Dup	QC Batch	WG-160900764- 20171016-JK4	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	4.49		5216334	5.93	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200		5216331	220	1.0	5216331
Calculated TDS	mg/L	240		5216337	320	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.2		5216331	2.3	1.0	5216331
Cation Sum	me/L	4.37		5216334	6.05	N/A	5216334
Hardness (CaCO3)	mg/L	200		5215470	290	1.0	5215470
Ion Balance (% Difference)	%	1.31		5216333	1.00	N/A	5216333
Langelier Index (@ 20C)	N/A	0.738		5216335	0.862		5216335
Langelier Index (@ 4C)	N/A	0.488		5216336	0.613		5216336
Saturation pH (@ 20C)	N/A	7.33		5216335	7.18		5216335
Saturation pH (@ 4C)	N/A	7.58		5216336	7.43		5216336
Inorganics							
Total Ammonia-N	mg/L	0.12		5219482	<0.050	0.050	5219482
Conductivity	umho/cm	370		5217186	520	1.0	5217186
Dissolved Organic Carbon	mg/L	1.3	1.3	5219059	0.78	0.20	5219054
Orthophosphate (P)	mg/L	<0.010		5219459	<0.010	0.010	5219459
pH	pH	8.07		5217187	8.04		5217187
Dissolved Sulphate (SO4)	mg/L	17		5219457	53	1.0	5219457
Alkalinity (Total as CaCO3)	mg/L	200		5217178	220	1.0	5217178
Dissolved Chloride (Cl)	mg/L	2.0		5219448	14	1.0	5219448
Nitrite (N)	mg/L	<0.010		5217140	<0.010	0.010	5217140
Nitrate (N)	mg/L	<0.10		5217140	<0.10	0.10	5217140
Metals							
. Aluminum (Al)	mg/L	<0.0050		5218426	<0.0050	0.0050	5223274
. Antimony (Sb)	mg/L	<0.00050		5218426	<0.00050	0.00050	5223274
. Arsenic (As)	mg/L	<0.0010		5218426	<0.0010	0.0010	5223274
. Barium (Ba)	mg/L	0.14		5218426	0.041	0.0020	5223274
. Beryllium (Be)	mg/L	<0.00050		5218426	<0.00050	0.00050	5223274
. Boron (B)	mg/L	0.010		5218426	<0.010	0.010	5223274
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							
N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP273	FIP273		FIP274		
Sampling Date		2017/10/16 11:53	2017/10/16 11:53		2017/10/16 14:40		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK3 Lab-Dup	QC Batch	WG-160900764- 20171016-JK4	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010		5218426	<0.00010	0.00010	5223274
. Calcium (Ca)	mg/L	56		5218426	78	0.20	5223274
. Chromium (Cr)	mg/L	<0.0050		5218426	<0.0050	0.0050	5223274
. Cobalt (Co)	mg/L	<0.00050		5218426	<0.00050	0.00050	5223274
. Copper (Cu)	mg/L	0.0012		5218426	<0.0010	0.0010	5223274
. Iron (Fe)	mg/L	1.8		5218426	2.5	0.10	5223274
. Lead (Pb)	mg/L	<0.00050		5218426	<0.00050	0.00050	5223274
. Magnesium (Mg)	mg/L	16		5218426	22	0.050	5223274
. Manganese (Mn)	mg/L	0.031		5218426	0.052	0.0020	5223274
. Molybdenum (Mo)	mg/L	0.00071		5218426	0.0033	0.00050	5223274
. Nickel (Ni)	mg/L	<0.0010		5218426	<0.0010	0.0010	5223274
. Phosphorus (P)	mg/L	<0.10		5218426	<0.10	0.10	5223274
. Potassium (K)	mg/L	0.85		5218426	1.2	0.20	5223274
. Selenium (Se)	mg/L	<0.0020		5218426	<0.0020	0.0020	5223274
. Silicon (Si)	mg/L	9.4		5218426	5.1	0.050	5223274
. Silver (Ag)	mg/L	<0.00010		5218426	<0.00010	0.00010	5223274
. Sodium (Na)	mg/L	4.3		5218426	4.7	0.10	5223274
. Strontium (Sr)	mg/L	0.23		5218426	0.28	0.0010	5223274
. Thallium (Tl)	mg/L	<0.000050		5218426	<0.000050	0.000050	5223274
. Titanium (Ti)	mg/L	<0.0050		5218426	<0.0050	0.0050	5223274
. Uranium (U)	mg/L	<0.00010		5218426	0.00069	0.00010	5223274
. Vanadium (V)	mg/L	<0.00050		5218426	<0.00050	0.00050	5223274
. Zinc (Zn)	mg/L	<0.0050		5218426	<0.0050	0.0050	5223274
. Zirconium (Zr)	mg/L	<0.0010		5218426	<0.0010	0.0010	5223274

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP274		FIP275	FIP275		
Sampling Date		2017/10/16 14:40		2017/10/16 15:15	2017/10/16 15:15		
COC Number		633340-01-01		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4 Lab-Dup	QC Batch	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK5 Lab-Dup	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		5216334	8.39		N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		5216331	320		1.0	5216331
Calculated TDS	mg/L		5216337	450		1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L		5216331	1.8		1.0	5216331
Cation Sum	me/L		5216334	8.30		N/A	5216334
Hardness (CaCO3)	mg/L		5215470	360		1.0	5215470
Ion Balance (% Difference)	%		5216333	0.540		N/A	5216333
Langelier Index (@ 20C)	N/A		5216335	0.898			5216335
Langelier Index (@ 4C)	N/A		5216336	0.650			5216336
Saturation pH (@ 20C)	N/A		5216335	6.88			5216335
Saturation pH (@ 4C)	N/A		5216336	7.13			5216336

Inorganics

Total Ammonia-N	mg/L		5219482	<0.050		0.050	5219482
Conductivity	umho/cm		5217186	750		1.0	5217186
Dissolved Organic Carbon	mg/L		5219054	0.88		0.20	5218620
Orthophosphate (P)	mg/L		5219459	<0.010		0.010	5219459
pH	pH		5217187	7.78			5217187
Dissolved Sulphate (SO4)	mg/L		5219457	21		1.0	5219457
Alkalinity (Total as CaCO3)	mg/L		5217178	320		1.0	5217178
Dissolved Chloride (Cl)	mg/L		5219448	45		1.0	5219448
Nitrite (N)	mg/L	<0.010	5217140	<0.010		0.010	5217104
Nitrate (N)	mg/L	<0.10	5217140	2.95		0.10	5217104

Metals

. Aluminum (Al)	mg/L		5223274	<0.0050	<0.0050	0.0050	5218426
. Antimony (Sb)	mg/L		5223274	<0.00050	<0.00050	0.00050	5218426
. Arsenic (As)	mg/L		5223274	<0.0010	<0.0010	0.0010	5218426
. Barium (Ba)	mg/L		5223274	0.072	0.072	0.0020	5218426
. Beryllium (Be)	mg/L		5223274	<0.00050	<0.00050	0.00050	5218426
. Boron (B)	mg/L		5223274	0.015	0.016	0.010	5218426
. Cadmium (Cd)	mg/L		5223274	<0.00010	<0.00010	0.00010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP274		FIP275	FIP275		
Sampling Date		2017/10/16 14:40		2017/10/16 15:15	2017/10/16 15:15		
COC Number		633340-01-01		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4 Lab-Dup	QC Batch	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK5 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L		5223274	120	120	0.20	5218426
. Chromium (Cr)	mg/L		5223274	<0.0050	<0.0050	0.0050	5218426
. Cobalt (Co)	mg/L		5223274	<0.00050	<0.00050	0.00050	5218426
. Copper (Cu)	mg/L		5223274	0.014	0.013	0.0010	5218426
. Iron (Fe)	mg/L		5223274	<0.10	<0.10	0.10	5218426
. Lead (Pb)	mg/L		5223274	0.00055	0.00051	0.00050	5218426
. Magnesium (Mg)	mg/L		5223274	16	16	0.050	5218426
. Manganese (Mn)	mg/L		5223274	<0.0020	<0.0020	0.0020	5218426
. Molybdenum (Mo)	mg/L		5223274	<0.00050	<0.00050	0.00050	5218426
. Nickel (Ni)	mg/L		5223274	<0.0010	<0.0010	0.0010	5218426
. Phosphorus (P)	mg/L		5223274	<0.10	<0.10	0.10	5218426
. Potassium (K)	mg/L		5223274	0.99	0.98	0.20	5218426
. Selenium (Se)	mg/L		5223274	<0.0020	<0.0020	0.0020	5218426
. Silicon (Si)	mg/L		5223274	6.9	7.1	0.050	5218426
. Silver (Ag)	mg/L		5223274	<0.00010	<0.00010	0.00010	5218426
. Sodium (Na)	mg/L		5223274	24	24	0.10	5218426
. Strontium (Sr)	mg/L		5223274	0.26	0.26	0.0010	5218426
. Thallium (Tl)	mg/L		5223274	<0.000050	<0.000050	0.000050	5218426
. Titanium (Ti)	mg/L		5223274	<0.0050	<0.0050	0.0050	5218426
. Uranium (U)	mg/L		5223274	0.00049	0.00048	0.00010	5218426
. Vanadium (V)	mg/L		5223274	<0.00050	<0.00050	0.00050	5218426
. Zinc (Zn)	mg/L		5223274	0.011	0.011	0.0050	5218426
. Zirconium (Zr)	mg/L		5223274	<0.0010	<0.0010	0.0010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP276	FIP276		FIP277		
Sampling Date		2017/10/16 15:46	2017/10/16 15:46		2017/10/16 16:30		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK6 Lab-Dup	QC Batch	WG-160900764- 20171016-JK7	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L	7.47		5216334	8.68	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	320		5216331	370	1.0	5216331
Calculated TDS	mg/L	390		5216337	450	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0		5216331	2.2	1.0	5216331
Cation Sum	me/L	6.99		5216334	8.17	N/A	5216334
Hardness (CaCO3)	mg/L	320		5215470	330	1.0	5215470
Ion Balance (% Difference)	%	3.33		5216333	3.05	N/A	5216333
Langelier Index (@ 20C)	N/A	0.918		5216335	0.981		5216335
Langelier Index (@ 4C)	N/A	0.669		5216336	0.733		5216336
Saturation pH (@ 20C)	N/A	6.90		5216335	6.83		5216335
Saturation pH (@ 4C)	N/A	7.15		5216336	7.08		5216336

Inorganics

Total Ammonia-N	mg/L	0.40	0.39	5219482	<0.050	0.050	5219482
Conductivity	umho/cm	630		5217186	770	1.0	5221047
Dissolved Organic Carbon	mg/L	1.1		5218620	2.5	0.20	5218620
Orthophosphate (P)	mg/L	<0.010		5221927	0.012	0.010	5219459
pH	pH	7.82		5217187	7.81		5221050
Dissolved Sulphate (SO4)	mg/L	19		5221913	22	1.0	5219457
Alkalinity (Total as CaCO3)	mg/L	320		5217178	370	1.0	5221048
Dissolved Chloride (Cl)	mg/L	14		5221904	24	1.0	5219448
Nitrite (N)	mg/L	<0.010		5217104	<0.010	0.010	5217104
Nitrate (N)	mg/L	2.44		5217104	1.66	0.10	5217104

Metals

. Aluminum (Al)	mg/L	0.011		5218426	0.021	0.0050	5218426
. Antimony (Sb)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Arsenic (As)	mg/L	<0.0010		5218426	<0.0010	0.0010	5218426
. Barium (Ba)	mg/L	0.047		5218426	0.052	0.0020	5218426
. Beryllium (Be)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Boron (B)	mg/L	<0.010		5218426	0.044	0.010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP276	FIP276		FIP277		
Sampling Date		2017/10/16 15:46	2017/10/16 15:46		2017/10/16 16:30		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK6 Lab-Dup	QC Batch	WG-160900764- 20171016-JK7	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010		5218426	<0.00010	0.00010	5218426
. Calcium (Ca)	mg/L	110		5218426	110	0.20	5218426
. Chromium (Cr)	mg/L	<0.0050		5218426	<0.0050	0.0050	5218426
. Cobalt (Co)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Copper (Cu)	mg/L	0.019		5218426	0.036	0.0010	5218426
. Iron (Fe)	mg/L	<0.10		5218426	0.17	0.10	5218426
. Lead (Pb)	mg/L	<0.00050		5218426	0.00081	0.00050	5218426
. Magnesium (Mg)	mg/L	13		5218426	11	0.050	5218426
. Manganese (Mn)	mg/L	0.0036		5218426	0.060	0.0020	5218426
. Molybdenum (Mo)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Nickel (Ni)	mg/L	<0.0010		5218426	<0.0010	0.0010	5218426
. Phosphorus (P)	mg/L	<0.10		5218426	<0.10	0.10	5218426
. Potassium (K)	mg/L	0.54		5218426	3.1	0.20	5218426
. Selenium (Se)	mg/L	<0.0020		5218426	<0.0020	0.0020	5218426
. Silicon (Si)	mg/L	6.4		5218426	5.9	0.050	5218426
. Silver (Ag)	mg/L	<0.00010		5218426	<0.00010	0.00010	5218426
. Sodium (Na)	mg/L	12		5218426	34	0.10	5218426
. Strontium (Sr)	mg/L	0.23		5218426	0.25	0.0010	5218426
. Thallium (Tl)	mg/L	<0.000050		5218426	<0.000050	0.000050	5218426
. Titanium (Ti)	mg/L	<0.0050		5218426	<0.0050	0.0050	5218426
. Uranium (U)	mg/L	0.00032		5218426	0.00038	0.00010	5218426
. Vanadium (V)	mg/L	<0.00050		5218426	<0.00050	0.00050	5218426
. Zinc (Zn)	mg/L	0.030		5218426	0.041	0.0050	5218426
. Zirconium (Zr)	mg/L	<0.0010		5218426	<0.0010	0.0010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP277			FIP278		
Sampling Date		2017/10/16 16:30			2017/10/16 17:10		
COC Number		633340-01-01			633340-01-01		
	UNITS	WG-160900764- 20171016-JK7 Lab-Dup	RDL	QC Batch	WG-160900764- 20171016-JK8	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		N/A	5216334	18.7	N/A	5216334
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		1.0	5216331	270	1.0	5216331
Calculated TDS	mg/L		1.0	5216337	1000	1.0	5216337
Carb. Alkalinity (calc. as CaCO3)	mg/L		1.0	5216331	1.9	1.0	5216331
Cation Sum	me/L		N/A	5216334	17.9	N/A	5216334
Hardness (CaCO3)	mg/L		1.0	5215470	370	1.0	5215470
Ion Balance (% Difference)	%		N/A	5216333	2.22	N/A	5216333
Langelier Index (@ 20C)	N/A			5216335	0.708		5216335
Langelier Index (@ 4C)	N/A			5216336	0.462		5216336
Saturation pH (@ 20C)	N/A			5216335	7.16		5216335
Saturation pH (@ 4C)	N/A			5216336	7.41		5216336

Inorganics

Total Ammonia-N	mg/L		0.050	5219482	0.11	0.050	5219482
Conductivity	umho/cm	760	1.0	5221047	1900	1.0	5221047
Dissolved Organic Carbon	mg/L		0.20	5218620	0.93	0.20	5219059
Orthophosphate (P)	mg/L		0.010	5219459	<0.010	0.010	5221927
pH	pH	7.83		5221050	7.87		5221050
Dissolved Sulphate (SO4)	mg/L		1.0	5219457	36	1.0	5221913
Alkalinity (Total as CaCO3)	mg/L	370	1.0	5221048	270	1.0	5221048
Dissolved Chloride (Cl)	mg/L		1.0	5219448	450	5.0	5221904
Nitrite (N)	mg/L		0.010	5217104	<0.010	0.010	5217140
Nitrate (N)	mg/L		0.10	5217104	<0.10	0.10	5217140

Metals

. Aluminum (Al)	mg/L		0.0050	5218426	<0.0050	0.0050	5218426
. Antimony (Sb)	mg/L		0.00050	5218426	<0.00050	0.00050	5218426
. Arsenic (As)	mg/L		0.0010	5218426	<0.0010	0.0010	5218426
. Barium (Ba)	mg/L		0.0020	5218426	0.12	0.0020	5218426
. Beryllium (Be)	mg/L		0.00050	5218426	<0.00050	0.00050	5218426
. Boron (B)	mg/L		0.010	5218426	0.021	0.010	5218426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIP277			FIP278		
Sampling Date		2017/10/16 16:30			2017/10/16 17:10		
COC Number		633340-01-01			633340-01-01		
	UNITS	WG-160900764- 20171016-JK7 Lab-Dup	RDL	QC Batch	WG-160900764- 20171016-JK8	RDL	QC Batch
. Cadmium (Cd)	mg/L		0.00010	5218426	<0.00010	0.00010	5218426
. Calcium (Ca)	mg/L		0.20	5218426	90	0.20	5218426
. Chromium (Cr)	mg/L		0.0050	5218426	<0.0050	0.0050	5218426
. Cobalt (Co)	mg/L		0.00050	5218426	<0.00050	0.00050	5218426
. Copper (Cu)	mg/L		0.0010	5218426	0.030	0.0010	5218426
. Iron (Fe)	mg/L		0.10	5218426	<0.10	0.10	5218426
. Lead (Pb)	mg/L		0.00050	5218426	<0.00050	0.00050	5218426
. Magnesium (Mg)	mg/L		0.050	5218426	36	0.050	5218426
. Manganese (Mn)	mg/L		0.0020	5218426	0.030	0.0020	5218426
. Molybdenum (Mo)	mg/L		0.00050	5218426	0.00051	0.00050	5218426
. Nickel (Ni)	mg/L		0.0010	5218426	0.0012	0.0010	5218426
. Phosphorus (P)	mg/L		0.10	5218426	<0.10	0.10	5218426
. Potassium (K)	mg/L		0.20	5218426	2.8	0.20	5218426
. Selenium (Se)	mg/L		0.0020	5218426	<0.0020	0.0020	5218426
. Silicon (Si)	mg/L		0.050	5218426	8.0	0.050	5218426
. Silver (Ag)	mg/L		0.00010	5218426	<0.00010	0.00010	5218426
. Sodium (Na)	mg/L		0.10	5218426	240	0.10	5218426
. Strontium (Sr)	mg/L		0.0010	5218426	0.43	0.0010	5218426
. Thallium (Tl)	mg/L		0.000050	5218426	<0.000050	0.000050	5218426
. Titanium (Ti)	mg/L		0.0050	5218426	<0.0050	0.0050	5218426
. Uranium (U)	mg/L		0.00010	5218426	0.00018	0.00010	5218426
. Vanadium (V)	mg/L		0.00050	5218426	<0.00050	0.00050	5218426
. Zinc (Zn)	mg/L		0.0050	5218426	0.39	0.0050	5218426
. Zirconium (Zr)	mg/L		0.0010	5218426	<0.0010	0.0010	5218426
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIP271	FIP271		FIP272		
Sampling Date		2017/10/16 10:12	2017/10/16 10:12		2017/10/16 10:50		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK1 Lab-Dup	QC Batch	WG-160900764- 20171016-JK2	RDL	QC Batch

Inorganics							
Acidity	mg/L	39	38	5225570	8.6	5.0	5225570
Total Dissolved Solids	mg/L	480		5221289	305	50	5221289
Fluoride (F-)	mg/L	<0.10	<0.10	5217156	0.12	0.10	5221038
Total Organic Carbon (TOC)	mg/L	1.4		5220611	0.89	0.20	5220611
Total Suspended Solids	mg/L	<10		5221284	<10	10	5221284
Turbidity	NTU	<0.1		5216135	13	0.1	5216135
WAD Cyanide (Free)	ug/L	<1		5217822	<1	1	5217822

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIP273	FIP274		FIP275		
Sampling Date		2017/10/16 11:53	2017/10/16 14:40		2017/10/16 15:15		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK4	QC Batch	WG-160900764- 20171016-JK5	RDL	QC Batch

Inorganics							
Acidity	mg/L	8.8	7.8	5225570	36	5.0	5225570
Total Dissolved Solids	mg/L	215	285	5221289	470	50	5220449
Fluoride (F-)	mg/L	<0.10	<0.10	5217188	<0.10	0.10	5217188
Total Organic Carbon (TOC)	mg/L	1.7	0.84	5220611	0.92	0.20	5220611
Total Suspended Solids	mg/L	<10	<10	5221284	<10	10	5218954
Turbidity	NTU	7.2	17	5216135	0.2	0.1	5216135
WAD Cyanide (Free)	ug/L	<1	<1	5220334	<1	1	5217822

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIP276		FIP277	FIP277		
Sampling Date		2017/10/16 15:46		2017/10/16 16:30	2017/10/16 16:30		
COC Number		633340-01-01		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK6	QC Batch	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK7 Lab-Dup	RDL	QC Batch
Inorganics							
Acidity	mg/L	34	5225570	43		5.0	5225570
Total Dissolved Solids	mg/L	365	5221289	440		50	5221289
Fluoride (F-)	mg/L	<0.10	5217188	<0.10	<0.10	0.10	5221038
Total Organic Carbon (TOC)	mg/L	1.1	5220611	2.7		0.20	5220611
Total Suspended Solids	mg/L	<10	5221284	<10		10	5221284
Turbidity	NTU	0.4	5216135	0.3		0.1	5216135
WAD Cyanide (Free)	ug/L	<1	5217822	<1		1	5217822
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FIP278		FIP278		
Sampling Date		2017/10/16 17:10		2017/10/16 17:10		
COC Number		633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK8		WG-160900764- 20171016-JK8 Lab-Dup	RDL	QC Batch
Inorganics						
Acidity	mg/L	24			5.0	5225570
Total Dissolved Solids	mg/L	980			50	5221289
Fluoride (F-)	mg/L	<0.10			0.10	5221038
Total Organic Carbon (TOC)	mg/L	0.98		0.97	0.20	5220611
Total Suspended Solids	mg/L	<10		<10	10	5221284
Turbidity	NTU	<0.1			0.1	5216135
WAD Cyanide (Free)	ug/L	<1			1	5217822
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FIP271	FIP272		FIP273		
Sampling Date		2017/10/16 10:12	2017/10/16 10:50		2017/10/16 11:53		
COC Number		633340-01-01	633340-01-01		633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	QC Batch	WG-160900764- 20171016-JK3	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	5218617	<0.50	0.50	5218617
Mercury (Hg)	mg/L	<0.0001	<0.0001	5222706	<0.0001	0.0001	5223450
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		FIP274	FIP275	FIP276	FIP277		
Sampling Date		2017/10/16 14:40	2017/10/16 15:15	2017/10/16 15:46	2017/10/16 16:30		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK7	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	0.69	0.56	<0.50	0.50	5218617
Mercury (Hg)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	5222706
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		FIP278		
Sampling Date		2017/10/16 17:10		
COC Number		633340-01-01		
	UNITS	WG-160900764- 20171016-JK8	RDL	QC Batch

Metals				
Chromium (VI)	ug/L	<0.50	0.50	5218617
Mercury (Hg)	mg/L	<0.0001	0.0001	5223450
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

MICROBIOLOGY (WATER)

Maxxam ID		FIP271	FIP272	FIP273	FIP274	
Sampling Date		2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53	2017/10/16 14:40	
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01	
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK4	QC Batch

Microbiological						
Background	CFU/100mL	0	0	37	9	5216437
Total Coliforms	CFU/100mL	0	0	0	0	5216437
Escherichia coli	CFU/100mL	0	0	0	0	5216437
QC Batch = Quality Control Batch						

Maxxam ID		FIP275	FIP276	FIP277	FIP278	
Sampling Date		2017/10/16 15:15	2017/10/16 15:46	2017/10/16 16:30	2017/10/16 17:10	
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01	
	UNITS	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK8	QC Batch

Microbiological						
Background	CFU/100mL	1300	NDOGT (1)	NDOGT (1)	21	5216437
Total Coliforms	CFU/100mL	68	NDOGT (1)	NDOGT (1)	2	5216437
Escherichia coli	CFU/100mL	0	NDOGT (1)	NDOGT (1)	0	5216437
QC Batch = Quality Control Batch						
(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected						

O.REG 153 PCBs (WATER)

Maxxam ID		FIP271	FIP271	FIP272	FIP273		
Sampling Date		2017/10/16 10:12	2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK1 Lab-Dup	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Surrogate Recovery (%)							
Decachlorobiphenyl	%	95	96	114	110		5221417
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FIP274	FIP275	FIP276	FIP277		
Sampling Date		2017/10/16 14:40	2017/10/16 15:15	2017/10/16 15:46	2017/10/16 16:30		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK7	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5221417
Surrogate Recovery (%)							
Decachlorobiphenyl	%	104	108	106	113		5221417
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

O.REG 153 PCBS (WATER)

Maxxam ID		FIP278		
Sampling Date		2017/10/16 17:10		
COC Number		633340-01-01		
	UNITS	WG-160900764- 20171016-JK8	RDL	QC Batch
PCBs				
Aroclor 1242	ug/L	<0.05	0.05	5221417
Aroclor 1248	ug/L	<0.05	0.05	5221417
Aroclor 1254	ug/L	<0.05	0.05	5221417
Aroclor 1260	ug/L	<0.05	0.05	5221417
Total PCB	ug/L	<0.05	0.05	5221417
Surrogate Recovery (%)				
Decachlorobiphenyl	%	98		5221417
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP271	FIP272	FIP273		
Sampling Date		2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53		
COC Number		633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5215462
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5217643
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5217643
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5217643
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5217643
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5217643
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5217643
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5217643
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5217643
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5217643
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5217643
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5217643
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5217643
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP271	FIP272	FIP273		
Sampling Date		2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53		
COC Number		633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5217643
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5217643
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5217643
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5217643
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5217643
F1 (C6-C10)	ug/L	<25	<25	<25	25	5217643
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5217643
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5222945
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5222945
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5222945
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5222945
Surrogate Recovery (%)						
o-Terphenyl	%	101	98	93		5222945
4-Bromofluorobenzene	%	99	99	98		5217643
D4-1,2-Dichloroethane	%	103	104	104		5217643
D8-Toluene	%	100	100	99		5217643
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP274		FIP275	FIP276		
Sampling Date		2017/10/16 14:40		2017/10/16 15:15	2017/10/16 15:46		
COC Number		633340-01-01		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4	QC Batch	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	RDL	QC Batch

Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	5215462	<0.50	<0.50	0.50	5215462
Volatile Organics							
Acetone (2-Propanone)	ug/L	<10	5217643	<10	<10	10	5217643
Benzene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Bromodichloromethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Bromoform	ug/L	<1.0	5217643	<1.0	<1.0	1.0	5217643
Bromomethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Carbon Tetrachloride	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Chlorobenzene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Chloroform	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Dibromochloromethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,2-Dichlorobenzene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,3-Dichlorobenzene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,4-Dichlorobenzene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	5217643	<1.0	<1.0	1.0	5217643
1,1-Dichloroethane	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
1,2-Dichloroethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,1-Dichloroethylene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
cis-1,2-Dichloroethylene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
trans-1,2-Dichloroethylene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,2-Dichloropropane	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
cis-1,3-Dichloropropene	ug/L	<0.30	5217643	<0.30	<0.30	0.30	5217643
trans-1,3-Dichloropropene	ug/L	<0.40	5217643	<0.40	<0.40	0.40	5217643
Ethylbenzene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Ethylene Dibromide	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Hexane	ug/L	<1.0	5217643	<1.0	<1.0	1.0	5217643
Methylene Chloride(Dichloromethane)	ug/L	<2.0	5217643	<2.0	<2.0	2.0	5217643
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	5217643	<10	<10	10	5217643
Methyl Isobutyl Ketone	ug/L	<5.0	5217643	<5.0	<5.0	5.0	5217643
Methyl t-butyl ether (MTBE)	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP274		FIP275	FIP276		
Sampling Date		2017/10/16 14:40		2017/10/16 15:15	2017/10/16 15:46		
COC Number		633340-01-01		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK4	QC Batch	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	RDL	QC Batch
Styrene	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,1,1,2-Tetrachloroethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
1,1,2,2-Tetrachloroethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Tetrachloroethylene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Toluene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
1,1,1-Trichloroethane	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
1,1,2-Trichloroethane	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Trichloroethylene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	5217643	<0.50	<0.50	0.50	5217643
Vinyl Chloride	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
p+m-Xylene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
o-Xylene	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
Total Xylenes	ug/L	<0.20	5217643	<0.20	<0.20	0.20	5217643
F1 (C6-C10)	ug/L	<25	5217643	<25	<25	25	5217643
F1 (C6-C10) - BTEX	ug/L	<25	5217643	<25	<25	25	5217643
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	5222945	<100	<100	100	5222613
F3 (C16-C34 Hydrocarbons)	ug/L	<200	5222945	<200	<200	200	5222613
F4 (C34-C50 Hydrocarbons)	ug/L	<200	5222945	<200	<200	200	5222613
Reached Baseline at C50	ug/L	Yes	5222945	Yes	Yes		5222613
Surrogate Recovery (%)							
o-Terphenyl	%	97	5222945	97	97		5222613
4-Bromofluorobenzene	%	98	5217643	98	98		5217643
D4-1,2-Dichloroethane	%	103	5217643	105	106		5217643
D8-Toluene	%	99	5217643	99	99		5217643
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP277	FIP278		
Sampling Date		2017/10/16 16:30	2017/10/16 17:10		
COC Number		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK8	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	5215462
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	5217643
Benzene	ug/L	<0.20	<0.20	0.20	5217643
Bromodichloromethane	ug/L	<0.50	3.1	0.50	5217643
Bromoform	ug/L	<1.0	<1.0	1.0	5217643
Bromomethane	ug/L	<0.50	<0.50	0.50	5217643
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	5217643
Chlorobenzene	ug/L	<0.20	<0.20	0.20	5217643
Chloroform	ug/L	<0.20	3.8	0.20	5217643
Dibromochloromethane	ug/L	<0.50	2.9	0.50	5217643
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5217643
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5217643
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5217643
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	5217643
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	5217643
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	5217643
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	5217643
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5217643
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5217643
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	5217643
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	5217643
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	5217643
Ethylbenzene	ug/L	<0.20	<0.20	0.20	5217643
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	5217643
Hexane	ug/L	<1.0	<1.0	1.0	5217643
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	5217643
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	5217643
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	5217643
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	5217643
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIP277	FIP278		
Sampling Date		2017/10/16 16:30	2017/10/16 17:10		
COC Number		633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK8	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	0.50	5217643
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5217643
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5217643
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	5217643
Toluene	ug/L	<0.20	<0.20	0.20	5217643
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	5217643
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	5217643
Trichloroethylene	ug/L	<0.20	<0.20	0.20	5217643
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	5217643
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	5217643
p+m-Xylene	ug/L	<0.20	<0.20	0.20	5217643
o-Xylene	ug/L	<0.20	<0.20	0.20	5217643
Total Xylenes	ug/L	<0.20	<0.20	0.20	5217643
F1 (C6-C10)	ug/L	<25	<25	25	5217643
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	5217643
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	5222613
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	5222613
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	5222613
Reached Baseline at C50	ug/L	Yes	Yes		5222613
Surrogate Recovery (%)					
o-Terphenyl	%	99	98		5222613
4-Bromofluorobenzene	%	98	98		5217643
D4-1,2-Dichloroethane	%	107	106		5217643
D8-Toluene	%	99	99		5217643
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIP271	FIP272	FIP273	FIP274		
Sampling Date		2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53	2017/10/16 14:40		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK4	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5217963
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5217963
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5217963
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIP271	FIP272	FIP273	FIP274		
Sampling Date		2017/10/16 10:12	2017/10/16 10:50	2017/10/16 11:53	2017/10/16 14:40		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK1	WG-160900764- 20171016-JK2	WG-160900764- 20171016-JK3	WG-160900764- 20171016-JK4	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5217963
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5216131
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	13 (1)	27 (1)	15 (1)	15 (1)		5217963
2-Fluorobiphenyl	%	75	80	56	84		5217963
D14-Terphenyl (FS)	%	96	99	99	97		5217963
D5-Nitrobenzene	%	70	72	50	78		5217963
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIP275	FIP276	FIP277	FIP278		
Sampling Date		2017/10/16 15:15	2017/10/16 15:46	2017/10/16 16:30	2017/10/16 17:10		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK8	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5217963
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5217963
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5217963
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5217963
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIP275	FIP276	FIP277	FIP278		
Sampling Date		2017/10/16 15:15	2017/10/16 15:46	2017/10/16 16:30	2017/10/16 17:10		
COC Number		633340-01-01	633340-01-01	633340-01-01	633340-01-01		
	UNITS	WG-160900764- 20171016-JK5	WG-160900764- 20171016-JK6	WG-160900764- 20171016-JK7	WG-160900764- 20171016-JK8	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5217963
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5217963
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5217963
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5217963
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5217963
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5216131
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	27 (1)	30 (1)	25 (1)	40 (1)		5217963
2-Fluorobiphenyl	%	89	78	76	77		5217963
D14-Terphenyl (FS)	%	99	99	100	103		5217963
D5-Nitrobenzene	%	82	71	72	76		5217963
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

TEST SUMMARY

Maxxam ID: FIP271
Sample ID: WG-160900764-20171016-JK1
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217152	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217163	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222945	2017/10/20	2017/10/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5217156	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217135	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP271 Dup
Sample ID: WG-160900764-20171016-JK1
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217152	N/A	2017/10/18	Surinder Rai
Conductivity	AT	5217163	N/A	2017/10/18	Surinder Rai
Fluoride	ISE	5217156	2017/10/17	2017/10/18	Surinder Rai
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang

TEST SUMMARY

Maxxam ID: FIP271 Dup
Sample ID: WG-160900764-20171016-JK1
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	5217135	N/A	2017/10/18	Surinder Rai

Maxxam ID: FIP272
Sample ID: WG-160900764-20171016-JK2
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5221048	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221047	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219059	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222945	2017/10/20	2017/10/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5221038	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5221050	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

TEST SUMMARY

Maxxam ID: FIP273
Sample ID: WG-160900764-20171016-JK3
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5219448	N/A	2017/10/19	Alina Dobreanu
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219059	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222945	2017/10/20	2017/10/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5223450	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5219459	N/A	2017/10/19	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5219457	N/A	2017/10/19	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP273 Dup
Sample ID: WG-160900764-20171016-JK3
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219059	N/A	2017/10/19	Anastasia Hamanov

TEST SUMMARY

Maxxam ID: FIP274
Sample ID: WG-160900764-20171016-JK4
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5219448	N/A	2017/10/19	Alina Dobreanu
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5220334	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219054	N/A	2017/10/18	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222945	2017/10/20	2017/10/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/23	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5223274	N/A	2017/10/21	John Bowman
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/23	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5219459	N/A	2017/10/19	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5219457	N/A	2017/10/19	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/23	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP274 Dup
Sample ID: WG-160900764-20171016-JK4
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal

TEST SUMMARY

Maxxam ID: FIP275
Sample ID: WG-160900764-20171016-JK5
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5219448	N/A	2017/10/19	Alina Dobreanu
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5218620	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO ₃)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH ₄	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	5217104	N/A	2017/10/19	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5219459	N/A	2017/10/19	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5219457	N/A	2017/10/19	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5220449	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5218954	2017/10/18	2017/10/18	Xue Zheng Li(Scott)
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP275 Dup
Sample ID: WG-160900764-20171016-JK5
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg

TEST SUMMARY

Maxxam ID: FIP276
Sample ID: WG-160900764-20171016-JK6
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5217178	N/A	2017/10/18	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/19	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5217186	N/A	2017/10/18	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5218620	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5217188	2017/10/17	2017/10/18	Surinder Rai
Hardness (calculated as CaCO ₃)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/20	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/20	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	5217104	N/A	2017/10/19	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5217187	N/A	2017/10/18	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/20	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/20	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP276 Dup
Sample ID: WG-160900764-20171016-JK6
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware

TEST SUMMARY

Maxxam ID: FIP277
Sample ID: WG-160900764-20171016-JK7
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5221048	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5219448	N/A	2017/10/19	Alina Dobreanu
Conductivity	AT	5221047	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5218620	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5221038	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO ₃)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5222706	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH ₄	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	5217104	N/A	2017/10/19	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5221050	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5219459	N/A	2017/10/19	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5219457	N/A	2017/10/19	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP277 Dup
Sample ID: WG-160900764-20171016-JK7
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5221048	N/A	2017/10/20	Surinder Rai
Conductivity	AT	5221047	N/A	2017/10/20	Surinder Rai
Fluoride	ISE	5221038	2017/10/19	2017/10/20	Surinder Rai
pH	AT	5221050	N/A	2017/10/20	Surinder Rai

TEST SUMMARY

Maxxam ID: FIP278
Sample ID: WG-160900764-20171016-JK8
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5216131	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5217963	2017/10/18	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5225570	N/A	2017/10/23	Brent Boudreau
Alkalinity	AT	5221048	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5216331	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5215462	N/A	2017/10/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221904	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221047	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218617	N/A	2017/10/19	Lang Le
Free (WAD) Cyanide	SKAL/CN	5217822	N/A	2017/10/19	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5219059	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5222613	2017/10/20	2017/10/22	(Kent) Maolin Li
Fluoride	ISE	5221038	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5215470	N/A	2017/10/20	Automated Statchk
Mercury in Water by CVAA	CV/AA	5223450	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5218426	N/A	2017/10/19	Matthew Ritenburg
Ion Balance (% Difference)	CALC	5216333	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5216334	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5216437	N/A	2017/10/17	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5219482	N/A	2017/10/20	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5217140	N/A	2017/10/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5221417	2017/10/19	2017/10/20	Sarah Huang
pH	AT	5221050	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221927	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5216335	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5216336	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221913	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5216337	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5221289	2017/10/19	2017/10/20	Xue Zheng Li(Scott)
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai
Turbidity	AT	5216135	N/A	2017/10/18	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5217643	N/A	2017/10/20	Yang (Philip) Yu

Maxxam ID: FIP278 Dup
Sample ID: WG-160900764-20171016-JK8
Matrix: Water

Collected: 2017/10/16
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Organic Carbon (TOC)	TOCV/NDIR	5220611	N/A	2017/10/20	Anastasia Hamanov
Total Suspended Solids	BAL	5221284	2017/10/19	2017/10/20	Shivani Desai

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-1.3°C
Package 2	2.7°C
Package 3	7.7°C
Package 4	5.3°C
Package 5	7.7°C
Package 6	9.7°C
Package 7	3.3°C
Package 8	2.7°C
Package 9	2.7°C
Package 10	4.7°C

Sample FIP275 [WG-160900764-20171016-JK5] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIP276 [WG-160900764-20171016-JK6] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIP277 [WG-160900764-20171016-JK7] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217643	4-Bromofluorobenzene	2017/10/19	101	70 - 130	101	70 - 130	100	%				
5217643	D4-1,2-Dichloroethane	2017/10/19	110	70 - 130	108	70 - 130	107	%				
5217643	D8-Toluene	2017/10/19	97	70 - 130	99	70 - 130	97	%				
5217963	2,4,6-Tribromophenol	2017/10/22			76	50 - 130	40 (2)					
5217963	2-Fluorobiphenyl	2017/10/22			80	50 - 130	93	%				
5217963	D14-Terphenyl (FS)	2017/10/22			100	50 - 130	98	%				
5217963	D5-Nitrobenzene	2017/10/22			85	50 - 130	89	%				
5221417	Decachlorobiphenyl	2017/10/20	105	60 - 130	94	60 - 130	94	%				
5222613	o-Terphenyl	2017/10/22	106	60 - 130	104	60 - 130	100	%				
5222945	o-Terphenyl	2017/10/21	104	60 - 130	103	60 - 130	101	%				
5216135	Turbidity	2017/10/18			100	85 - 115	<0.1	NTU	3.1	20		
5217104	Nitrate (N)	2017/10/19	100	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
5217104	Nitrite (N)	2017/10/19	107	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
5217135	pH	2017/10/18			102	98 - 103			0.23	N/A		
5217140	Nitrate (N)	2017/10/20	92	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
5217140	Nitrite (N)	2017/10/20	106	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
5217152	Alkalinity (Total as CaCO3)	2017/10/18			95	85 - 115	<1.0	mg/L	1.1	20		
5217156	Fluoride (F-)	2017/10/18	104	80 - 120	103	80 - 120	<0.10	mg/L	NC	20		
5217163	Conductivity	2017/10/18			100	85 - 115	<1.0	umho/cm	0.81	25		
5217178	Alkalinity (Total as CaCO3)	2017/10/18			98	85 - 115	<1.0	mg/L	0.90	20		
5217186	Conductivity	2017/10/18			99	85 - 115	<1.0	umho/cm	1.5	25		
5217187	pH	2017/10/18			102	98 - 103			0.27	N/A		
5217188	Fluoride (F-)	2017/10/18	90	80 - 120	98	80 - 120	<0.10	mg/L	19	20		
5217643	1,1,1,2-Tetrachloroethane	2017/10/19	108	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
5217643	1,1,1-Trichloroethane	2017/10/19	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5217643	1,1,2,2-Tetrachloroethane	2017/10/19	117	70 - 130	112	70 - 130	<0.50	ug/L	NC	30		
5217643	1,1,2-Trichloroethane	2017/10/19	114	70 - 130	109	70 - 130	<0.50	ug/L	NC	30		
5217643	1,1-Dichloroethane	2017/10/19	108	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5217643	1,1-Dichloroethylene	2017/10/19	109	70 - 130	105	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217643	1,2-Dichlorobenzene	2017/10/19	103	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5217643	1,2-Dichloroethane	2017/10/19	111	70 - 130	106	70 - 130	<0.50	ug/L	NC	30		
5217643	1,2-Dichloropropane	2017/10/19	104	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5217643	1,3-Dichlorobenzene	2017/10/19	103	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5217643	1,4-Dichlorobenzene	2017/10/19	103	70 - 130	98	70 - 130	<0.50	ug/L	1.8	30		
5217643	Acetone (2-Propanone)	2017/10/19	108	60 - 140	106	60 - 140	<10	ug/L	0.92	30		
5217643	Benzene	2017/10/19	106	70 - 130	102	70 - 130	<0.20	ug/L	3.6	30		
5217643	Bromodichloromethane	2017/10/19	104	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5217643	Bromoform	2017/10/19	113	70 - 130	110	70 - 130	<1.0	ug/L	NC	30		
5217643	Bromomethane	2017/10/19	98	60 - 140	96	60 - 140	<0.50	ug/L	NC	30		
5217643	Carbon Tetrachloride	2017/10/19	99	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5217643	Chlorobenzene	2017/10/19	104	70 - 130	99	70 - 130	<0.20	ug/L	5.0	30		
5217643	Chloroform	2017/10/19	105	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5217643	cis-1,2-Dichloroethylene	2017/10/19	106	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
5217643	cis-1,3-Dichloropropene	2017/10/19	103	70 - 130	96	70 - 130	<0.30	ug/L	NC	30		
5217643	Dibromochloromethane	2017/10/19	111	70 - 130	107	70 - 130	<0.50	ug/L	NC	30		
5217643	Dichlorodifluoromethane (FREON 12)	2017/10/19	89	60 - 140	88	60 - 140	<1.0	ug/L	NC	30		
5217643	Ethylbenzene	2017/10/19	98	70 - 130	96	70 - 130	<0.20	ug/L	17	30		
5217643	Ethylene Dibromide	2017/10/19	116	70 - 130	110	70 - 130	<0.20	ug/L	NC	30		
5217643	F1 (C6-C10) - BTEX	2017/10/19					<25	ug/L	22	30		
5217643	F1 (C6-C10)	2017/10/19	96	60 - 140	88	60 - 140	<25	ug/L	8.5	30		
5217643	Hexane	2017/10/19	103	70 - 130	99	70 - 130	<1.0	ug/L	NC	30		
5217643	Methyl Ethyl Ketone (2-Butanone)	2017/10/19	125	60 - 140	121	60 - 140	<10	ug/L	NC	30		
5217643	Methyl Isobutyl Ketone	2017/10/19	115	70 - 130	110	70 - 130	<5.0	ug/L	NC	30		
5217643	Methyl t-butyl ether (MTBE)	2017/10/19	99	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5217643	Methylene Chloride(Dichloromethane)	2017/10/19	103	70 - 130	97	70 - 130	<2.0	ug/L	NC	30		
5217643	o-Xylene	2017/10/19	100	70 - 130	97	70 - 130	<0.20	ug/L	0.38	30		
5217643	p+m-Xylene	2017/10/19	99	70 - 130	96	70 - 130	<0.20	ug/L	18	30		
5217643	Styrene	2017/10/19	98	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5217643	Tetrachloroethylene	2017/10/19	95	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5217643	Toluene	2017/10/19	94	70 - 130	91	70 - 130	<0.20	ug/L	8.0	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217643	Total Xylenes	2017/10/19					<0.20	ug/L	9.8	30		
5217643	trans-1,2-Dichloroethylene	2017/10/19	104	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5217643	trans-1,3-Dichloropropene	2017/10/19	109	70 - 130	99	70 - 130	<0.40	ug/L	NC	30		
5217643	Trichloroethylene	2017/10/19	100	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5217643	Trichlorofluoromethane (FREON 11)	2017/10/19	101	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5217643	Vinyl Chloride	2017/10/19	98	70 - 130	95	70 - 130	<0.20	ug/L	1.0	30		
5217822	WAD Cyanide (Free)	2017/10/19	95	80 - 120	98	80 - 120	<1	ug/L	NC	20		
5217963	1,2,4-Trichlorobenzene	2017/10/22			64	40 - 130	<0.1	ug/L	26	30		
5217963	1-Methylnaphthalene	2017/10/22			87	50 - 130	<0.2	ug/L	27	30		
5217963	2,4,5-Trichlorophenol	2017/10/22			99	50 - 130	<0.2	ug/L	27	30		
5217963	2,4,6-Trichlorophenol	2017/10/22			95	50 - 130	<0.2	ug/L	25	30		
5217963	2,4-Dichlorophenol	2017/10/22			74	50 - 130	<0.1	ug/L	36 (1)	30		
5217963	2,4-Dimethylphenol	2017/10/22			47	30 - 130	<0.5	ug/L	28	30		
5217963	2,4-Dinitrophenol	2017/10/22			114	30 - 130	<2	ug/L	3.2	30		
5217963	2,4-Dinitrotoluene	2017/10/22			96	50 - 130	<0.3	ug/L	24	30		
5217963	2,6-Dinitrotoluene	2017/10/22			96	50 - 130	<0.3	ug/L	28	30		
5217963	2-Chlorophenol	2017/10/22			78	50 - 130	<0.1	ug/L	23	30		
5217963	2-Methylnaphthalene	2017/10/22			82	50 - 130	<0.2	ug/L	27	30		
5217963	3,3'-Dichlorobenzidine	2017/10/22			96	30 - 130	<0.5	ug/L	16	30		
5217963	Acenaphthene	2017/10/22			95	50 - 130	<0.2	ug/L	26	30		
5217963	Acenaphthylene	2017/10/22			92	50 - 130	<0.2	ug/L	28	30		
5217963	Anthracene	2017/10/22			85	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(a)anthracene	2017/10/22			109	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(a)pyrene	2017/10/22			101	50 - 130	<0.01	ug/L	21	30		
5217963	Benzo(b/j)fluoranthene	2017/10/22			114	50 - 130	<0.05	ug/L	22	30		
5217963	Benzo(g,h,i)perylene	2017/10/22			110	50 - 130	<0.05	ug/L	21	30		
5217963	Benzo(k)fluoranthene	2017/10/22			99	50 - 130	<0.05	ug/L	23	30		
5217963	Biphenyl	2017/10/22			89	50 - 130	<0.1	ug/L	26	30		
5217963	Bis(2-chloroethyl)ether	2017/10/22			83	50 - 130	<0.5	ug/L	28	30		
5217963	Bis(2-chloroisopropyl)ether	2017/10/22			80	50 - 130	<0.5	ug/L	29	30		
5217963	Bis(2-ethylhexyl)phthalate	2017/10/22			115	50 - 130	<1	ug/L	21	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5217963	Chrysene	2017/10/22			103	50 - 130	<0.05	ug/L	21	30		
5217963	Dibenz(a,h)anthracene	2017/10/22			111	50 - 130	<0.1	ug/L	22	30		
5217963	Diethyl phthalate	2017/10/22			91	50 - 130	<0.1	ug/L	22	30		
5217963	Dimethyl phthalate	2017/10/22			90	50 - 130	<0.1	ug/L	24	30		
5217963	Fluoranthene	2017/10/22			96	50 - 130	<0.2	ug/L	19	30		
5217963	Fluorene	2017/10/22			83	50 - 130	<0.2	ug/L	26	30		
5217963	Indeno(1,2,3-cd)pyrene	2017/10/22			124	50 - 130	<0.1	ug/L	23	30		
5217963	Naphthalene	2017/10/22			78	50 - 130	<0.2	ug/L	29	30		
5217963	p-Chloroaniline	2017/10/22			87	30 - 130	<1	ug/L	15	30		
5217963	Pentachlorophenol	2017/10/22			63	50 - 130	<0.1	ug/L	11	30		
5217963	Phenanthrene	2017/10/22			90	50 - 130	<0.1	ug/L	22	30		
5217963	Phenol	2017/10/22			39	30 - 130	<0.5	ug/L	17	30		
5217963	Pyrene	2017/10/22			104	50 - 130	<0.05	ug/L	20	30		
5218426	. Aluminum (Al)	2017/10/19	101	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
5218426	. Antimony (Sb)	2017/10/19	107	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20		
5218426	. Arsenic (As)	2017/10/19	100	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
5218426	. Barium (Ba)	2017/10/19	99	80 - 120	100	80 - 120	<0.0020	mg/L	0.10	20		
5218426	. Beryllium (Be)	2017/10/19	102	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5218426	. Boron (B)	2017/10/19	100	80 - 120	102	80 - 120	<0.010	mg/L	4.8	20		
5218426	. Cadmium (Cd)	2017/10/19	104	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20		
5218426	. Calcium (Ca)	2017/10/19	NC	80 - 120	98	80 - 120	<0.20	mg/L	2.6	20		
5218426	. Chromium (Cr)	2017/10/19	98	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
5218426	. Cobalt (Co)	2017/10/19	97	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5218426	. Copper (Cu)	2017/10/19	103	80 - 120	106	80 - 120	<0.0010	mg/L	1.3	20		
5218426	. Iron (Fe)	2017/10/19	99	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
5218426	. Lead (Pb)	2017/10/19	99	80 - 120	100	80 - 120	<0.00050	mg/L	7.5	20		
5218426	. Magnesium (Mg)	2017/10/19	99	80 - 120	100	80 - 120	<0.050	mg/L	2.8	20		
5218426	. Manganese (Mn)	2017/10/19	99	80 - 120	99	80 - 120	<0.0020	mg/L	NC	20		
5218426	. Molybdenum (Mo)	2017/10/19	103	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5218426	. Nickel (Ni)	2017/10/19	97	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
5218426	. Phosphorus (P)	2017/10/19	103	80 - 120	109	80 - 120	<0.10	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5218426	. Potassium (K)	2017/10/19	102	80 - 120	101	80 - 120	<0.20	mg/L	1.4	20		
5218426	. Selenium (Se)	2017/10/19	99	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
5218426	. Silicon (Si)	2017/10/19	100	80 - 120	101	80 - 120	<0.050	mg/L	2.3	20		
5218426	. Silver (Ag)	2017/10/19	97	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5218426	. Sodium (Na)	2017/10/19	98	80 - 120	98	80 - 120	<0.10	mg/L	1.2	20		
5218426	. Strontium (Sr)	2017/10/19	100	80 - 120	100	80 - 120	<0.0010	mg/L	1.8	20		
5218426	. Thallium (Tl)	2017/10/19	97	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20		
5218426	. Titanium (Ti)	2017/10/19	100	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5218426	. Uranium (U)	2017/10/19	102	80 - 120	99	80 - 120	<0.00010	mg/L	2.3	20		
5218426	. Vanadium (V)	2017/10/19	97	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
5218426	. Zinc (Zn)	2017/10/19	99	80 - 120	99	80 - 120	<0.0050	mg/L	1.1	20		
5218426	. Zirconium (Zr)	2017/10/19	106	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20		
5218617	Chromium (VI)	2017/10/19	100	80 - 120	103	80 - 120	<0.50	ug/L	NC	20		
5218620	Dissolved Organic Carbon	2017/10/18	90	80 - 120	97	80 - 120	0.23, RDL=0.20	mg/L	0.69	20		
5218954	Total Suspended Solids	2017/10/18					<10	mg/L	10	25	98	85 - 115
5219054	Dissolved Organic Carbon	2017/10/18	96	80 - 120	98	80 - 120	<0.20	mg/L	0.39	20		
5219059	Dissolved Organic Carbon	2017/10/19	89	80 - 120	92	80 - 120	<0.20	mg/L	2.2	20		
5219448	Dissolved Chloride (Cl)	2017/10/19	NC	80 - 120	104	80 - 120	<1.0	mg/L	2.8	20		
5219457	Dissolved Sulphate (SO4)	2017/10/19	NC	75 - 125	106	80 - 120	<1.0	mg/L	0.55	20		
5219459	Orthophosphate (P)	2017/10/19	107	75 - 125	100	80 - 120	<0.010	mg/L	1.3	25		
5219482	Total Ammonia-N	2017/10/20	95	80 - 120	100	85 - 115	<0.050	mg/L	3.0	20		
5220334	WAD Cyanide (Free)	2017/10/20	102	80 - 120	101	80 - 120	<1	ug/L	NC	20		
5220449	Total Dissolved Solids	2017/10/20					<50	mg/L	5.4	25	102	90 - 110
5220611	Total Organic Carbon (TOC)	2017/10/20	96	80 - 120	99	80 - 120	<0.20	mg/L	1.0	20		
5221038	Fluoride (F-)	2017/10/20	105	80 - 120	104	80 - 120	<0.10	mg/L	NC	20		
5221047	Conductivity	2017/10/20			100	85 - 115	<1.0	umho/cm	0.79	25		
5221048	Alkalinity (Total as CaCO3)	2017/10/20			95	85 - 115	<1.0	mg/L	0.51	20		
5221050	pH	2017/10/20			101	98 - 103			0.26	N/A		
5221284	Total Suspended Solids	2017/10/20					<10	mg/L	NC	25	97	85 - 115

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221289	Total Dissolved Solids	2017/10/20					<50	mg/L	0.48	25	98	90 - 110
5221417	Aroclor 1242	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1248	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1254	2017/10/20					<0.05	ug/L	NC	30		
5221417	Aroclor 1260	2017/10/20	116	60 - 130	98	60 - 130	<0.05	ug/L	NC	30		
5221417	Total PCB	2017/10/20	116	60 - 130	98	60 - 130	<0.05	ug/L	NC	40		
5221904	Dissolved Chloride (Cl)	2017/10/20	NC	80 - 120	104	80 - 120	<1.0	mg/L	0.25	20		
5221913	Dissolved Sulphate (SO4)	2017/10/20	NC	75 - 125	103	80 - 120	<1.0	mg/L	0.26	20		
5221927	Orthophosphate (P)	2017/10/20	111	75 - 125	99	80 - 120	<0.010	mg/L	4.8	25		
5222613	F2 (C10-C16 Hydrocarbons)	2017/10/22	NC	50 - 130	95	60 - 130	<100	ug/L	0.50	30		
5222613	F3 (C16-C34 Hydrocarbons)	2017/10/22	105	50 - 130	102	60 - 130	<200	ug/L	NC	30		
5222613	F4 (C34-C50 Hydrocarbons)	2017/10/22	109	50 - 130	105	60 - 130	<200	ug/L	NC	30		
5222706	Mercury (Hg)	2017/10/23	100	75 - 125	102	80 - 120	<0.0001	mg/L	NC	20		
5222945	F2 (C10-C16 Hydrocarbons)	2017/10/21	106	50 - 130	104	60 - 130	<100	ug/L	NC	30		
5222945	F3 (C16-C34 Hydrocarbons)	2017/10/21	102	50 - 130	101	60 - 130	<200	ug/L	NC	30		
5222945	F4 (C34-C50 Hydrocarbons)	2017/10/21	99	50 - 130	97	60 - 130	<200	ug/L	NC	30		
5223274	. Aluminum (Al)	2017/10/23	101	80 - 120	99	80 - 120	<0.0050	mg/L	8.5	20		
5223274	. Antimony (Sb)	2017/10/23	106	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		
5223274	. Arsenic (As)	2017/10/23	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
5223274	. Barium (Ba)	2017/10/23	98	80 - 120	97	80 - 120	<0.0020	mg/L	6.6	20		
5223274	. Beryllium (Be)	2017/10/23	107	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5223274	. Boron (B)	2017/10/23	102	80 - 120	97	80 - 120	<0.010	mg/L	0.74	20		
5223274	. Cadmium (Cd)	2017/10/23	103	80 - 120	100	80 - 120	<0.00010	mg/L	0	20		
5223274	. Calcium (Ca)	2017/10/23	100	80 - 120	98	80 - 120	<0.20	mg/L	NC	20		
5223274	. Chromium (Cr)	2017/10/23	98	80 - 120	95	80 - 120	<0.0050	mg/L	NC	20		
5223274	. Cobalt (Co)	2017/10/23	103	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5223274	. Copper (Cu)	2017/10/23	104	80 - 120	101	80 - 120	<0.0010	mg/L	0.60	20		
5223274	. Iron (Fe)	2017/10/23	103	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
5223274	. Lead (Pb)	2017/10/23	101	80 - 120	100	80 - 120	<0.00050	mg/L	2.9	20		
5223274	. Magnesium (Mg)	2017/10/23	105	80 - 120	100	80 - 120	<0.050	mg/L	NC	20		
5223274	. Manganese (Mn)	2017/10/23	100	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5223274	. Molybdenum (Mo)	2017/10/23	102	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
5223274	. Nickel (Ni)	2017/10/23	100	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
5223274	. Phosphorus (P)	2017/10/23	104	80 - 120	115	80 - 120	<0.10	mg/L	NC	20		
5223274	. Potassium (K)	2017/10/23	104	80 - 120	101	80 - 120	<0.20	mg/L	NC	20		
5223274	. Selenium (Se)	2017/10/23	102	80 - 120	101	80 - 120	<0.0020	mg/L	NC	20		
5223274	. Silicon (Si)	2017/10/23	103	80 - 120	102	80 - 120	<0.050	mg/L	1.6	20		
5223274	. Silver (Ag)	2017/10/23	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5223274	. Sodium (Na)	2017/10/23	103	80 - 120	100	80 - 120	<0.10	mg/L	0.61	20		
5223274	. Strontium (Sr)	2017/10/23	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
5223274	. Thallium (Tl)	2017/10/23	104	80 - 120	102	80 - 120	<0.000050	mg/L	NC	20		
5223274	. Titanium (Ti)	2017/10/23	101	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
5223274	. Uranium (U)	2017/10/23	99	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5223274	. Vanadium (V)	2017/10/23	96	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20		
5223274	. Zinc (Zn)	2017/10/23	101	80 - 120	99	80 - 120	<0.0050	mg/L	0.48	20		
5223274	. Zirconium (Zr)	2017/10/21	103	80 - 120	101	80 - 120	<0.0010	mg/L				
5223450	Mercury (Hg)	2017/10/23	110	75 - 125	106	80 - 120	<0.0001	mg/L	NC	20		
5225570	Acidity	2017/10/23	84	80 - 120	103	80 - 120	<5.0	mg/L	2.6	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Surrogate recovery was below the lower control limit. This may represent a low bias in some results.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Cristina Carriere, Scientific Service Specialist



Sirimathie Aluthwala, Campobello Micro

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

All on ice



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #		
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Page 1 of 1	633340	
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REC'D IN PORT HOPE

COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			

MAXXAM JOB#:			
633339 / 633340			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	X		
INTACT	X		
ICE PRESENT			

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
Jhnawoodward / Woodward	17/10/17	0830AM

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: #18379 Stantec Consulting Ltd	Quotation #: B48218	Deepthi Shaji		
Contact Name: Accounts Payable	Contact Name: Report - 160900764	Task #: 200.400	B7M9357		
Address: 300 Hagey Blvd Suite 100	Address: ON	Project #: 160900764	KES	ENV-625	
Waterloo ON N2L 0A4	Address: ON	Profit Centre: 1609	Clarrington TS - Private Well		
Phone: (519) 579-4410 x Fax: (519) 579-6733 x	Phone: Fax:	Site #: Clarrington TS - Private Well	C#633340-01-01		
Email: accounts.payable.invoices@stantec.com	Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co	Sampled By: JK	Depthi Shaji		

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)	Other Regulations	Special Instructions
<input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____	<input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Other _____	

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / VI	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	Total Coliforms E. coli Background	TDS & TSS	RCAs - Comprehensive (Drinking Water) No filter	Reg. 153 PCBs	Reg. 153 VOCS & F-H4	SVOCs	# of Bottles	Comments
1	WG-160900764-20171016-JK1	OCT 16 2017	1012	WG	n/a	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19	MICRO
2	WG-160900764-20171016-JK2		1050			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3	WG-160900764-20171016-JK3		1153			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		analyze per quote
4	JK4		1440			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		not reportable
5	JK5		1519			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6	JK6		1546			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
7	JK7		1630			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8	JK8		1710			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		REC'D IN PORT HOPE
9																	on ice
10																	

* RELINQUISHED BY: (Signature/Print) JK8 Jamie Koch	Date: (YY/MM/DD) 17/10/17	Time 2:05	RECEIVED BY: (Signature/Print) JANIS JRSIN...	Date: (YY/MM/DD) 17/10/17	Time 12:40	# Jars used and not submitted	Laboratory Use Only				
							Time Sensitive	Temperature (°C) on Rece: see ACTR	Custody Seal Present	Yes	No
								Intact			

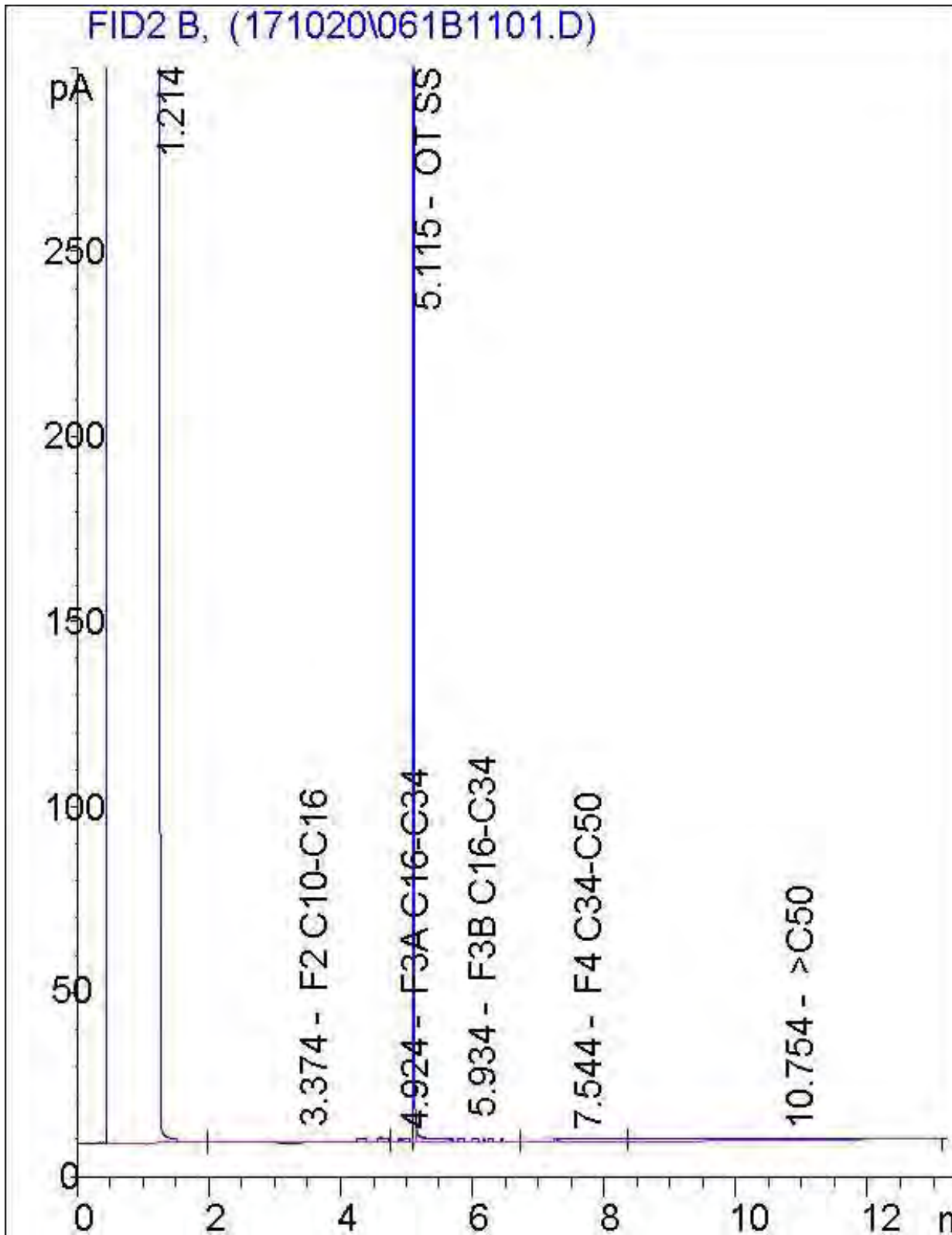
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT [HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF](http://maxxam.ca/wp-content/uploads/ontario-coc.pdf).

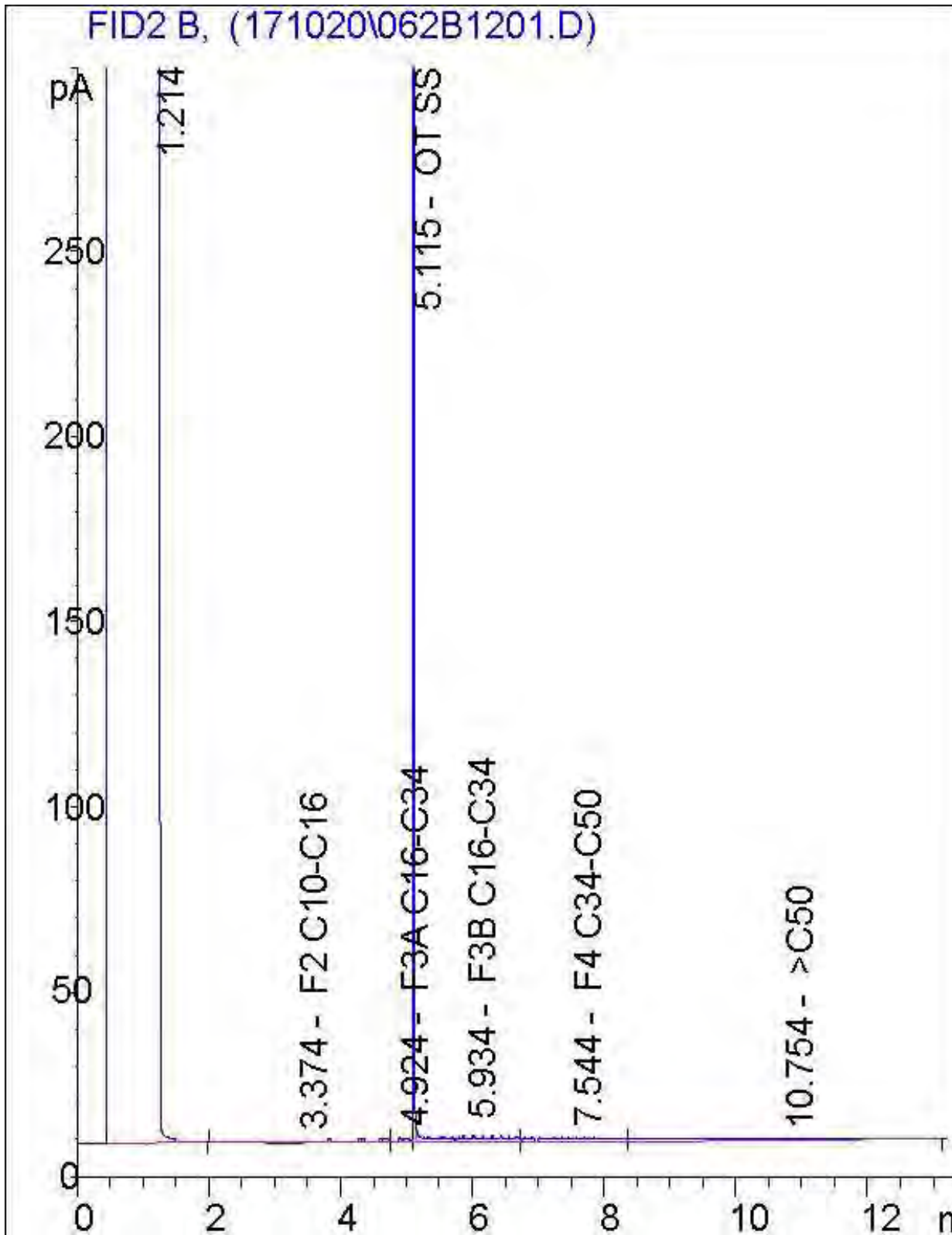
Ref to ACTR
 with 35779

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



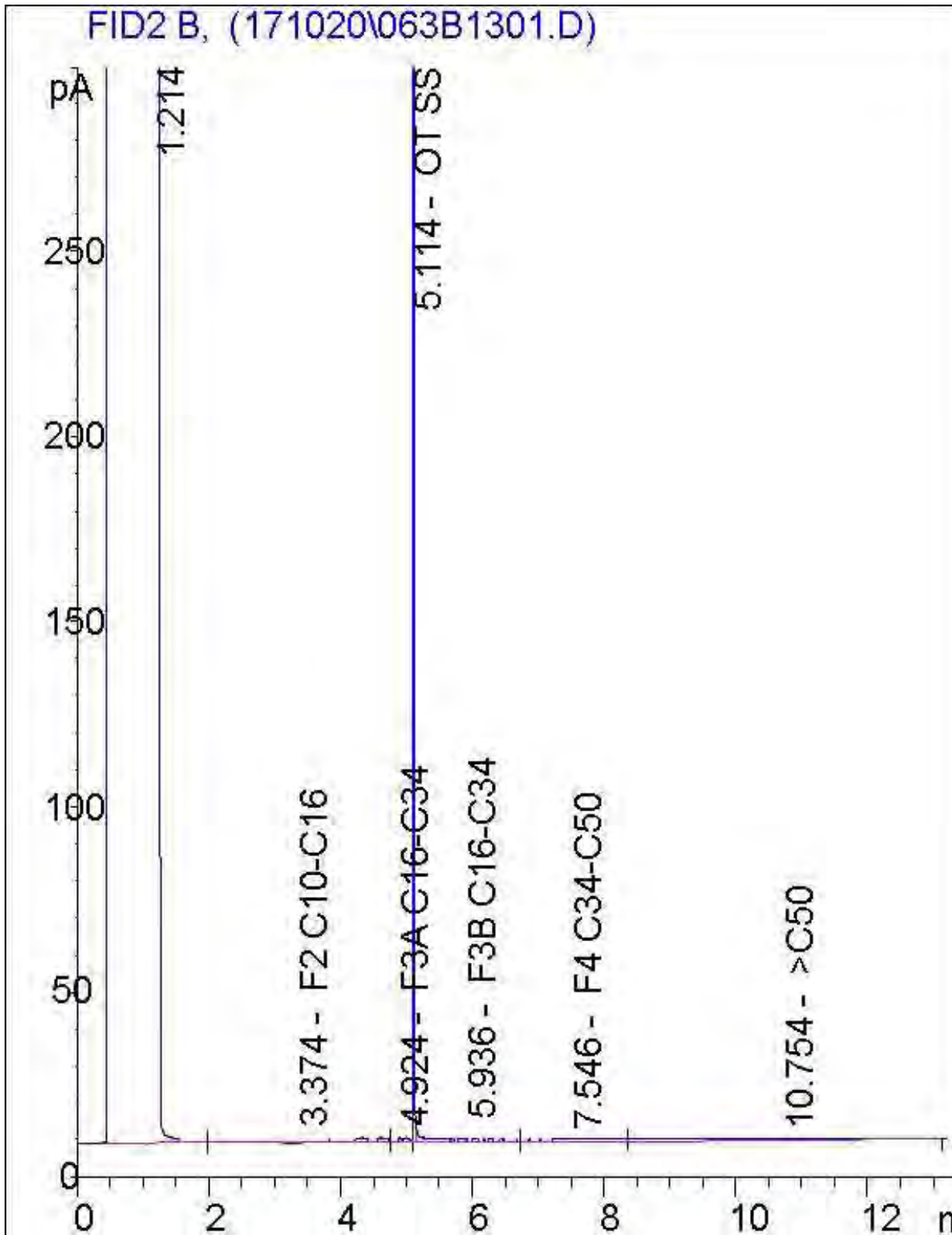
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



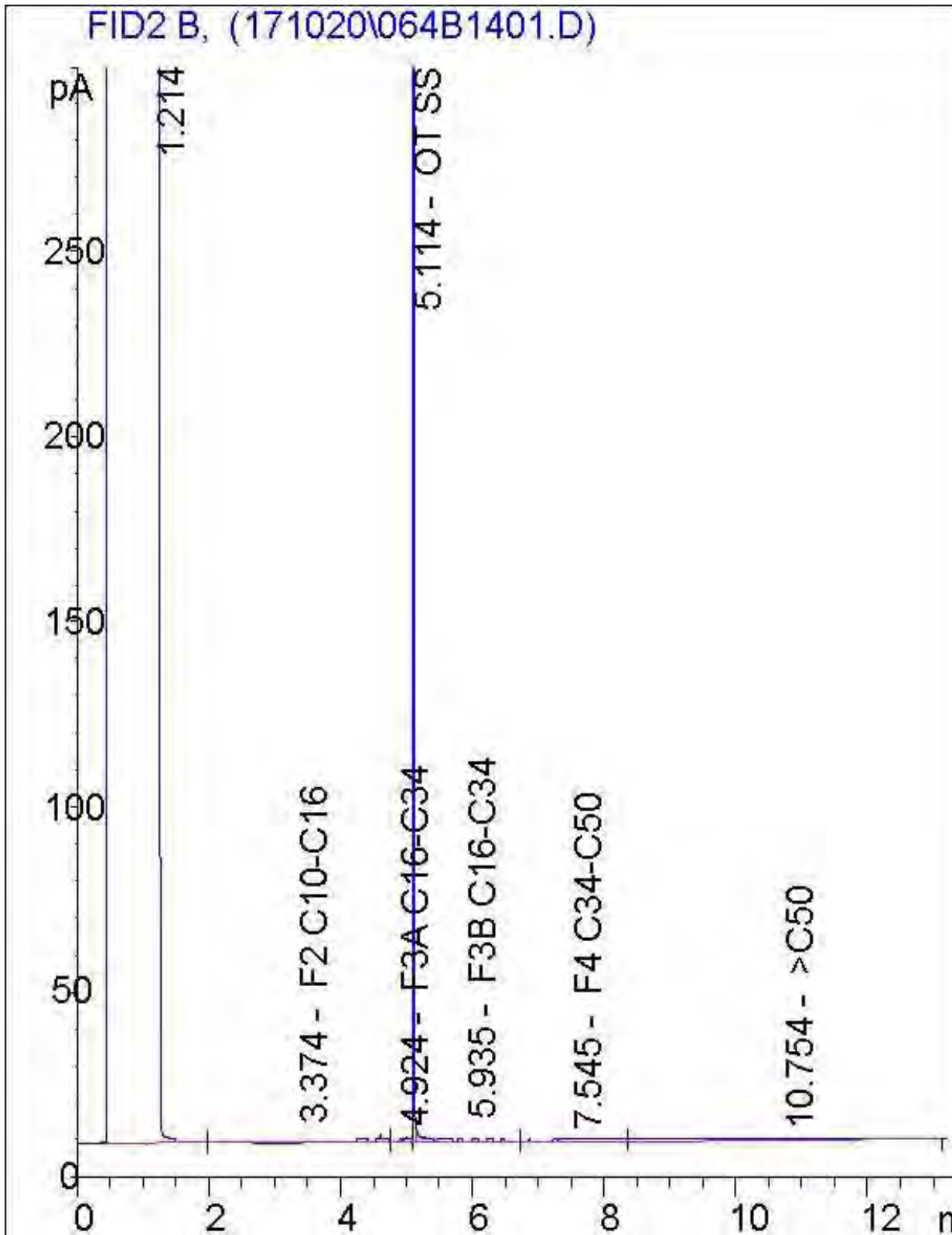
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



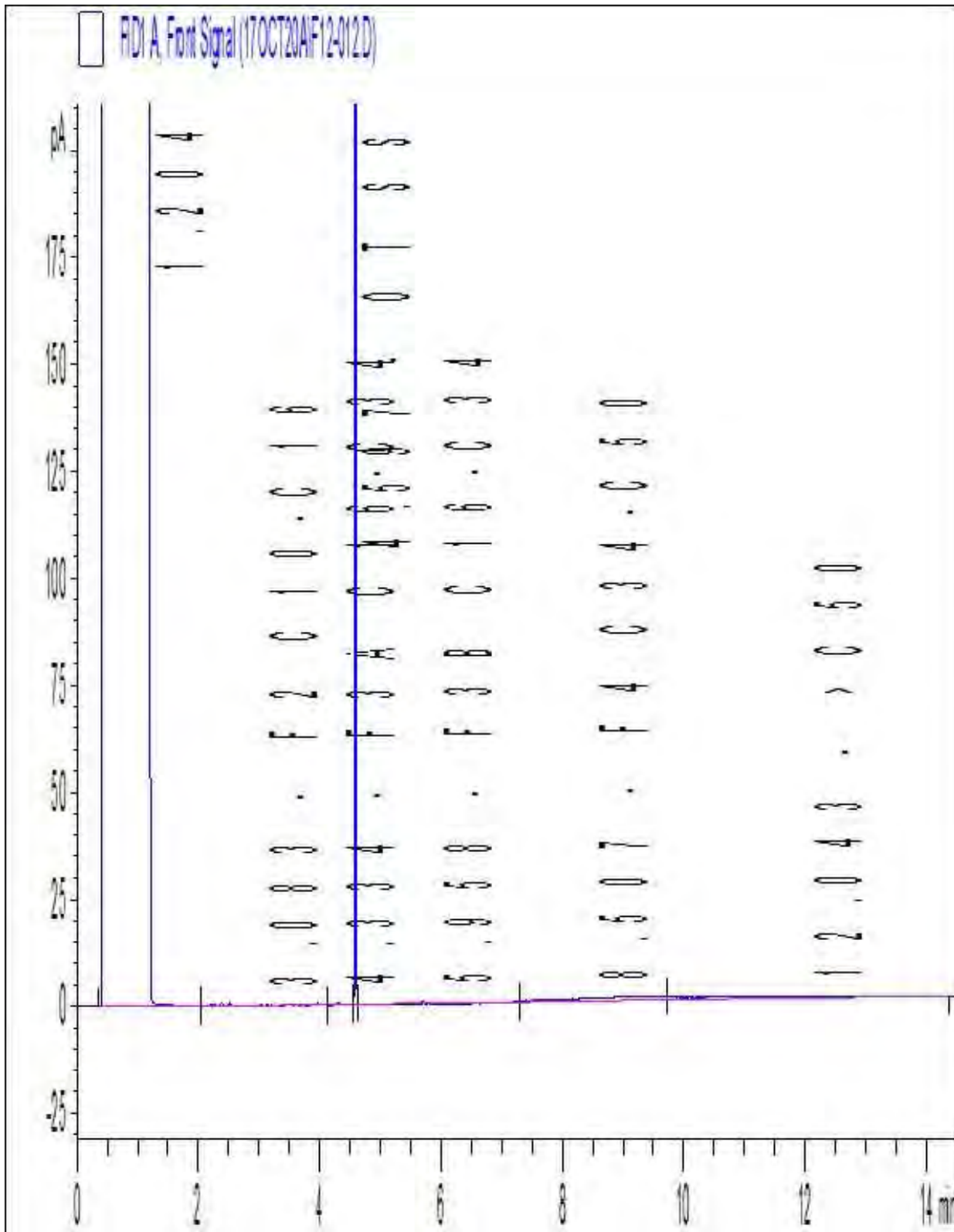
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



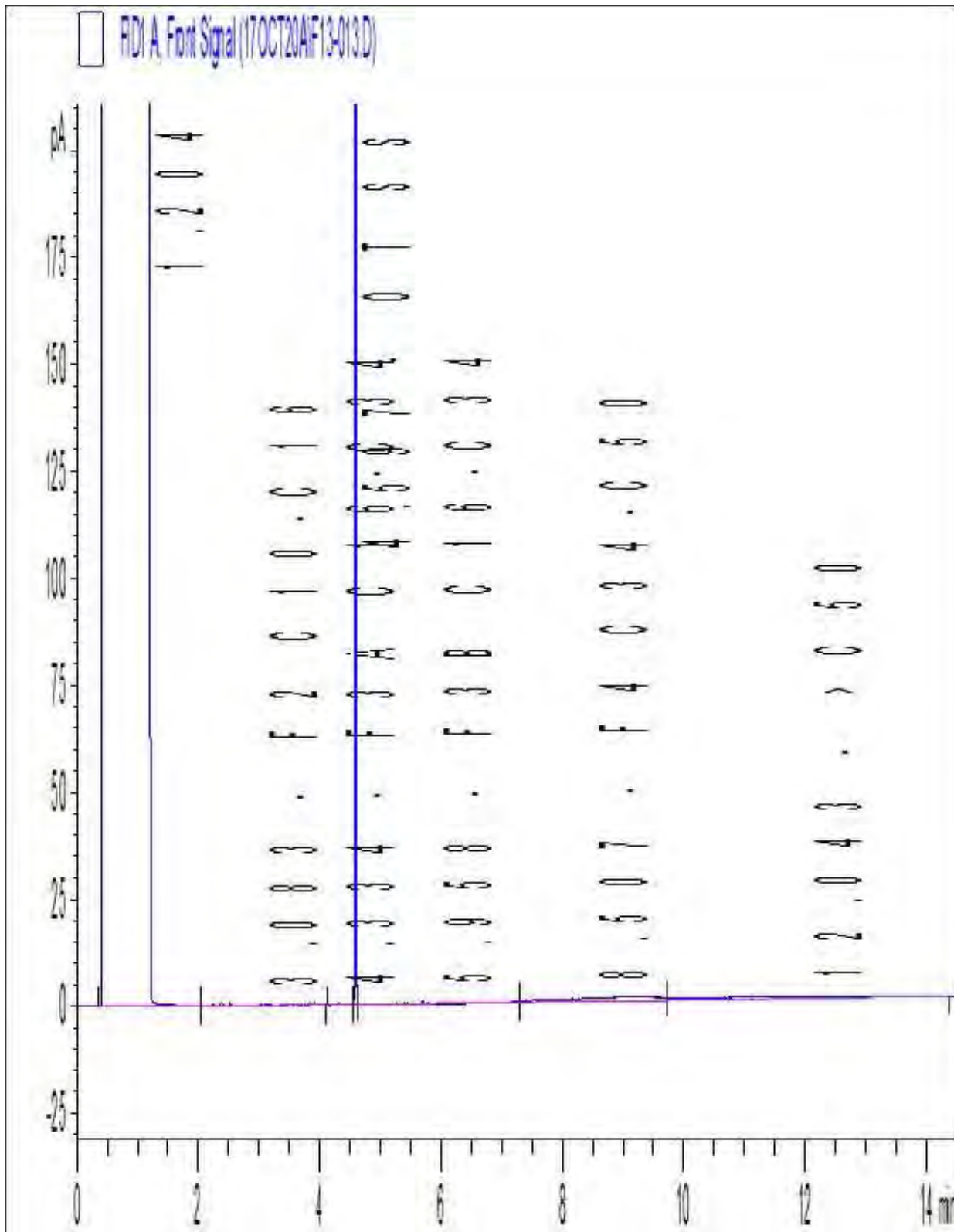
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



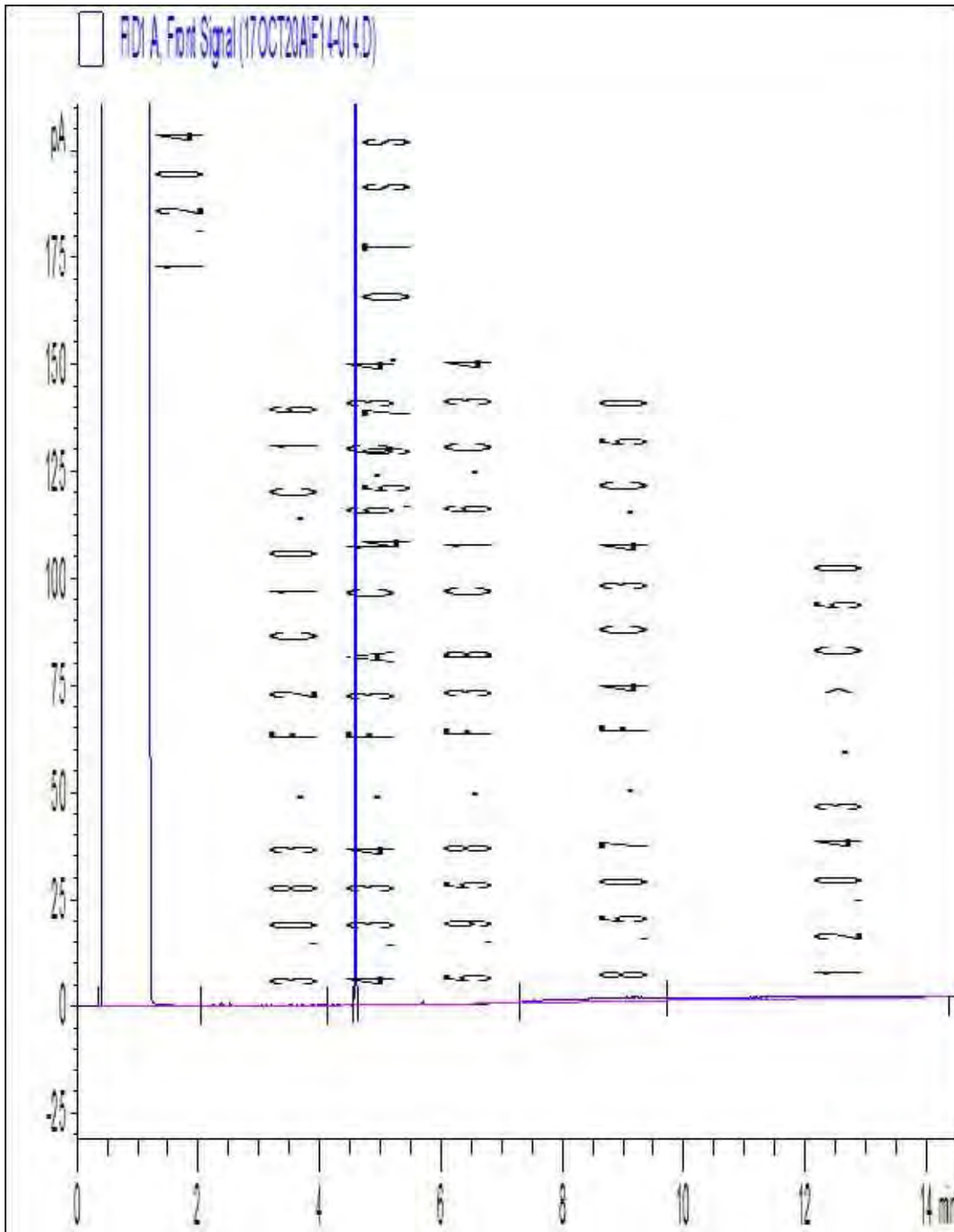
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



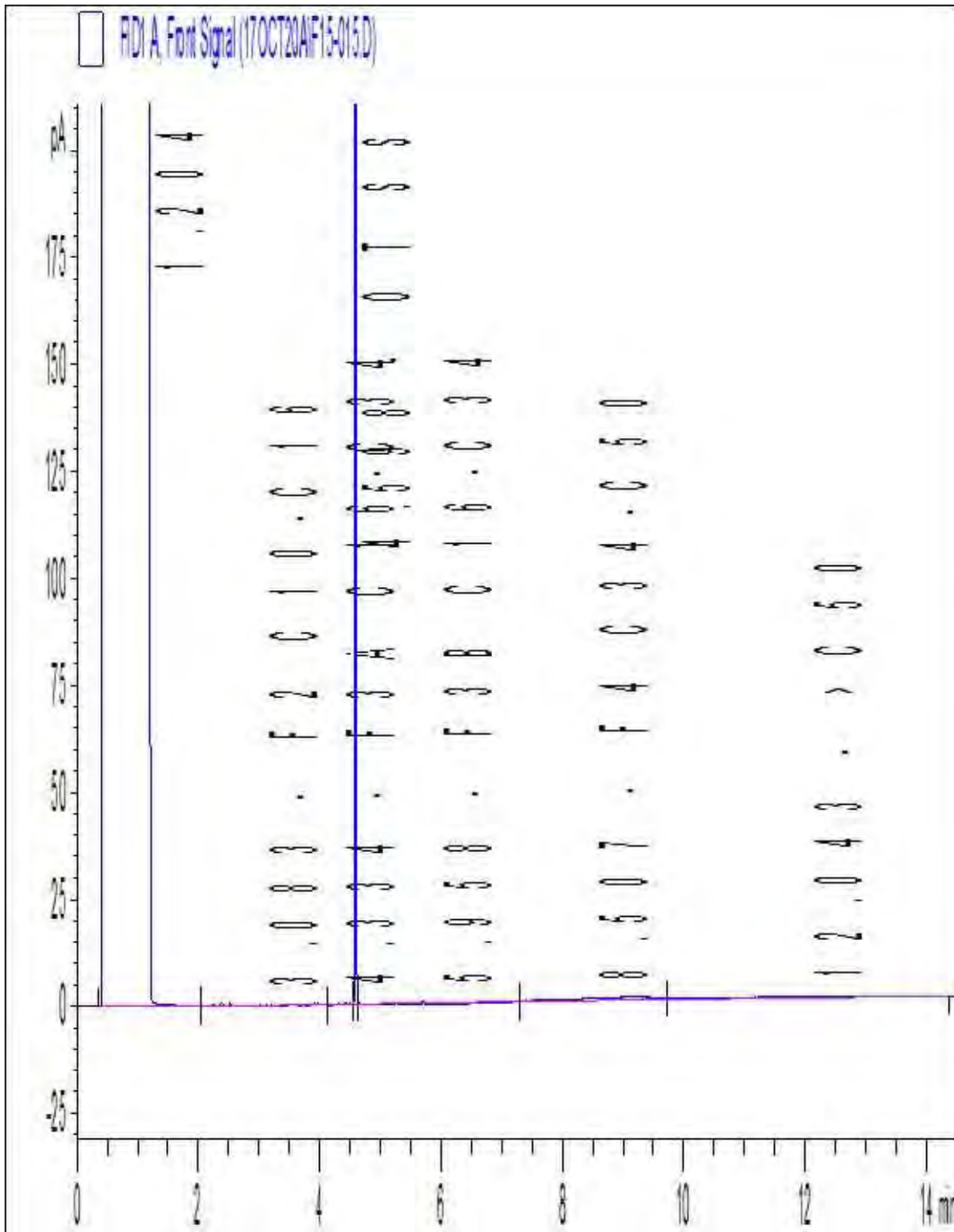
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633345-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/26
 Report #: R4804985
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0778

Received: 2017/10/17, 20:44

Sample Matrix: Water
 # Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	10	N/A	2017/10/23	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	7	2017/10/21	2017/10/22	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	3	2017/10/21	2017/10/23	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	10	N/A	2017/10/25		SM 22 2310
Alkalinity	9	N/A	2017/10/20	CAM SOP-00448	SM 22 2320 B m
Alkalinity	1	N/A	2017/10/22	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2017/10/21	CAM SOP-00102	APHA 4500-CO2 D
Carbonate, Bicarbonate and Hydroxide	1	N/A	2017/10/23	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	10	N/A	2017/10/24		EPA 8260C m
Chloride by Automated Colourimetry	9	N/A	2017/10/20	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2017/10/23	CAM SOP-00463	EPA 325.2 m
Conductivity	9	N/A	2017/10/20	CAM SOP-00414	SM 22 2510 m
Conductivity	1	N/A	2017/10/22	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	3	N/A	2017/10/20	CAM SOP-00436	EPA 7199 m
Chromium (VI) in Water	7	N/A	2017/10/23	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	10	N/A	2017/10/20	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	2	N/A	2017/10/19	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (2)	2	N/A	2017/10/21	CAM SOP-00446	SM 22 5310 B m
Dissolved Organic Carbon (DOC) (2)	6	N/A	2017/10/25	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	10	2017/10/23	2017/10/24	CAM SOP-00316	CCME PHC-CWS m
Fluoride	9	2017/10/19	2017/10/20	CAM SOP-00449	SM 22 4500-F C m
Fluoride	1	2017/10/20	2017/10/22	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2017/10/20	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	4	N/A	2017/10/21	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	2	N/A	2017/10/23	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	2	2017/10/20	2017/10/23	CAM SOP-00453	EPA 7470A m
Mercury	8	2017/10/21	2017/10/24	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (4)	6	N/A	2017/10/20	CAM SOP-00447	EPA 6020B m

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633345-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/26
 Report #: R4804985
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0778

Received: 2017/10/17, 20:44

Sample Matrix: Water
 # Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Metals Analysis by ICPMS (as received) (4)	4	N/A	2017/10/21	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	7	N/A	2017/10/21		
Ion Balance (% Difference)	2	N/A	2017/10/23		
Ion Balance (% Difference)	1	N/A	2017/10/24		
Anion and Cation Sum	8	N/A	2017/10/21		
Anion and Cation Sum	2	N/A	2017/10/23		
Total Coliforms/ E. coli, CFU/100mL	10	N/A	2017/10/18	CAM SOP-00551	MOE E3407
Total Ammonia-N	10	N/A	2017/10/23	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	9	N/A	2017/10/21	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (5)	1	N/A	2017/10/23	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	10	2017/10/21	2017/10/21	CAM SOP-00309	EPA 8082A m
pH	9	N/A	2017/10/20	CAM SOP-00413	SM 4500H+ B m
pH	1	N/A	2017/10/22	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	9	N/A	2017/10/20	CAM SOP-00461	EPA 365.1 m
Orthophosphate	1	N/A	2017/10/23	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	7	N/A	2017/10/21		
Sat. pH and Langelier Index (@ 20C)	2	N/A	2017/10/23		
Sat. pH and Langelier Index (@ 20C)	1	N/A	2017/10/24		
Sat. pH and Langelier Index (@ 4C)	7	N/A	2017/10/21		
Sat. pH and Langelier Index (@ 4C)	2	N/A	2017/10/23		
Sat. pH and Langelier Index (@ 4C)	1	N/A	2017/10/24		
Sulphate by Automated Colourimetry	9	N/A	2017/10/20	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2017/10/23	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	7	N/A	2017/10/21		
Total Dissolved Solids (TDS calc)	2	N/A	2017/10/23		
Total Dissolved Solids (TDS calc)	1	N/A	2017/10/24		
Total Dissolved Solids	10	2017/10/19	2017/10/23	CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (6)	4	N/A	2017/10/21	CAM SOP-00446	SM 22 5310B m
Total Organic Carbon (TOC) (6)	4	N/A	2017/10/25	CAM SOP-00446	SM 22 5310B m
Total Organic Carbon (TOC) (6)	2	N/A	2017/10/26	CAM SOP-00446	SM 22 5310B m

Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633345-01-01

Attention:Report - 160900764

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 Clarington
 ON
 Canada

Report Date: 2017/10/26
 Report #: R4804985
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0778
Received: 2017/10/17, 20:44

Sample Matrix: Water
 # Samples Received: 10

Analyses	Date		Laboratory Method	Reference
	Quantity	Date		
Total Suspended Solids	10	2017/10/19	2017/10/21 CAM SOP-00428	SM 22 2540D m
Turbidity	10	N/A	2017/10/19 CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	10	N/A	2017/10/23 CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Metals analysis was performed on the sample 'as received'.
- (5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (6) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.



Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your C.O.C. #: 633345-01-01

Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/26
Report #: R4804985
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N0778
Received: 2017/10/17, 20:44

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX849	FIX849		
Sampling Date		2017/10/17 09:05	2017/10/17 09:05		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK9 Lab-Dup	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	3.36		N/A	5217926
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	130		1.0	5217922
Calculated TDS	mg/L	180		1.0	5217925
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	2.0		1.0	5217922
Cation Sum	me/L	3.00		N/A	5217926
Hardness (CaCO ₃)	mg/L	85		1.0	5218674
Ion Balance (% Difference)	%	5.58		N/A	5217809
Langelier Index (@ 20C)	N/A	0.175			5217921
Langelier Index (@ 4C)	N/A	-0.0750			5217924
Saturation pH (@ 20C)	N/A	8.05			5217921
Saturation pH (@ 4C)	N/A	8.30			5217924
Inorganics					
Total Ammonia-N	mg/L	0.12	0.11	0.050	5223572
Conductivity	umho/cm	300		1.0	5221404
Dissolved Organic Carbon	mg/L	0.95	0.92	0.20	5221057
Orthophosphate (P)	mg/L	0.016		0.010	5221932
pH	pH	8.22			5221408
Dissolved Sulphate (SO ₄)	mg/L	34		1.0	5221931
Alkalinity (Total as CaCO ₃)	mg/L	130		1.0	5221398
Dissolved Chloride (Cl)	mg/L	1.6		1.0	5221928
Nitrite (N)	mg/L	<0.010		0.010	5221854
Nitrate (N)	mg/L	<0.10		0.10	5221854
Metals					
. Aluminum (Al)	mg/L	<0.0050	0.0065	0.0050	5221832
. Antimony (Sb)	mg/L	<0.00050	<0.00050	0.00050	5221832
. Arsenic (As)	mg/L	0.0030	0.0032	0.0010	5221832
. Barium (Ba)	mg/L	0.035	0.033	0.0020	5221832
. Beryllium (Be)	mg/L	<0.00050	<0.00050	0.00050	5221832
. Boron (B)	mg/L	0.066	0.066	0.010	5221832
. Cadmium (Cd)	mg/L	<0.00010	<0.00010	0.00010	5221832
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX849	FIX849		
Sampling Date		2017/10/17 09:05	2017/10/17 09:05		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK9 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L	16	16	0.20	5221832
. Chromium (Cr)	mg/L	<0.0050	<0.0050	0.0050	5221832
. Cobalt (Co)	mg/L	<0.00050	<0.00050	0.00050	5221832
. Copper (Cu)	mg/L	<0.0010	<0.0010	0.0010	5221832
. Iron (Fe)	mg/L	<0.10	<0.10	0.10	5221832
. Lead (Pb)	mg/L	<0.00050	<0.00050	0.00050	5221832
. Magnesium (Mg)	mg/L	11	10	0.050	5221832
. Manganese (Mn)	mg/L	0.0073	0.0072	0.0020	5221832
. Molybdenum (Mo)	mg/L	0.0051	0.0052	0.00050	5221832
. Nickel (Ni)	mg/L	<0.0010	<0.0010	0.0010	5221832
. Phosphorus (P)	mg/L	<0.10	<0.10	0.10	5221832
. Potassium (K)	mg/L	0.80	0.79	0.20	5221832
. Selenium (Se)	mg/L	<0.0020	<0.0020	0.0020	5221832
. Silicon (Si)	mg/L	6.2	6.2	0.050	5221832
. Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	5221832
. Sodium (Na)	mg/L	29	29	0.10	5221832
. Strontium (Sr)	mg/L	0.37	0.36	0.0010	5221832
. Thallium (Tl)	mg/L	<0.000050	<0.000050	0.000050	5221832
. Titanium (Ti)	mg/L	<0.0050	<0.0050	0.0050	5221832
. Uranium (U)	mg/L	0.00047	0.00048	0.00010	5221832
. Vanadium (V)	mg/L	<0.00050	<0.00050	0.00050	5221832
. Zinc (Zn)	mg/L	<0.0050	<0.0050	0.0050	5221832
. Zirconium (Zr)	mg/L	<0.0010	<0.0010	0.0010	5221832
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX850	FIX850		
Sampling Date		2017/10/17 10:05	2017/10/17 10:05		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	14.2		N/A	5217926
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	410		1.0	5217922
Calculated TDS	mg/L	780		1.0	5217925
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	1.5		1.0	5217922
Cation Sum	me/L	14.3		N/A	5217926
Hardness (CaCO ₃)	mg/L	570		1.0	5218674
Ion Balance (% Difference)	%	0.260		N/A	5217809
Langelier Index (@ 20C)	N/A	0.977			5217921
Langelier Index (@ 4C)	N/A	0.730			5217924
Saturation pH (@ 20C)	N/A	6.62			5217921
Saturation pH (@ 4C)	N/A	6.87			5217924
Inorganics					
Total Ammonia-N	mg/L	<0.050		0.050	5223572
Conductivity	umho/cm	1300	1300	1.0	5221404
Dissolved Organic Carbon	mg/L	2.2		0.20	5230611
Orthophosphate (P)	mg/L	<0.010		0.010	5221932
pH	pH	7.60	7.57		5221408
Dissolved Sulphate (SO ₄)	mg/L	81		1.0	5221931
Alkalinity (Total as CaCO ₃)	mg/L	410	410	1.0	5221398
Dissolved Chloride (Cl)	mg/L	150		2.0	5221928
Nitrite (N)	mg/L	0.010		0.010	5221854
Nitrate (N)	mg/L	2.95		0.10	5221854
Metals					
. Aluminum (Al)	mg/L	<0.0050		0.0050	5221780
. Antimony (Sb)	mg/L	<0.00050		0.00050	5221780
. Arsenic (As)	mg/L	<0.0010		0.0010	5221780
. Barium (Ba)	mg/L	0.11		0.0020	5221780
. Beryllium (Be)	mg/L	<0.00050		0.00050	5221780
. Boron (B)	mg/L	0.021		0.010	5221780
. Cadmium (Cd)	mg/L	<0.00010		0.00010	5221780
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX850	FIX850		
Sampling Date		2017/10/17 10:05	2017/10/17 10:05		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L	200		0.20	5221780
. Chromium (Cr)	mg/L	<0.0050		0.0050	5221780
. Cobalt (Co)	mg/L	<0.00050		0.00050	5221780
. Copper (Cu)	mg/L	0.013		0.0010	5221780
. Iron (Fe)	mg/L	<0.10		0.10	5221780
. Lead (Pb)	mg/L	<0.00050		0.00050	5221780
. Magnesium (Mg)	mg/L	18		0.050	5221780
. Manganese (Mn)	mg/L	<0.0020		0.0020	5221780
. Molybdenum (Mo)	mg/L	<0.00050		0.00050	5221780
. Nickel (Ni)	mg/L	<0.0010		0.0010	5221780
. Phosphorus (P)	mg/L	<0.10		0.10	5221780
. Potassium (K)	mg/L	1.4		0.20	5221780
. Selenium (Se)	mg/L	<0.0020		0.0020	5221780
. Silicon (Si)	mg/L	5.0		0.050	5221780
. Silver (Ag)	mg/L	<0.00010		0.00010	5221780
. Sodium (Na)	mg/L	66		0.10	5221780
. Strontium (Sr)	mg/L	0.36		0.0010	5221780
. Thallium (Tl)	mg/L	<0.000050		0.000050	5221780
. Titanium (Ti)	mg/L	<0.0050		0.0050	5221780
. Uranium (U)	mg/L	0.00092		0.00010	5221780
. Vanadium (V)	mg/L	<0.00050		0.00050	5221780
. Zinc (Zn)	mg/L	<0.0050		0.0050	5221780
. Zirconium (Zr)	mg/L	<0.0010		0.0010	5221780
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX851			FIX852		
Sampling Date		2017/10/17 10:49			2017/10/17 11:34		
COC Number		633345-01-01			633345-01-01		
	UNITS	WG-160900764- 20171017-JK11	RDL	QC Batch	WG-160900764- 20171017-JK12	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	17.4	N/A	5217926	6.95	N/A	5217926
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	340	1.0	5217922	280	1.0	5217922
Calculated TDS	mg/L	960	1.0	5217925	370	1.0	5217925
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.2	1.0	5217922	1.8	1.0	5217922
Cation Sum	me/L	17.1	N/A	5217926	6.45	N/A	5217926
Hardness (CaCO3)	mg/L	420	1.0	5218674	310	1.0	5218674
Ion Balance (% Difference)	%	0.910	N/A	5217809	3.71	N/A	5217809
Langelier Index (@ 20C)	N/A	0.949		5217921	0.872		5217921
Langelier Index (@ 4C)	N/A	0.703		5217924	0.623		5217924
Saturation pH (@ 20C)	N/A	6.88		5217921	6.97		5217921
Saturation pH (@ 4C)	N/A	7.12		5217924	7.22		5217924
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	5223572	<0.050	0.050	5223572
Conductivity	umho/cm	1700	1.0	5221404	620	1.0	5221404
Dissolved Organic Carbon	mg/L	1.5	0.20	5230611	1.2	0.20	5230611
Orthophosphate (P)	mg/L	<0.010	0.010	5221932	<0.010	0.010	5221932
pH	pH	7.83		5221408	7.84		5221408
Dissolved Sulphate (SO4)	mg/L	25	1.0	5221931	19	1.0	5221931
Alkalinity (Total as CaCO3)	mg/L	340	1.0	5221398	280	1.0	5221398
Dissolved Chloride (Cl)	mg/L	350	4.0	5221928	14	1.0	5221928
Nitrite (N)	mg/L	<0.010	0.010	5221842	<0.010	0.010	5221854
Nitrate (N)	mg/L	1.99	0.10	5221842	8.11	0.10	5221854
Metals							
. Aluminum (Al)	mg/L	<0.0050	0.0050	5221832	0.0059	0.0050	5221832
. Antimony (Sb)	mg/L	<0.00050	0.00050	5221832	<0.00050	0.00050	5221832
. Arsenic (As)	mg/L	<0.0010	0.0010	5221832	<0.0010	0.0010	5221832
. Barium (Ba)	mg/L	0.13	0.0020	5221832	0.047	0.0020	5221832
. Beryllium (Be)	mg/L	<0.00050	0.00050	5221832	<0.00050	0.00050	5221832
. Boron (B)	mg/L	<0.010	0.010	5221832	<0.010	0.010	5221832
. Cadmium (Cd)	mg/L	<0.00010	0.00010	5221832	<0.00010	0.00010	5221832
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX851			FIX852		
Sampling Date		2017/10/17 10:49			2017/10/17 11:34		
COC Number		633345-01-01			633345-01-01		
	UNITS	WG-160900764- 20171017-JK11	RDL	QC Batch	WG-160900764- 20171017-JK12	RDL	QC Batch
. Calcium (Ca)	mg/L	140	0.20	5221832	110	0.20	5221832
. Chromium (Cr)	mg/L	<0.0050	0.0050	5221832	<0.0050	0.0050	5221832
. Cobalt (Co)	mg/L	<0.00050	0.00050	5221832	<0.00050	0.00050	5221832
. Copper (Cu)	mg/L	0.0045	0.0010	5221832	0.0062	0.0010	5221832
. Iron (Fe)	mg/L	<0.10	0.10	5221832	<0.10	0.10	5221832
. Lead (Pb)	mg/L	0.0014	0.00050	5221832	<0.00050	0.00050	5221832
. Magnesium (Mg)	mg/L	19	0.050	5221832	11	0.050	5221832
. Manganese (Mn)	mg/L	<0.0020	0.0020	5221832	<0.0020	0.0020	5221832
. Molybdenum (Mo)	mg/L	<0.00050	0.00050	5221832	<0.00050	0.00050	5221832
. Nickel (Ni)	mg/L	<0.0010	0.0010	5221832	<0.0010	0.0010	5221832
. Phosphorus (P)	mg/L	<0.10	0.10	5221832	<0.10	0.10	5221832
. Potassium (K)	mg/L	1.7	0.20	5221832	0.97	0.20	5221832
. Selenium (Se)	mg/L	<0.0020	0.0020	5221832	<0.0020	0.0020	5221832
. Silicon (Si)	mg/L	6.7	0.050	5221832	6.1	0.050	5221832
. Silver (Ag)	mg/L	<0.00010	0.00010	5221832	<0.00010	0.00010	5221832
. Sodium (Na)	mg/L	200	0.10	5221832	5.2	0.10	5221832
. Strontium (Sr)	mg/L	0.36	0.0010	5221832	0.20	0.0010	5221832
. Thallium (Tl)	mg/L	<0.000050	0.000050	5221832	<0.000050	0.000050	5221832
. Titanium (Ti)	mg/L	<0.0050	0.0050	5221832	<0.0050	0.0050	5221832
. Uranium (U)	mg/L	0.00054	0.00010	5221832	0.00054	0.00010	5221832
. Vanadium (V)	mg/L	<0.00050	0.00050	5221832	<0.00050	0.00050	5221832
. Zinc (Zn)	mg/L	<0.0050	0.0050	5221832	0.0071	0.0050	5221832
. Zirconium (Zr)	mg/L	<0.0010	0.0010	5221832	<0.0010	0.0010	5221832

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX853		FIX854	FIX854		
Sampling Date		2017/10/17 13:13		2017/10/17 13:47	2017/10/17 13:47		
COC Number		633345-01-01		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK13	QC Batch	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK14 Lab-Dup	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	3.41	5217926	8.38		N/A	5217926
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	160	5217922	320		1.0	5217922
Calculated TDS	mg/L	180	5217925	450		1.0	5217925
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.2	5217922	2.0		1.0	5217922
Cation Sum	me/L	3.20	5217926	8.32		N/A	5217926
Hardness (CaCO3)	mg/L	130	5218674	280		1.0	5218674
Ion Balance (% Difference)	%	3.17	5217809	0.360		N/A	5217809
Langelier Index (@ 20C)	N/A	0.451	5217921	0.782			5217921
Langelier Index (@ 4C)	N/A	0.201	5217924	0.534			5217924
Saturation pH (@ 20C)	N/A	7.72	5217921	7.04			5217921
Saturation pH (@ 4C)	N/A	7.97	5217924	7.29			5217924
Inorganics							
Total Ammonia-N	mg/L	0.094	5223572	<0.050		0.050	5223572
Conductivity	umho/cm	290	5221404	760	760	1.0	5223248
Dissolved Organic Carbon	mg/L	0.67	5230611	1.2		0.20	5230611
Orthophosphate (P)	mg/L	<0.010	5221932	<0.010		0.010	5221932
pH	pH	8.17	5221408	7.82	7.81		5223247
Dissolved Sulphate (SO4)	mg/L	9.4	5221931	36		1.0	5221931
Alkalinity (Total as CaCO3)	mg/L	160	5221398	320	320	1.0	5223245
Dissolved Chloride (Cl)	mg/L	1.0	5221928	38		1.0	5221928
Nitrite (N)	mg/L	<0.010	5221854	<0.010		0.010	5221854
Nitrate (N)	mg/L	<0.10	5221854	0.93		0.10	5221854
Metals							
. Aluminum (Al)	mg/L	<0.0050	5221131	0.0072		0.0050	5221780
. Antimony (Sb)	mg/L	<0.00050	5221131	<0.00050		0.00050	5221780
. Arsenic (As)	mg/L	0.0014	5221131	<0.0010		0.0010	5221780
. Barium (Ba)	mg/L	0.12	5221131	0.026		0.0020	5221780
. Beryllium (Be)	mg/L	<0.00050	5221131	<0.00050		0.00050	5221780
. Boron (B)	mg/L	0.043	5221131	0.016		0.010	5221780
. Cadmium (Cd)	mg/L	<0.00010	5221131	<0.00010		0.00010	5221780

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX853		FIX854	FIX854		
Sampling Date		2017/10/17 13:13		2017/10/17 13:47	2017/10/17 13:47		
COC Number		633345-01-01		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK13	QC Batch	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK14 Lab-Dup	RDL	QC Batch
. Calcium (Ca)	mg/L	29	5221131	79		0.20	5221780
. Chromium (Cr)	mg/L	<0.0050	5221131	<0.0050		0.0050	5221780
. Cobalt (Co)	mg/L	<0.00050	5221131	<0.00050		0.00050	5221780
. Copper (Cu)	mg/L	<0.0010	5221131	0.032		0.0010	5221780
. Iron (Fe)	mg/L	0.12	5221131	<0.10		0.10	5221780
. Lead (Pb)	mg/L	<0.00050	5221131	0.00098		0.00050	5221780
. Magnesium (Mg)	mg/L	14	5221131	20		0.050	5221780
. Manganese (Mn)	mg/L	0.025	5221131	0.014		0.0020	5221780
. Molybdenum (Mo)	mg/L	0.0014	5221131	<0.00050		0.00050	5221780
. Nickel (Ni)	mg/L	<0.0010	5221131	0.0014		0.0010	5221780
. Phosphorus (P)	mg/L	<0.10	5221131	<0.10		0.10	5221780
. Potassium (K)	mg/L	0.85	5221131	2.2		0.20	5221780
. Selenium (Se)	mg/L	<0.0020	5221131	<0.0020		0.0020	5221780
. Silicon (Si)	mg/L	10	5221131	6.7		0.050	5221780
. Silver (Ag)	mg/L	<0.00010	5221131	<0.00010		0.00010	5221780
. Sodium (Na)	mg/L	13	5221131	62		0.10	5221780
. Strontium (Sr)	mg/L	0.31	5221131	0.12		0.0010	5221780
. Thallium (Tl)	mg/L	<0.000050	5221131	<0.000050		0.000050	5221780
. Titanium (Ti)	mg/L	<0.0050	5221131	<0.0050		0.0050	5221780
. Uranium (U)	mg/L	<0.00010	5221131	0.0036		0.00010	5221780
. Vanadium (V)	mg/L	<0.00050	5221131	<0.00050		0.00050	5221780
. Zinc (Zn)	mg/L	<0.0050	5221131	0.019		0.0050	5221780
. Zirconium (Zr)	mg/L	<0.0010	5221131	<0.0010		0.0010	5221780
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX855	FIX856		FIX857		
Sampling Date		2017/10/17 14:24	2017/10/17 14:58		2017/10/17 15:40		
COC Number		633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK15	WG-160900764- 20171017-JK16	QC Batch	WG-160900764- 20171017-JK17	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	11.6	8.39	5217926	3.26	N/A	5217926
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	390	310	5217922	150	1.0	5217922
Calculated TDS	mg/L	610	470	5217925	170	1.0	5217925
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	1.6	5217922	2.2	1.0	5217922
Cation Sum	me/L	11.1	8.22	5217926	3.10	N/A	5217926
Hardness (CaCO3)	mg/L	430	380	5218674	120	1.0	5218674
Ion Balance (% Difference)	%	2.19	1.01	5217809	2.66	N/A	5217809
Langelier Index (@ 20C)	N/A	0.983	0.838	5217921	0.343		5217921
Langelier Index (@ 4C)	N/A	0.735	0.589	5217924	0.0930		5217924
Saturation pH (@ 20C)	N/A	6.77	6.91	5217921	7.85		5217921
Saturation pH (@ 4C)	N/A	7.02	7.16	5217924	8.10		5217924

Inorganics							
Total Ammonia-N	mg/L	<0.050	<0.050	5223572	0.22	0.050	5223572
Conductivity	umho/cm	1000	750	5221404	280	1.0	5221404
Dissolved Organic Carbon	mg/L	1.1	0.76	5224649	0.69	0.20	5230611
Orthophosphate (P)	mg/L	<0.010	<0.010	5221932	0.014	0.010	5223404
pH	pH	7.75	7.75	5221408	8.20		5221408
Dissolved Sulphate (SO4)	mg/L	33	52	5221931	10	1.0	5223403
Alkalinity (Total as CaCO3)	mg/L	390	310	5221398	150	1.0	5221398
Dissolved Chloride (Cl)	mg/L	110	19	5221928	2.0	1.0	5223401
Nitrite (N)	mg/L	<0.010	<0.010	5221854	<0.010	0.010	5221854
Nitrate (N)	mg/L	1.48	8.06	5221854	<0.10	0.10	5221854

Metals							
. Aluminum (Al)	mg/L	<0.0050	<0.0050	5221059	<0.0050	0.0050	5221059
. Antimony (Sb)	mg/L	<0.00050	<0.00050	5221059	<0.00050	0.00050	5221059
. Arsenic (As)	mg/L	<0.0010	<0.0010	5221059	<0.0010	0.0010	5221059
. Barium (Ba)	mg/L	0.086	0.11	5221059	0.10	0.0020	5221059
. Beryllium (Be)	mg/L	<0.00050	<0.00050	5221059	<0.00050	0.00050	5221059
. Boron (B)	mg/L	0.028	0.015	5221059	0.045	0.010	5221059
. Cadmium (Cd)	mg/L	<0.00010	<0.00010	5221059	<0.00010	0.00010	5221059

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX855	FIX856		FIX857		
Sampling Date		2017/10/17 14:24	2017/10/17 14:58		2017/10/17 15:40		
COC Number		633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK15	WG-160900764- 20171017-JK16	QC Batch	WG-160900764- 20171017-JK17	RDL	QC Batch
. Calcium (Ca)	mg/L	130	110	5221059	22	0.20	5221059
. Chromium (Cr)	mg/L	<0.0050	<0.0050	5221059	<0.0050	0.0050	5221059
. Cobalt (Co)	mg/L	<0.00050	<0.00050	5221059	<0.00050	0.00050	5221059
. Copper (Cu)	mg/L	0.011	0.0064	5221059	<0.0010	0.0010	5221059
. Iron (Fe)	mg/L	<0.10	<0.10	5221059	0.35	0.10	5221059
. Lead (Pb)	mg/L	<0.00050	0.0011	5221059	<0.00050	0.00050	5221059
. Magnesium (Mg)	mg/L	22	24	5221059	16	0.050	5221059
. Manganese (Mn)	mg/L	<0.0020	<0.0020	5221059	0.0082	0.0020	5221059
. Molybdenum (Mo)	mg/L	<0.00050	<0.00050	5221059	0.00075	0.00050	5221059
. Nickel (Ni)	mg/L	<0.0010	<0.0010	5221059	<0.0010	0.0010	5221059
. Phosphorus (P)	mg/L	<0.10	<0.10	5221059	<0.10	0.10	5221059
. Potassium (K)	mg/L	1.8	9.3	5221059	0.54	0.20	5221059
. Selenium (Se)	mg/L	<0.0020	<0.0020	5221059	<0.0020	0.0020	5221059
. Silicon (Si)	mg/L	7.4	8.4	5221059	8.0	0.050	5221059
. Silver (Ag)	mg/L	<0.00010	<0.00010	5221059	<0.00010	0.00010	5221059
. Sodium (Na)	mg/L	58	9.3	5221059	14	0.10	5221059
. Strontium (Sr)	mg/L	0.35	0.29	5221059	0.37	0.0010	5221059
. Thallium (Tl)	mg/L	<0.000050	<0.000050	5221059	<0.000050	0.000050	5221059
. Titanium (Ti)	mg/L	<0.0050	<0.0050	5221059	<0.0050	0.0050	5221059
. Uranium (U)	mg/L	0.0011	0.0011	5221059	<0.00010	0.00010	5221059
. Vanadium (V)	mg/L	<0.00050	<0.00050	5221059	<0.00050	0.00050	5221059
. Zinc (Zn)	mg/L	0.0085	0.14	5221059	<0.0050	0.0050	5221059
. Zirconium (Zr)	mg/L	<0.0010	<0.0010	5221059	<0.0010	0.0010	5221059

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX857		FIX858		
Sampling Date		2017/10/17 15:40		2017/10/17 16:31		
COC Number		633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK17 Lab-Dup	QC Batch	WG-160900764- 20171017-JK18	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L		5217926	4.52	N/A	5217926
Bicarb. Alkalinity (calc. as CaCO3)	mg/L		5217922	210	1.0	5217922
Calculated TDS	mg/L		5217925	240	1.0	5217925
Carb. Alkalinity (calc. as CaCO3)	mg/L		5217922	2.2	1.0	5217922
Cation Sum	me/L		5217926	4.26	N/A	5217926
Hardness (CaCO3)	mg/L		5218674	200	1.0	5218674
Ion Balance (% Difference)	%		5217809	2.88	N/A	5217809
Langelier Index (@ 20C)	N/A		5217921	0.717		5217921
Langelier Index (@ 4C)	N/A		5217924	0.469		5217924
Saturation pH (@ 20C)	N/A		5217921	7.33		5217921
Saturation pH (@ 4C)	N/A		5217924	7.58		5217924

Inorganics

Total Ammonia-N	mg/L		5223572	0.082	0.050	5223572
Conductivity	umho/cm		5221404	370	1.0	5221404
Dissolved Organic Carbon	mg/L		5230611	1.2	0.20	5220441
Orthophosphate (P)	mg/L	0.014	5223404	<0.010	0.010	5221932
pH	pH		5221408	8.05		5221408
Dissolved Sulphate (SO4)	mg/L	11	5223403	13	1.0	5221931
Alkalinity (Total as CaCO3)	mg/L		5221398	210	1.0	5221398
Dissolved Chloride (Cl)	mg/L	2.1	5223401	2.2	1.0	5221928
Nitrite (N)	mg/L		5221854	0.024	0.010	5221830
Nitrate (N)	mg/L		5221854	<0.10	0.10	5221830

Metals

. Aluminum (Al)	mg/L		5221059	<0.0050	0.0050	5221832
. Antimony (Sb)	mg/L		5221059	<0.00050	0.00050	5221832
. Arsenic (As)	mg/L		5221059	<0.0010	0.0010	5221832
. Barium (Ba)	mg/L		5221059	0.17	0.0020	5221832
. Beryllium (Be)	mg/L		5221059	<0.00050	0.00050	5221832
. Boron (B)	mg/L		5221059	0.014	0.010	5221832

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FIX857		FIX858		
Sampling Date		2017/10/17 15:40		2017/10/17 16:31		
COC Number		633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK17 Lab-Dup	QC Batch	WG-160900764- 20171017-JK18	RDL	QC Batch
. Cadmium (Cd)	mg/L		5221059	<0.00010	0.00010	5221832
. Calcium (Ca)	mg/L		5221059	55	0.20	5221832
. Chromium (Cr)	mg/L		5221059	<0.0050	0.0050	5221832
. Cobalt (Co)	mg/L		5221059	<0.00050	0.00050	5221832
. Copper (Cu)	mg/L		5221059	0.0019	0.0010	5221832
. Iron (Fe)	mg/L		5221059	1.3	0.10	5221832
. Lead (Pb)	mg/L		5221059	<0.00050	0.00050	5221832
. Magnesium (Mg)	mg/L		5221059	15	0.050	5221832
. Manganese (Mn)	mg/L		5221059	0.023	0.0020	5221832
. Molybdenum (Mo)	mg/L		5221059	0.00063	0.00050	5221832
. Nickel (Ni)	mg/L		5221059	<0.0010	0.0010	5221832
. Phosphorus (P)	mg/L		5221059	<0.10	0.10	5221832
. Potassium (K)	mg/L		5221059	1.0	0.20	5221832
. Selenium (Se)	mg/L		5221059	<0.0020	0.0020	5221832
. Silicon (Si)	mg/L		5221059	11	0.050	5221832
. Silver (Ag)	mg/L		5221059	<0.00010	0.00010	5221832
. Sodium (Na)	mg/L		5221059	4.7	0.10	5221832
. Strontium (Sr)	mg/L		5221059	0.23	0.0010	5221832
. Thallium (Tl)	mg/L		5221059	<0.000050	0.000050	5221832
. Titanium (Ti)	mg/L		5221059	<0.0050	0.0050	5221832
. Uranium (U)	mg/L		5221059	<0.00010	0.00010	5221832
. Vanadium (V)	mg/L		5221059	<0.00050	0.00050	5221832
. Zinc (Zn)	mg/L		5221059	0.0098	0.0050	5221832
. Zirconium (Zr)	mg/L		5221059	<0.0010	0.0010	5221832
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Lab-Dup = Laboratory Initiated Duplicate						

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIX849	FIX849		FIX850		
Sampling Date		2017/10/17 09:05	2017/10/17 09:05		2017/10/17 10:05		
COC Number		633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK9 Lab-Dup	QC Batch	WG-160900764- 20171017-JK10	RDL	QC Batch

Inorganics							
Acidity	mg/L	<5.0	<5.0	5229688	79	5.0	5229688
Total Dissolved Solids	mg/L	165		5220858	855	50	5220858
Fluoride (F-)	mg/L	0.40		5221401	<0.10	0.10	5221401
Total Organic Carbon (TOC)	mg/L	0.66		5222869	2.2	0.20	5230583
Total Suspended Solids	mg/L	<10		5220855	<10	10	5220855
Turbidity	NTU	0.3		5219426	<0.1	0.1	5219426
WAD Cyanide (Free)	ug/L	<1		5221187	<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIX850	FIX851	FIX852	FIX853		
Sampling Date		2017/10/17 10:05	2017/10/17 10:49	2017/10/17 11:34	2017/10/17 13:13		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK10 Lab-Dup	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	WG-160900764- 20171017-JK13	RDL	QC Batch

Inorganics							
Acidity	mg/L		31	17	<5.0	5.0	5229688
Total Dissolved Solids	mg/L		965	375	170	50	5220858
Fluoride (F-)	mg/L	<0.10	<0.10	<0.10	0.25	0.10	5221401
Total Organic Carbon (TOC)	mg/L		1.5	1.2	0.68	0.20	5230583
Total Suspended Solids	mg/L		<10	<10	<10	10	5220855
Turbidity	NTU		<0.1	0.2	0.4	0.1	5219426
WAD Cyanide (Free)	ug/L		<1	<1	<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RESULTS OF ANALYSES OF WATER

Maxxam ID		FIX854	FIX854		FIX855		
Sampling Date		2017/10/17 13:47	2017/10/17 13:47		2017/10/17 14:24		
COC Number		633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK14 Lab-Dup	QC Batch	WG-160900764- 20171017-JK15	RDL	QC Batch

Inorganics							
Acidity	mg/L	24		5229688	55	5.0	5229688
Total Dissolved Solids	mg/L	410		5220858	580	50	5220858
Fluoride (F-)	mg/L	<0.10	<0.10	5223249	<0.10	0.10	5221401
Total Organic Carbon (TOC)	mg/L	1.2		5230583	1.8	0.20	5222869
Total Suspended Solids	mg/L	<10		5220855	<10	10	5220855
Turbidity	NTU	<0.1		5219426	0.1	0.1	5219426
WAD Cyanide (Free)	ug/L	<1		5221187	<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIX856		FIX857		FIX858		
Sampling Date		2017/10/17 14:58		2017/10/17 15:40		2017/10/17 16:31		
COC Number		633345-01-01		633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK16	QC Batch	WG-160900764- 20171017-JK17	QC Batch	WG-160900764- 20171017-JK18	RDL	QC Batch

Inorganics								
Acidity	mg/L	30	5229688	<5.0	5229688	5.8	5.0	5229688
Total Dissolved Solids	mg/L	450	5220858	155	5220858	220	50	5220858
Fluoride (F-)	mg/L	<0.10	5221401	0.21	5221401	0.12	0.10	5221401
Total Organic Carbon (TOC)	mg/L	1.2	5222869	0.75	5230583	1.2	0.20	5222869
Total Suspended Solids	mg/L	<10	5220855	<10	5220855	<10	10	5220855
Turbidity	NTU	<0.1	5219426	0.7	5219426	2.5	0.1	5219426
WAD Cyanide (Free)	ug/L	<1	5221187	<1	5221187	<1	1	5221187

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FIX849	FIX850	FIX850	FIX851		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:05	2017/10/17 10:49		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	WG-160900764- 20171017-JK11	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	5218868
Mercury (Hg)	ug/L	<0.1	<0.1		<0.1	0.1	5224733

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIX852		FIX853		FIX854	
Sampling Date		2017/10/17 11:34		2017/10/17 13:13		2017/10/17 13:47	
COC Number		633345-01-01		633345-01-01		633345-01-01	
	UNITS	WG-160900764- 20171017-JK12	QC Batch	WG-160900764- 20171017-JK13	QC Batch	WG-160900764- 20171017-JK14	RDL QC Batch

Metals							
Chromium (VI)	ug/L	0.56	5218868	<0.50	5221231	<0.50	0.50 5218868
Mercury (Hg)	ug/L	<0.1	5224733	<0.1	5224733	<0.1	0.1 5224733

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FIX855		FIX856		FIX857	
Sampling Date		2017/10/17 14:24		2017/10/17 14:58		2017/10/17 15:40	
COC Number		633345-01-01		633345-01-01		633345-01-01	
	UNITS	WG-160900764- 20171017-JK15	RDL	WG-160900764- 20171017-JK16	RDL QC Batch	WG-160900764- 20171017-JK17	RDL QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	0.50	<2.5	2.5 5221231	<0.50	0.50 5218868
Mercury (Hg)	ug/L	<0.1	0.1	<0.1	0.1 5223870	<0.1	0.1 5224733

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FIX858		
Sampling Date		2017/10/17 16:31		
COC Number		633345-01-01		
	UNITS	WG-160900764- 20171017-JK18	RDL	QC Batch
Metals				
Chromium (VI)	ug/L	<0.50	0.50	5218868
Mercury (Hg)	ug/L	<0.1	0.1	5224733
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

MICROBIOLOGY (WATER)

Maxxam ID		FIX849	FIX850	FIX851	FIX852	
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:49	2017/10/17 11:34	
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01	
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	QC Batch

Microbiological						
Background	CFU/100mL	0	300	460	2	5218827
Total Coliforms	CFU/100mL	0	95	46	1	5218827
Escherichia coli	CFU/100mL	0	1	3	0	5218827
QC Batch = Quality Control Batch						

Maxxam ID		FIX853	FIX854	FIX855	FIX856	
Sampling Date		2017/10/17 13:13	2017/10/17 13:47	2017/10/17 14:24	2017/10/17 14:58	
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01	
	UNITS	WG-160900764- 20171017-JK13	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	WG-160900764- 20171017-JK16	QC Batch

Microbiological						
Background	CFU/100mL	21	860	77	0	5218827
Total Coliforms	CFU/100mL	0	400	32	0	5218827
Escherichia coli	CFU/100mL	0	0	17	0	5218827
QC Batch = Quality Control Batch						

Maxxam ID		FIX857	FIX858	
Sampling Date		2017/10/17 15:40	2017/10/17 16:31	
COC Number		633345-01-01	633345-01-01	
	UNITS	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	QC Batch

Microbiological				
Background	CFU/100mL	4	56	5218827
Total Coliforms	CFU/100mL	0	0	5218827
Escherichia coli	CFU/100mL	0	0	5218827
QC Batch = Quality Control Batch				

O.REG 153 PCBs (WATER)

Maxxam ID		FIX849	FIX850	FIX850	FIX851		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:05	2017/10/17 10:49		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	WG-160900764- 20171017-JK11	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278

Surrogate Recovery (%)							
Decachlorobiphenyl	%	83	99	93	94		5224278

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FIX852	FIX853	FIX854	FIX855		
Sampling Date		2017/10/17 11:34	2017/10/17 13:13	2017/10/17 13:47	2017/10/17 14:24		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK12	WG-160900764- 20171017-JK13	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224278

Surrogate Recovery (%)							
Decachlorobiphenyl	%	101	82	120	87		5224278

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 PCBS (WATER)

Maxxam ID		FIX856	FIX857	FIX858		
Sampling Date		2017/10/17 14:58	2017/10/17 15:40	2017/10/17 16:31		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK16	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	RDL	QC Batch
PCBs						
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	5224278
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	5224278
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	5224278
Surrogate Recovery (%)						
Decachlorobiphenyl	%	105	99	100		5224278
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX849	FIX850	FIX850		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:05		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	5218566
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222330
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222330
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222330
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222330
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222330
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222330
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222330
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222330

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX849	FIX850	FIX850		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:05		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK10 Lab-Dup	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222330
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222330
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222330
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5225854
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5225854
Surrogate Recovery (%)						
o-Terphenyl	%	96	96	96		5225854
4-Bromofluorobenzene	%	92	90	91		5222330
D4-1,2-Dichloroethane	%	106	111	112		5222330
D8-Toluene	%	97	96	96		5222330
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX851	FIX852	FIX853		
Sampling Date		2017/10/17 10:49	2017/10/17 11:34	2017/10/17 13:13		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	WG-160900764- 20171017-JK13	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5218566
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222330
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chloroform	ug/L	0.42	<0.20	<0.20	0.20	5222330
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222330
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222330
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222330
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222330
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222330
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222330
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222330
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX851	FIX852	FIX853		
Sampling Date		2017/10/17 10:49	2017/10/17 11:34	2017/10/17 13:13		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	WG-160900764- 20171017-JK13	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222330
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222330
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222330
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5225854
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5225854
Surrogate Recovery (%)						
o-Terphenyl	%	97	96	96		5225854
4-Bromofluorobenzene	%	97	93	94		5222330
D4-1,2-Dichloroethane	%	106	106	108		5222330
D8-Toluene	%	95	94	97		5222330
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX854	FIX855	FIX856		
Sampling Date		2017/10/17 13:47	2017/10/17 14:24	2017/10/17 14:58		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	WG-160900764- 20171017-JK16	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5218566
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222330
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Bromodichloromethane	ug/L	<0.50	<0.50	3.8	0.50	5222330
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Chloroform	ug/L	0.63	<0.20	11	0.20	5222330
Dibromochloromethane	ug/L	<0.50	<0.50	2.1	0.50	5222330
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222330
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222330
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222330
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222330
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222330
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222330
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222330
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222330
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX854	FIX855	FIX856		
Sampling Date		2017/10/17 13:47	2017/10/17 14:24	2017/10/17 14:58		
COC Number		633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	WG-160900764- 20171017-JK16	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222330
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222330
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222330
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222330
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222330
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222330
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222330
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5225854
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5225854
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5225854
Surrogate Recovery (%)						
o-Terphenyl	%	95	97	93		5225854
4-Bromofluorobenzene	%	93	91	92		5222330
D4-1,2-Dichloroethane	%	107	107	107		5222330
D8-Toluene	%	95	97	93		5222330
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX857	FIX858		
Sampling Date		2017/10/17 15:40	2017/10/17 16:31		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	5218566
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	5222330
Benzene	ug/L	<0.20	<0.20	0.20	5222330
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	5222330
Bromoform	ug/L	<1.0	<1.0	1.0	5222330
Bromomethane	ug/L	<0.50	<0.50	0.50	5222330
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	5222330
Chlorobenzene	ug/L	<0.20	<0.20	0.20	5222330
Chloroform	ug/L	<0.20	<0.20	0.20	5222330
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	5222330
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222330
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222330
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5222330
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	5222330
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	5222330
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	5222330
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	5222330
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5222330
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5222330
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	5222330
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	5222330
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	5222330
Ethylbenzene	ug/L	<0.20	<0.20	0.20	5222330
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	5222330
Hexane	ug/L	<1.0	<1.0	1.0	5222330
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	5222330
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	5222330
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	5222330
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	5222330
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FIX857	FIX858		
Sampling Date		2017/10/17 15:40	2017/10/17 16:31		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	0.50	5222330
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5222330
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5222330
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	5222330
Toluene	ug/L	<0.20	<0.20	0.20	5222330
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	5222330
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	5222330
Trichloroethylene	ug/L	<0.20	<0.20	0.20	5222330
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	5222330
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	5222330
p+m-Xylene	ug/L	<0.20	<0.20	0.20	5222330
o-Xylene	ug/L	<0.20	<0.20	0.20	5222330
Total Xylenes	ug/L	<0.20	<0.20	0.20	5222330
F1 (C6-C10)	ug/L	<25	<25	25	5222330
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	5222330
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	5225854
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	5225854
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	5225854
Reached Baseline at C50	ug/L	Yes	Yes		5225854
Surrogate Recovery (%)					
o-Terphenyl	%	92	91		5225854
4-Bromofluorobenzene	%	93	92		5222330
D4-1,2-Dichloroethane	%	107	107		5222330
D8-Toluene	%	96	97		5222330
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX849	FIX850	FIX851	FIX852		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:49	2017/10/17 11:34		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5224297
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5224297
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5224297
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5224297
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5224297
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5224297
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5224297
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5224297
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5224297
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX849	FIX850	FIX851	FIX852		
Sampling Date		2017/10/17 09:05	2017/10/17 10:05	2017/10/17 10:49	2017/10/17 11:34		
COC Number		633345-01-01	633345-01-01	633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK9	WG-160900764- 20171017-JK10	WG-160900764- 20171017-JK11	WG-160900764- 20171017-JK12	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5224297
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5224297
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5224297
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5224297
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5224297
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5218343
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	85	71	74	84		5224297
2-Fluorobiphenyl	%	67	71	43 (1)	67		5224297
D14-Terphenyl (FS)	%	98	97	98	97		5224297
D5-Nitrobenzene	%	73	74	47 (1)	72		5224297
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX853	FIX854	FIX855		FIX856		
Sampling Date		2017/10/17 13:13	2017/10/17 13:47	2017/10/17 14:24		2017/10/17 14:58		
COC Number		633345-01-01	633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK13	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	RDL	WG-160900764- 20171017-JK16	RDL	QC Batch

Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	0.5	<3	3	5224297
2,4-Dinitrophenol	ug/L	<2	<2	<2	2	<10	10	5224297
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	<1	1	5224297
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	0.3	<1	1	5224297
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	0.5	<3	3	5224297
Acenaphthene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
Anthracene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	0.01	<0.05	0.05	5224297
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Biphenyl	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	<3	3	5224297
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	0.5	<3	3	5224297
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	1	<5	5	5224297
Chrysene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Fluoranthene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
Fluorene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX853	FIX854	FIX855		FIX856		
Sampling Date		2017/10/17 13:13	2017/10/17 13:47	2017/10/17 14:24		2017/10/17 14:58		
COC Number		633345-01-01	633345-01-01	633345-01-01		633345-01-01		
	UNITS	WG-160900764- 20171017-JK13	WG-160900764- 20171017-JK14	WG-160900764- 20171017-JK15	RDL	WG-160900764- 20171017-JK16	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Naphthalene	ug/L	<0.2	<0.2	<0.2	0.2	<1	1	5224297
p-Chloroaniline	ug/L	<1	<1	<1	1	<5	5	5224297
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Phenanthrene	ug/L	<0.1	<0.1	<0.1	0.1	<0.5	0.5	5224297
Phenol	ug/L	<0.5	<0.5	<0.5	0.5	<3	3	5224297
Pyrene	ug/L	<0.05	<0.05	<0.05	0.05	<0.3	0.3	5224297
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	0.28	<1.4	1.4	5218343
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	85	85	81		29 (1)		5224297
2-Fluorobiphenyl	%	68	73	66		56		5224297
D14-Terphenyl (FS)	%	102	99	98		74		5224297
D5-Nitrobenzene	%	73	79	70		56		5224297
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.								

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX857	FIX858		
Sampling Date		2017/10/17 15:40	2017/10/17 16:31		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	RDL	QC Batch
Semivolatile Organics					
1,2,4-Trichlorobenzene	ug/L	<0.5	<0.5	0.5	5224297
1-Methylnaphthalene	ug/L	<1	<1	1	5224297
2,4,5-Trichlorophenol	ug/L	<1	<1	1	5224297
2,4,6-Trichlorophenol	ug/L	<1	<1	1	5224297
2,4-Dichlorophenol	ug/L	<0.5	<0.5	0.5	5224297
2,4-Dimethylphenol	ug/L	<3	<3	3	5224297
2,4-Dinitrophenol	ug/L	<10	<10	10	5224297
2,4-Dinitrotoluene	ug/L	<1	<1	1	5224297
2,6-Dinitrotoluene	ug/L	<1	<1	1	5224297
2-Chlorophenol	ug/L	<0.5	<0.5	0.5	5224297
2-Methylnaphthalene	ug/L	<1	<1	1	5224297
3,3'-Dichlorobenzidine	ug/L	<3	<3	3	5224297
Acenaphthene	ug/L	<1	<1	1	5224297
Acenaphthylene	ug/L	<1	<1	1	5224297
Anthracene	ug/L	<0.3	<0.3	0.3	5224297
Benzo(a)anthracene	ug/L	<0.3	<0.3	0.3	5224297
Benzo(a)pyrene	ug/L	<0.05	<0.05	0.05	5224297
Benzo(b/j)fluoranthene	ug/L	<0.3	<0.3	0.3	5224297
Benzo(g,h,i)perylene	ug/L	<0.3	<0.3	0.3	5224297
Benzo(k)fluoranthene	ug/L	<0.3	<0.3	0.3	5224297
Biphenyl	ug/L	<0.5	<0.5	0.5	5224297
Bis(2-chloroethyl)ether	ug/L	<3	<3	3	5224297
Bis(2-chloroisopropyl)ether	ug/L	<3	<3	3	5224297
Bis(2-ethylhexyl)phthalate	ug/L	<5	<5	5	5224297
Chrysene	ug/L	<0.3	<0.3	0.3	5224297
Dibenz(a,h)anthracene	ug/L	<0.5	<0.5	0.5	5224297
Diethyl phthalate	ug/L	<0.5	<0.5	0.5	5224297
Dimethyl phthalate	ug/L	<0.5	<0.5	0.5	5224297
Fluoranthene	ug/L	<1	<1	1	5224297
Fluorene	ug/L	<1	<1	1	5224297
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FIX857	FIX858		
Sampling Date		2017/10/17 15:40	2017/10/17 16:31		
COC Number		633345-01-01	633345-01-01		
	UNITS	WG-160900764- 20171017-JK17	WG-160900764- 20171017-JK18	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.5	<0.5	0.5	5224297
Naphthalene	ug/L	<1	<1	1	5224297
p-Chloroaniline	ug/L	<5	<5	5	5224297
Pentachlorophenol	ug/L	<0.5	<0.5	0.5	5224297
Phenanthrene	ug/L	<0.5	<0.5	0.5	5224297
Phenol	ug/L	<3	<3	3	5224297
Pyrene	ug/L	<0.3	<0.3	0.3	5224297
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	<1.4	<1.4	1.4	5218343
Surrogate Recovery (%)					
2,4,6-Tribromophenol	%	16 (1)	39 (1)		5224297
2-Fluorobiphenyl	%	62	60		5224297
D14-Terphenyl (FS)	%	82	72		5224297
D5-Nitrobenzene	%	59	53		5224297
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.					

TEST SUMMARY

Maxxam ID: FIX849
Sample ID: WG-160900764-20171017-JK9
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5221057	N/A	2017/10/19	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO ₃)		5218674	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221832	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH ₄	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5222869	N/A	2017/10/21	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX849 Dup
Sample ID: WG-160900764-20171017-JK9
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO ₃) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5221057	N/A	2017/10/19	Anastasia Hamanov
Metals Analysis by ICPMS (as received)	ICP/MS	5221832	N/A	2017/10/21	Thao Nguyen
Total Ammonia-N	LACH/NH ₄	5223572	N/A	2017/10/23	Charles Opoku-Ware

TEST SUMMARY

Maxxam ID: FIX850
Sample ID: WG-160900764-20171017-JK10
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221780	N/A	2017/10/20	Arefa Dabhad
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/23	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/23	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/26	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX850 Dup
Sample ID: WG-160900764-20171017-JK10
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai

TEST SUMMARY

Maxxam ID: FIX850 Dup
Sample ID: WG-160900764-20171017-JK10
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX851
Sample ID: WG-160900764-20171017-JK11
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221832	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221842	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

TEST SUMMARY

Maxxam ID: FIX852
Sample ID: WG-160900764-20171017-JK12
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO ₃)		5218674	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221832	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH ₄	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX853
Sample ID: WG-160900764-20171017-JK13
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO ₃) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk

TEST SUMMARY

Maxxam ID: FIX853
Sample ID: WG-160900764-20171017-JK13
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221131	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX854
Sample ID: WG-160900764-20171017-JK14
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5223245	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5223248	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding

TEST SUMMARY

Maxxam ID: FIX854
Sample ID: WG-160900764-20171017-JK14
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5223249	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221780	N/A	2017/10/20	Arefa Dabhad
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/23	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5223247	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/23	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/26	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX854 Dup
Sample ID: WG-160900764-20171017-JK14
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5223245	N/A	2017/10/22	Yogesh Patel
Conductivity	AT	5223248	N/A	2017/10/22	Yogesh Patel
Fluoride	ISE	5223249	2017/10/20	2017/10/22	Yogesh Patel
pH	AT	5223247	N/A	2017/10/22	Yogesh Patel

Maxxam ID: FIX855
Sample ID: WG-160900764-20171017-JK15
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/22	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk

TEST SUMMARY

Maxxam ID: FIX855
Sample ID: WG-160900764-20171017-JK15
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5223870	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221059	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5222869	N/A	2017/10/21	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX856
Sample ID: WG-160900764-20171017-JK16
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5221231	N/A	2017/10/20	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding

TEST SUMMARY

Maxxam ID: FIX856
Sample ID: WG-160900764-20171017-JK16
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5223870	2017/10/20	2017/10/23	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221059	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5222869	N/A	2017/10/21	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX857
Sample ID: WG-160900764-20171017-JK17
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5223401	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5230611	N/A	2017/10/25	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/20	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison

TEST SUMMARY

Maxxam ID: FIX857
Sample ID: WG-160900764-20171017-JK17
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals Analysis by ICPMS (as received)	ICP/MS	5221059	N/A	2017/10/20	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/24	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221854	N/A	2017/10/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5223404	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/24	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/24	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5223403	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/24	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5230583	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

Maxxam ID: FIX857 Dup
Sample ID: WG-160900764-20171017-JK17
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	5223401	N/A	2017/10/23	Deonarine Ramnarine
Orthophosphate	KONE	5223404	N/A	2017/10/23	Alina Dobreanu
Sulphate by Automated Colourimetry	KONE	5223403	N/A	2017/10/23	Alina Dobreanu

Maxxam ID: FIX858
Sample ID: WG-160900764-20171017-JK18
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5218343	N/A	2017/10/23	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5224297	2017/10/21	2017/10/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5229688	N/A	2017/10/25	Brent Boudreau
Alkalinity	AT	5221398	N/A	2017/10/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5217922	N/A	2017/10/21	Automated Statchk
1,3-Dichloropropene Sum	CALC	5218566	N/A	2017/10/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	5221928	N/A	2017/10/20	Deonarine Ramnarine
Conductivity	AT	5221404	N/A	2017/10/20	Surinder Rai
Chromium (VI) in Water	IC	5218868	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5221187	N/A	2017/10/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5220441	N/A	2017/10/19	Anastasia Hamanov

TEST SUMMARY

Maxxam ID: FIX858
Sample ID: WG-160900764-20171017-JK18
Matrix: Water

Collected: 2017/10/17
Shipped:
Received: 2017/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5225854	2017/10/23	2017/10/24	(Kent) Maolin Li
Fluoride	ISE	5221401	2017/10/19	2017/10/20	Surinder Rai
Hardness (calculated as CaCO3)		5218674	N/A	2017/10/21	Automated Statchk
Mercury	CV/AA	5224733	2017/10/21	2017/10/24	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221832	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5217809	N/A	2017/10/21	Automated Statchk
Anion and Cation Sum	CALC	5217926	N/A	2017/10/21	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5218827	N/A	2017/10/18	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5223572	N/A	2017/10/23	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5221830	N/A	2017/10/23	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5224278	2017/10/21	2017/10/21	Dawn Alarie
pH	AT	5221408	N/A	2017/10/20	Surinder Rai
Orthophosphate	KONE	5221932	N/A	2017/10/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5217921	N/A	2017/10/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5217924	N/A	2017/10/21	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5221931	N/A	2017/10/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5217925	N/A	2017/10/21	Automated Statchk
Total Dissolved Solids	BAL	5220858	2017/10/19	2017/10/23	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5222869	N/A	2017/10/21	Anastasia Hamanov
Total Suspended Solids	BAL	5220855	2017/10/19	2017/10/21	Arpan Shah
Turbidity	AT	5219426	N/A	2017/10/19	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222330	N/A	2017/10/23	John Wu

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C
Package 2	7.3°C
Package 3	6.0°C
Package 4	7.0°C
Package 5	8.0°C
Package 6	7.3°C
Package 7	6.0°C
Package 8	3.3°C
Package 9	3.3°C
Package 10	3.0°C
Package 11	6.0°C
Package 12	6.3°C
Package 13	5.0°C
Package 14	6.0°C
Package 15	7.0°C
Package 16	6.3°C

ABN Analysis: Due to the sample matrix, some samples required dilution. Detection limits were adjusted accordingly.

Sample FIX849 [WG-160900764-20171017-JK9] : TOC < DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.
ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIX852 [WG-160900764-20171017-JK12] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FIX856 [WG-160900764-20171017-JK16] : Hexavalent Chromium: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample FIX857 [WG-160900764-20171017-JK17] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222330	4-Bromofluorobenzene	2017/10/23	101	70 - 130	102	70 - 130	84	%				
5222330	D4-1,2-Dichloroethane	2017/10/23	107	70 - 130	105	70 - 130	75	%				
5222330	D8-Toluene	2017/10/23	102	70 - 130	101	70 - 130	109	%				
5224278	Decachlorobiphenyl	2017/10/21	99	60 - 130	90	60 - 130	97	%				
5224297	2,4,6-Tribromophenol	2017/10/22			101	50 - 130	76	%				
5224297	2-Fluorobiphenyl	2017/10/22			62	50 - 130	72	%				
5224297	D14-Terphenyl (FS)	2017/10/22			100	50 - 130	100	%				
5224297	D5-Nitrobenzene	2017/10/22			79	50 - 130	76	%				
5225854	o-Terphenyl	2017/10/24	100	60 - 130	99	60 - 130	96	%				
5218868	Chromium (VI)	2017/10/23	99	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
5219426	Turbidity	2017/10/19			100	85 - 115	<0.1	NTU	2.3	20		
5220441	Dissolved Organic Carbon	2017/10/19	87	80 - 120	91	80 - 120	0.22, RDL=0.20	mg/L	0.54	20		
5220855	Total Suspended Solids	2017/10/21					<10	mg/L	NC	25	100	85 - 115
5220858	Total Dissolved Solids	2017/10/23					<50	mg/L	0	25	98	90 - 110
5221057	Dissolved Organic Carbon	2017/10/19	94	80 - 120	99	80 - 120	<0.20	mg/L	3.1	20		
5221059	. Aluminum (Al)	2017/10/20	104	80 - 120	105	80 - 120	<0.0050	mg/L	NC	20		
5221059	. Antimony (Sb)	2017/10/20	106	80 - 120	105	80 - 120	<0.00050	mg/L	17	20		
5221059	. Arsenic (As)	2017/10/20	98	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
5221059	. Barium (Ba)	2017/10/20	102	80 - 120	102	80 - 120	<0.0020	mg/L	17	20		
5221059	. Beryllium (Be)	2017/10/20	103	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5221059	. Boron (B)	2017/10/20	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
5221059	. Cadmium (Cd)	2017/10/20	103	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
5221059	. Calcium (Ca)	2017/10/20	NC	80 - 120	100	80 - 120	<0.20	mg/L	6.2	20		
5221059	. Chromium (Cr)	2017/10/20	99	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
5221059	. Cobalt (Co)	2017/10/20	98	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5221059	. Copper (Cu)	2017/10/20	101	80 - 120	103	80 - 120	<0.0010	mg/L	4.5	20		
5221059	. Iron (Fe)	2017/10/20	98	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
5221059	. Lead (Pb)	2017/10/20	96	80 - 120	97	80 - 120	<0.00050	mg/L	7.1	20		
5221059	. Magnesium (Mg)	2017/10/20	98	80 - 120	100	80 - 120	<0.050	mg/L	1.7	20		
5221059	. Manganese (Mn)	2017/10/20	99	80 - 120	99	80 - 120	<0.0020	mg/L	6.8	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221059	. Molybdenum (Mo)	2017/10/20	102	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		
5221059	. Nickel (Ni)	2017/10/20	97	80 - 120	99	80 - 120	<0.0010	mg/L	0.19	20		
5221059	. Phosphorus (P)	2017/10/20	105	80 - 120	116	80 - 120	<0.10	mg/L	NC	20		
5221059	. Potassium (K)	2017/10/20	99	80 - 120	101	80 - 120	<0.20	mg/L	1.0	20		
5221059	. Selenium (Se)	2017/10/20	102	80 - 120	101	80 - 120	<0.0020	mg/L	NC	20		
5221059	. Silicon (Si)	2017/10/20	102	80 - 120	102	80 - 120	<0.050	mg/L	6.0	20		
5221059	. Silver (Ag)	2017/10/20	99	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		
5221059	. Sodium (Na)	2017/10/20	97	80 - 120	99	80 - 120	<0.10	mg/L	0.92	20		
5221059	. Strontium (Sr)	2017/10/20	98	80 - 120	100	80 - 120	<0.0010	mg/L	0.26	20		
5221059	. Thallium (Tl)	2017/10/20	96	80 - 120	96	80 - 120	<0.000050	mg/L	NC	20		
5221059	. Titanium (Ti)	2017/10/20	101	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5221059	. Uranium (U)	2017/10/20	97	80 - 120	96	80 - 120	<0.00010	mg/L	13	20		
5221059	. Vanadium (V)	2017/10/20	99	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5221059	. Zinc (Zn)	2017/10/20	NC	80 - 120	100	80 - 120	<0.0050	mg/L	1.1	20		
5221059	. Zirconium (Zr)	2017/10/20	105	80 - 120	107	80 - 120	<0.0010	mg/L				
5221131	. Aluminum (Al)	2017/10/20	101	80 - 120	104	80 - 120	<0.0050	mg/L				
5221131	. Antimony (Sb)	2017/10/20	106	80 - 120	110	80 - 120	<0.00050	mg/L				
5221131	. Arsenic (As)	2017/10/20	99	80 - 120	101	80 - 120	<0.0010	mg/L				
5221131	. Barium (Ba)	2017/10/20	98	80 - 120	103	80 - 120	<0.0020	mg/L				
5221131	. Beryllium (Be)	2017/10/20	102	80 - 120	104	80 - 120	<0.00050	mg/L				
5221131	. Boron (B)	2017/10/20	101	80 - 120	103	80 - 120	<0.010	mg/L				
5221131	. Cadmium (Cd)	2017/10/20	103	80 - 120	106	80 - 120	<0.00010	mg/L				
5221131	. Calcium (Ca)	2017/10/20	NC	80 - 120	98	80 - 120	<0.20	mg/L				
5221131	. Chromium (Cr)	2017/10/20	99	80 - 120	102	80 - 120	<0.0050	mg/L				
5221131	. Cobalt (Co)	2017/10/20	97	80 - 120	101	80 - 120	<0.00050	mg/L				
5221131	. Copper (Cu)	2017/10/20	98	80 - 120	106	80 - 120	<0.0010	mg/L				
5221131	. Iron (Fe)	2017/10/20	99	80 - 120	102	80 - 120	<0.10	mg/L				
5221131	. Lead (Pb)	2017/10/20	96	80 - 120	100	80 - 120	<0.00050	mg/L				
5221131	. Magnesium (Mg)	2017/10/20	NC	80 - 120	102	80 - 120	<0.050	mg/L				
5221131	. Manganese (Mn)	2017/10/20	100	80 - 120	102	80 - 120	<0.0020	mg/L	7.7	20		
5221131	. Molybdenum (Mo)	2017/10/20	102	80 - 120	106	80 - 120	<0.00050	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221131	. Nickel (Ni)	2017/10/20	98	80 - 120	101	80 - 120	<0.0010	mg/L				
5221131	. Phosphorus (P)	2017/10/20	106	80 - 120	120	80 - 120	<0.10	mg/L				
5221131	. Potassium (K)	2017/10/20	99	80 - 120	103	80 - 120	<0.20	mg/L				
5221131	. Selenium (Se)	2017/10/20	98	80 - 120	101	80 - 120	<0.0020	mg/L				
5221131	. Silicon (Si)	2017/10/20	98	80 - 120	101	80 - 120	<0.050	mg/L				
5221131	. Silver (Ag)	2017/10/20	93	80 - 120	102	80 - 120	<0.00010	mg/L				
5221131	. Sodium (Na)	2017/10/20	99	80 - 120	101	80 - 120	<0.10	mg/L	6.6	20		
5221131	. Strontium (Sr)	2017/10/20	101	80 - 120	103	80 - 120	<0.0010	mg/L				
5221131	. Thallium (Tl)	2017/10/20	96	80 - 120	99	80 - 120	<0.000050	mg/L				
5221131	. Titanium (Ti)	2017/10/20	101	80 - 120	104	80 - 120	<0.0050	mg/L				
5221131	. Uranium (U)	2017/10/20	97	80 - 120	99	80 - 120	<0.00010	mg/L				
5221131	. Vanadium (V)	2017/10/20	100	80 - 120	102	80 - 120	<0.00050	mg/L				
5221131	. Zinc (Zn)	2017/10/20	98	80 - 120	102	80 - 120	<0.0050	mg/L				
5221131	. Zirconium (Zr)	2017/10/20	106	80 - 120	109	80 - 120	<0.0010	mg/L				
5221187	WAD Cyanide (Free)	2017/10/20	99	80 - 120	100	80 - 120	<1	ug/L	NC	20		
5221231	Chromium (VI)	2017/10/20	102	80 - 120	103	80 - 120	<0.50	ug/L	NC	20		
5221398	Alkalinity (Total as CaCO3)	2017/10/20			97	85 - 115	<1.0	mg/L	0.46	20		
5221401	Fluoride (F-)	2017/10/20	109	80 - 120	105	80 - 120	<0.10	mg/L	NC	20		
5221404	Conductivity	2017/10/20			100	85 - 115	<1.0	umho/cm	1.3	25		
5221408	pH	2017/10/20			101	98 - 103			0.35	N/A		
5221780	. Aluminum (Al)	2017/10/20	108	80 - 120	108	80 - 120	<0.0050	mg/L	1.4	20		
5221780	. Antimony (Sb)	2017/10/20	106	80 - 120	108	80 - 120	<0.00050	mg/L				
5221780	. Arsenic (As)	2017/10/20	101	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
5221780	. Barium (Ba)	2017/10/20	105	80 - 120	105	80 - 120	<0.0020	mg/L	0.78	20		
5221780	. Beryllium (Be)	2017/10/20	102	80 - 120	99	80 - 120	<0.00050	mg/L				
5221780	. Boron (B)	2017/10/20	99	80 - 120	101	80 - 120	<0.010	mg/L				
5221780	. Cadmium (Cd)	2017/10/20	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
5221780	. Calcium (Ca)	2017/10/20	NC	80 - 120	100	80 - 120	<0.20	mg/L				
5221780	. Chromium (Cr)	2017/10/20	100	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
5221780	. Cobalt (Co)	2017/10/20	103	80 - 120	101	80 - 120	<0.00050	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221780	. Copper (Cu)	2017/10/20	99	80 - 120	105	80 - 120	<0.0010	mg/L	3.9	20		
5221780	. Iron (Fe)	2017/10/20	101	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
5221780	. Lead (Pb)	2017/10/20	100	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
5221780	. Magnesium (Mg)	2017/10/20	102	80 - 120	103	80 - 120	<0.050	mg/L				
5221780	. Manganese (Mn)	2017/10/20	97	80 - 120	96	80 - 120	<0.0020	mg/L	NC	20		
5221780	. Molybdenum (Mo)	2017/10/20	102	80 - 120	104	80 - 120	<0.00050	mg/L				
5221780	. Nickel (Ni)	2017/10/20	99	80 - 120	98	80 - 120	<0.0010	mg/L				
5221780	. Phosphorus (P)	2017/10/20	103	80 - 120	108	80 - 120	<0.10	mg/L				
5221780	. Potassium (K)	2017/10/20	102	80 - 120	102	80 - 120	<0.20	mg/L				
5221780	. Selenium (Se)	2017/10/20	102	80 - 120	101	80 - 120	<0.0020	mg/L	NC	20		
5221780	. Silicon (Si)	2017/10/20	106	80 - 120	105	80 - 120	<0.050	mg/L				
5221780	. Silver (Ag)	2017/10/20	99	80 - 120	102	80 - 120	<0.00010	mg/L				
5221780	. Sodium (Na)	2017/10/20	101	80 - 120	101	80 - 120	<0.10	mg/L	1.2	20		
5221780	. Strontium (Sr)	2017/10/20	99	80 - 120	95	80 - 120	<0.0010	mg/L				
5221780	. Thallium (Tl)	2017/10/20	102	80 - 120	103	80 - 120	<0.000050	mg/L				
5221780	. Titanium (Ti)	2017/10/20	105	80 - 120	101	80 - 120	<0.0050	mg/L				
5221780	. Uranium (U)	2017/10/20	98	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
5221780	. Vanadium (V)	2017/10/20	100	80 - 120	99	80 - 120	<0.00050	mg/L				
5221780	. Zinc (Zn)	2017/10/20	102	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
5221780	. Zirconium (Zr)	2017/10/20	102	80 - 120	105	80 - 120	<0.0010	mg/L				
5221830	Nitrate (N)	2017/10/23	93	80 - 120	93	80 - 120	<0.10	mg/L	NC	20		
5221830	Nitrite (N)	2017/10/23	102	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
5221832	. Aluminum (Al)	2017/10/21	94	80 - 120	95	80 - 120	<0.0050	mg/L	NC	20		
5221832	. Antimony (Sb)	2017/10/21	105	80 - 120	105	80 - 120	<0.00050	mg/L	NC	20		
5221832	. Arsenic (As)	2017/10/21	97	80 - 120	96	80 - 120	<0.0010	mg/L	6.8	20		
5221832	. Barium (Ba)	2017/10/21	97	80 - 120	97	80 - 120	<0.0020	mg/L	4.4	20		
5221832	. Beryllium (Be)	2017/10/21	98	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
5221832	. Boron (B)	2017/10/21	92	80 - 120	92	80 - 120	<0.010	mg/L	0.31	20		
5221832	. Cadmium (Cd)	2017/10/21	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		
5221832	. Calcium (Ca)	2017/10/21	92	80 - 120	92	80 - 120	<0.20	mg/L	0.45	20		
5221832	. Chromium (Cr)	2017/10/21	95	80 - 120	94	80 - 120	<0.0050	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221832	. Cobalt (Co)	2017/10/21	93	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20		
5221832	. Copper (Cu)	2017/10/21	97	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
5221832	. Iron (Fe)	2017/10/21	95	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
5221832	. Lead (Pb)	2017/10/21	95	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
5221832	. Magnesium (Mg)	2017/10/21	96	80 - 120	95	80 - 120	<0.050	mg/L	1.9	20		
5221832	. Manganese (Mn)	2017/10/21	96	80 - 120	95	80 - 120	<0.0020	mg/L	0.94	20		
5221832	. Molybdenum (Mo)	2017/10/21	99	80 - 120	99	80 - 120	<0.00050	mg/L	3.3	20		
5221832	. Nickel (Ni)	2017/10/21	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
5221832	. Phosphorus (P)	2017/10/21	98	80 - 120	105	80 - 120	<0.10	mg/L	NC	20		
5221832	. Potassium (K)	2017/10/21	96	80 - 120	96	80 - 120	<0.20	mg/L	1.2	20		
5221832	. Selenium (Se)	2017/10/21	96	80 - 120	95	80 - 120	<0.0020	mg/L	NC	20		
5221832	. Silicon (Si)	2017/10/21	97	80 - 120	95	80 - 120	<0.050	mg/L	0.27	20		
5221832	. Silver (Ag)	2017/10/21	87	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
5221832	. Sodium (Na)	2017/10/21	NC	80 - 120	94	80 - 120	<0.10	mg/L	0.73	20		
5221832	. Strontium (Sr)	2017/10/21	98	80 - 120	96	80 - 120	<0.0010	mg/L	1.6	20		
5221832	. Thallium (Tl)	2017/10/21	93	80 - 120	93	80 - 120	<0.000050	mg/L	NC	20		
5221832	. Titanium (Ti)	2017/10/21	99	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5221832	. Uranium (U)	2017/10/21	94	80 - 120	94	80 - 120	<0.00010	mg/L	2.7	20		
5221832	. Vanadium (V)	2017/10/21	94	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20		
5221832	. Zinc (Zn)	2017/10/21	94	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
5221832	. Zirconium (Zr)	2017/10/21	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
5221842	Nitrate (N)	2017/10/21	80	80 - 120	87	80 - 120	<0.10	mg/L	0.13	20		
5221842	Nitrite (N)	2017/10/21	99	80 - 120	105	80 - 120	<0.010	mg/L	0.55	20		
5221854	Nitrate (N)	2017/10/21	90	80 - 120	102	80 - 120	<0.10	mg/L	NC	20		
5221854	Nitrite (N)	2017/10/21	101	80 - 120	105	80 - 120	<0.010	mg/L	NC	20		
5221928	Dissolved Chloride (Cl)	2017/10/20	NC	80 - 120	103	80 - 120	<1.0	mg/L	0.72	20		
5221931	Dissolved Sulphate (SO4)	2017/10/20	89	75 - 125	105	80 - 120	<1.0	mg/L	NC	20		
5221932	Orthophosphate (P)	2017/10/20	118	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
5222330	1,1,1,2-Tetrachloroethane	2017/10/23	100	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5222330	1,1,1-Trichloroethane	2017/10/23	92	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222330	1,1,2,2-Tetrachloroethane	2017/10/23	102	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222330	1,1,2-Trichloroethane	2017/10/23	103	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
5222330	1,1-Dichloroethane	2017/10/23	100	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5222330	1,1-Dichloroethylene	2017/10/23	104	70 - 130	108	70 - 130	<0.20	ug/L	NC	30		
5222330	1,2-Dichlorobenzene	2017/10/23	91	70 - 130	91	70 - 130	<0.50	ug/L	NC	30		
5222330	1,2-Dichloroethane	2017/10/23	110	70 - 130	112	70 - 130	<0.50	ug/L	NC	30		
5222330	1,2-Dichloropropane	2017/10/23	95	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5222330	1,3-Dichlorobenzene	2017/10/23	94	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5222330	1,4-Dichlorobenzene	2017/10/23	98	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5222330	Acetone (2-Propanone)	2017/10/23	104	60 - 140	99	60 - 140	<10	ug/L	NC	30		
5222330	Benzene	2017/10/23	97	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
5222330	Bromodichloromethane	2017/10/23	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5222330	Bromoform	2017/10/23	103	70 - 130	104	70 - 130	<1.0	ug/L	NC	30		
5222330	Bromomethane	2017/10/23	100	60 - 140	106	60 - 140	<0.50	ug/L	NC	30		
5222330	Carbon Tetrachloride	2017/10/23	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222330	Chlorobenzene	2017/10/23	93	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222330	Chloroform	2017/10/23	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5222330	cis-1,2-Dichloroethylene	2017/10/23	94	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5222330	cis-1,3-Dichloropropene	2017/10/23	98	70 - 130	103	70 - 130	<0.30	ug/L	NC	30		
5222330	Dibromochloromethane	2017/10/23	100	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5222330	Dichlorodifluoromethane (FREON 12)	2017/10/23	104	60 - 140	108	60 - 140	<1.0	ug/L	NC	30		
5222330	Ethylbenzene	2017/10/23	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222330	Ethylene Dibromide	2017/10/23	103	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
5222330	F1 (C6-C10) - BTEX	2017/10/23					<25	ug/L	NC	30		
5222330	F1 (C6-C10)	2017/10/23	98	60 - 140	95	60 - 140	<25	ug/L	NC	30		
5222330	Hexane	2017/10/23	100	70 - 130	104	70 - 130	<1.0	ug/L	NC	30		
5222330	Methyl Ethyl Ketone (2-Butanone)	2017/10/23	106	60 - 140	102	60 - 140	<10	ug/L	NC	30		
5222330	Methyl Isobutyl Ketone	2017/10/23	99	70 - 130	101	70 - 130	<5.0	ug/L	NC	30		
5222330	Methyl t-butyl ether (MTBE)	2017/10/23	96	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5222330	Methylene Chloride(Dichloromethane)	2017/10/23	99	70 - 130	101	70 - 130	<2.0	ug/L	NC	30		
5222330	o-Xylene	2017/10/23	92	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5222330	p+m-Xylene	2017/10/23	93	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222330	Styrene	2017/10/23	92	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5222330	Tetrachloroethylene	2017/10/23	87	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
5222330	Toluene	2017/10/23	90	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5222330	Total Xylenes	2017/10/23					<0.20	ug/L	NC	30		
5222330	trans-1,2-Dichloroethylene	2017/10/23	96	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5222330	trans-1,3-Dichloropropene	2017/10/23	103	70 - 130	111	70 - 130	<0.40	ug/L	NC	30		
5222330	Trichloroethylene	2017/10/23	91	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5222330	Trichlorofluoromethane (FREON 11)	2017/10/23	96	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5222330	Vinyl Chloride	2017/10/23	102	70 - 130	107	70 - 130	<0.20	ug/L	NC	30		
5222869	Total Organic Carbon (TOC)	2017/10/21	95	80 - 120	100	80 - 120	<0.20	mg/L	NC	20		
5223245	Alkalinity (Total as CaCO3)	2017/10/22			96	85 - 115	<1.0	mg/L	0.042	20		
5223247	pH	2017/10/22			102	98 - 103			0.13	N/A		
5223248	Conductivity	2017/10/22			101	85 - 115	<1.0	umho/cm	0.13	25		
5223249	Fluoride (F-)	2017/10/22	106	80 - 120	105	80 - 120	<0.10	mg/L	NC	20		
5223401	Dissolved Chloride (Cl)	2017/10/23	102	80 - 120	102	80 - 120	<1.0	mg/L	2.8	20		
5223403	Dissolved Sulphate (SO4)	2017/10/23	109	75 - 125	104	80 - 120	<1.0	mg/L	0.36	20		
5223404	Orthophosphate (P)	2017/10/23	100	75 - 125	101	80 - 120	<0.010	mg/L	1.3	25		
5223572	Total Ammonia-N	2017/10/23	97	80 - 120	97	85 - 115	<0.050	mg/L	11	20		
5223870	Mercury (Hg)	2017/10/23	97	75 - 125	93	80 - 120	<0.1	ug/L	NC	20		
5224278	Aroclor 1242	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1248	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1254	2017/10/21					<0.05	ug/L	NC	30		
5224278	Aroclor 1260	2017/10/21	92	60 - 130	94	60 - 130	<0.05	ug/L	NC	30		
5224278	Total PCB	2017/10/21	92	60 - 130	94	60 - 130	<0.05	ug/L	NC	40		
5224297	1,2,4-Trichlorobenzene	2017/10/22			55	40 - 130	<0.1	ug/L	0.67	30		
5224297	1-Methylnaphthalene	2017/10/22			82	50 - 130	<0.2	ug/L	2.1	30		
5224297	2,4,5-Trichlorophenol	2017/10/22			95	50 - 130	<0.2	ug/L	0.42	30		
5224297	2,4,6-Trichlorophenol	2017/10/22			86	50 - 130	<0.2	ug/L	1.3	30		
5224297	2,4-Dichlorophenol	2017/10/22			77	50 - 130	<0.1	ug/L	4.6	30		
5224297	2,4-Dimethylphenol	2017/10/22			47	30 - 130	<0.5	ug/L	35 (1)	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224297	2,4-Dinitrophenol	2017/10/22			128	30 - 130	<2	ug/L	3.3	30		
5224297	2,4-Dinitrotoluene	2017/10/22			98	50 - 130	<0.3	ug/L	1.0	30		
5224297	2,6-Dinitrotoluene	2017/10/22			91	50 - 130	<0.3	ug/L	0.98	30		
5224297	2-Chlorophenol	2017/10/22			67	50 - 130	<0.1	ug/L	0.39	30		
5224297	2-Methylnaphthalene	2017/10/22			78	50 - 130	<0.2	ug/L	2.8	30		
5224297	3,3'-Dichlorobenzidine	2017/10/22			92	30 - 130	<0.5	ug/L	9.1	30		
5224297	Acenaphthene	2017/10/22			91	50 - 130	<0.2	ug/L	1.3	30		
5224297	Acenaphthylene	2017/10/22			85	50 - 130	<0.2	ug/L	2.1	30		
5224297	Anthracene	2017/10/22			97	50 - 130	<0.05	ug/L	0.18	30		
5224297	Benzo(a)anthracene	2017/10/22			104	50 - 130	<0.05	ug/L	1.3	30		
5224297	Benzo(a)pyrene	2017/10/22			98	50 - 130	<0.01	ug/L	0.54	30		
5224297	Benzo(b/j)fluoranthene	2017/10/22			103	50 - 130	<0.05	ug/L	0.088	30		
5224297	Benzo(g,h,i)perylene	2017/10/22			105	50 - 130	<0.05	ug/L	2.3	30		
5224297	Benzo(k)fluoranthene	2017/10/22			110	50 - 130	<0.05	ug/L	2.5	30		
5224297	Biphenyl	2017/10/22			82	50 - 130	<0.1	ug/L	2.8	30		
5224297	Bis(2-chloroethyl)ether	2017/10/22			70	50 - 130	<0.5	ug/L	0.27	30		
5224297	Bis(2-chloroisopropyl)ether	2017/10/22			72	50 - 130	<0.5	ug/L	0.19	30		
5224297	Bis(2-ethylhexyl)phthalate	2017/10/22			94	50 - 130	<1	ug/L	1.6	30		
5224297	Chrysene	2017/10/22			111	50 - 130	<0.05	ug/L	0.90	30		
5224297	Dibenz(a,h)anthracene	2017/10/22			105	50 - 130	<0.1	ug/L	2.5	30		
5224297	Diethyl phthalate	2017/10/22			88	50 - 130	<0.1	ug/L	0.47	30		
5224297	Dimethyl phthalate	2017/10/22			97	50 - 130	<0.1	ug/L	0.010	30		
5224297	Fluoranthene	2017/10/22			101	50 - 130	<0.2	ug/L	0.49	30		
5224297	Fluorene	2017/10/22			101	50 - 130	<0.2	ug/L	0.30	30		
5224297	Indeno(1,2,3-cd)pyrene	2017/10/22			96	50 - 130	<0.1	ug/L	1.6	30		
5224297	Naphthalene	2017/10/22			68	50 - 130	<0.2	ug/L	2.3	30		
5224297	p-Chloroaniline	2017/10/22			72	30 - 130	<1	ug/L	23	30		
5224297	Pentachlorophenol	2017/10/22			78	50 - 130	<0.1	ug/L	25	30		
5224297	Phenanthrene	2017/10/22			103	50 - 130	<0.1	ug/L	0.59	30		
5224297	Phenol	2017/10/22			33	30 - 130	<0.5	ug/L	0.12	30		
5224297	Pyrene	2017/10/22			105	50 - 130	<0.05	ug/L	1.3	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224649	Dissolved Organic Carbon	2017/10/21	91	80 - 120	96	80 - 120	0.23, RDL=0.20	mg/L	0.97	20		
5224733	Mercury (Hg)	2017/10/24	98	75 - 125	102	80 - 120	<0.1	ug/L	NC	20		
5225854	F2 (C10-C16 Hydrocarbons)	2017/10/24	94	50 - 130	93	60 - 130	<100	ug/L	NC	30		
5225854	F3 (C16-C34 Hydrocarbons)	2017/10/24	99	50 - 130	97	60 - 130	<200	ug/L	NC	30		
5225854	F4 (C34-C50 Hydrocarbons)	2017/10/24	101	50 - 130	101	60 - 130	<200	ug/L	NC	30		
5229688	Acidity	2017/10/25	89	80 - 120	105	80 - 120	<5.0	mg/L	NC	25		
5230583	Total Organic Carbon (TOC)	2017/10/25	94	80 - 120	99	80 - 120	<0.20	mg/L	6.7	20		
5230611	Dissolved Organic Carbon	2017/10/25	96	80 - 120	98	80 - 120	<0.20	mg/L	2.0	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Cristina Carriere, Scientific Service Specialist



Sirimathie Aluthwala, Campobello Micro

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

STARTER!

3 FRIDGE
13 FLOOR



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #		
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COOLER OBSERVATIONS: *same!*
HEAVY! 50lbs

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
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INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		

MAXXAM JOB#:

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
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PRESENT	<input checked="" type="checkbox"/>		
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CUSTODY SEAL	YES	NO	COOLER ID
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INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
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ICE PRESENT	<input checked="" type="checkbox"/>		
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PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
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INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>		
ICE PRESENT	<input checked="" type="checkbox"/>		

16 total JW

REC'D IN PORT HOPE

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<i>Woodward</i> <i>Jenn Woodward</i>	2017/10/17	20:44



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #		
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COOLER OBSERVATIONS:				MAXXAM JOB#:			
CUSTODY SEAL	YES	NO	COOLER ID	1			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	4	7	8	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	2			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	4	6	6	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	3			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	4	0	2	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	4			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	3	3	4	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	5			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	3	3	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	6			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	6	5	7	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	7			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	3	3	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	8			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	6	1	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	9			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	0	2	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	10			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1	3	4	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	11			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1	2	0	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	12			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1	1	1	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	13			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	0	0	0	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	14			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	9	1	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	15			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	0	4	2	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CUSTODY SEAL	YES	NO	COOLER ID	16			
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	0	1	3	
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>Aslitha Williams</i> ASLITHA WILLIAMS	2017/10/18	12:58

17-Oct-17 20:44

Deepthi Shaji
B7N0778

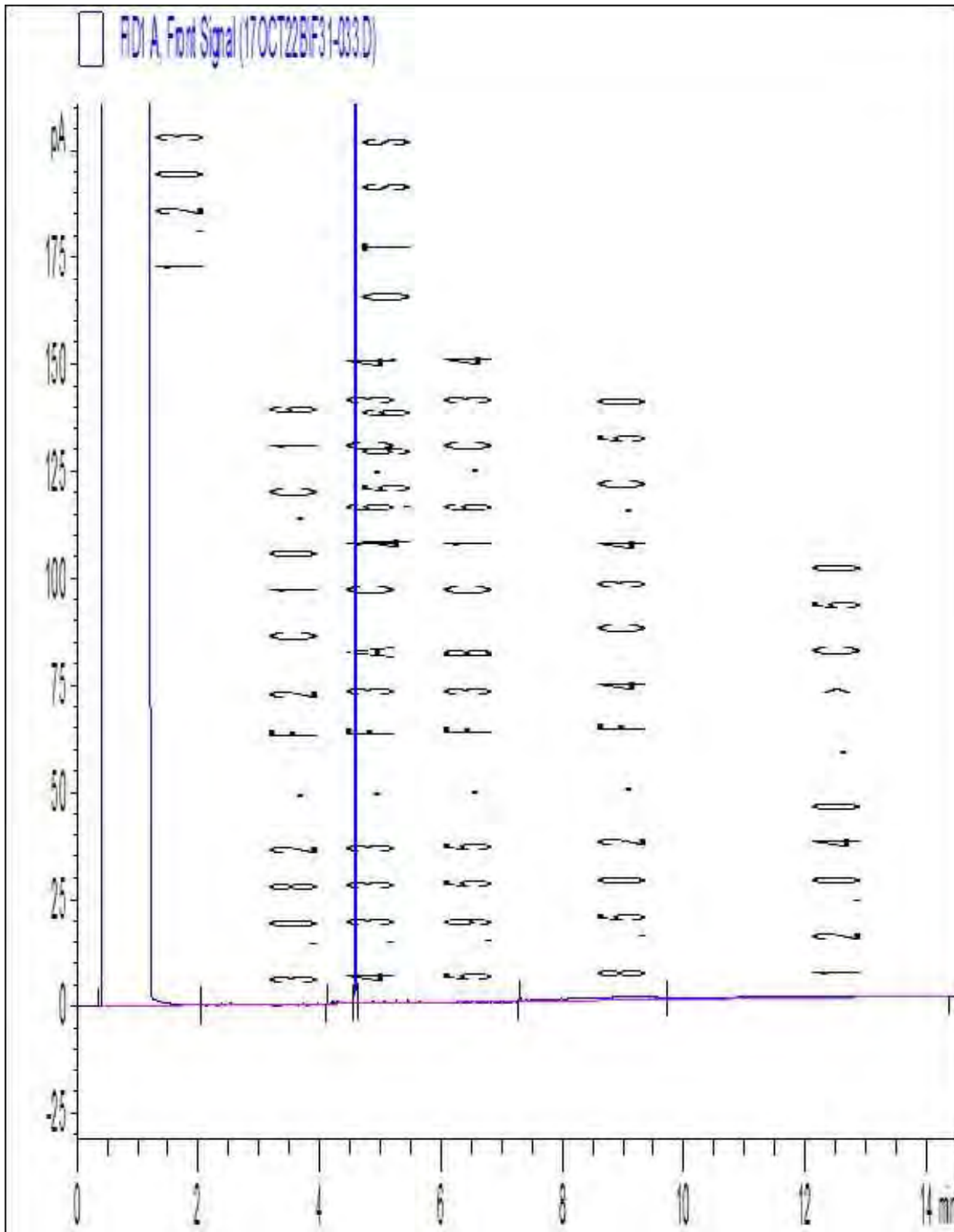
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INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Use Only:		
Company Name: #9197 Stantec Consulting Ltd	Contact Name: Accounts Payable	Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Phone: (519) 579-4410 x Fax: (519) 579-6733 x	Company Name: #18379 Stantec Consulting Ltd	Contact Name: Report - 160900764	Address: ON	Phone: Fax:	
Quotation #: B48218	Task #: 200.400	Project #: 160900764	Profit Centre: 1609	Site #: Clarington TS - Private Well	Sampled By: JK	Bottle Order #: 633345	Project Manager: Deepthi Shaji	
Email: accounts.payable.invoices@stantec.com				Email: aaron.warkentin@stantec.com, jamie.koch@stantec.com				Barcode: C#633345-01-01

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY				ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects				
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle): Metals / Hg / Cr / V	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	Total Coliform & E. coli Background	TDS & TSS	RCAP - Comprehensive (Drinking Water) - No lead filter	Reg 153 PCBs	Reg 153 VOCs & FIF4	SVOCs	Regular (Standard) TAT: <i>(will be applied if Rush TAT is not specified):</i> Standard TAT = 5-7 Working days for most tests. <i>Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</i>	
<input type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw													Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ <i>(call lab for #)</i>	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw														
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality: _____														
<input type="checkbox"/> Table			<input type="checkbox"/> PWQO															
Include Criteria on Certificate of Analysis (Y/N)?																		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix													# of Bottles	Comments
	WG-160900764-20171017-3K9	17/10/17	0905	GW	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19	BACTERIA
	WG-160900764-20171017-3H0	17/10/17	1005	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20171017-3H1	17/10/17	1049	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		analyze as quote
	WG-160900764-20171017-3H2	17/10/17	1134	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		not reportable
	WG-160900764-20171017-3H3	17/10/17	1313	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20171017-3H4	17/10/17	1347	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20171017-3H5	17/10/17	1424	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	WG-160900764-20171017-3H6	17/10/17	1458	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		REC'D IN PORT HOPE
	WG-160900764-20171017-3H7	17/10/17	1540	GW		~	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		on ice
	WG-160900764-20171017-3H8	17/10/17	1631	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	# jars used and not submitted		Laboratory Use Only				Custody Seal		Yes	No	
[Signature] Jamie Koch		17/10/17	1900	[Signature] [Signature]		17/10/17	20:44			Time Sensitive	Temperature (°C) on Receipt	Custody Seal Present	Intact	Yes	No			
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS. ASH/114										* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.				* SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF				
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS. ASH/114										SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM				White: Maxxa Yellow: Client REFER to ACTR				

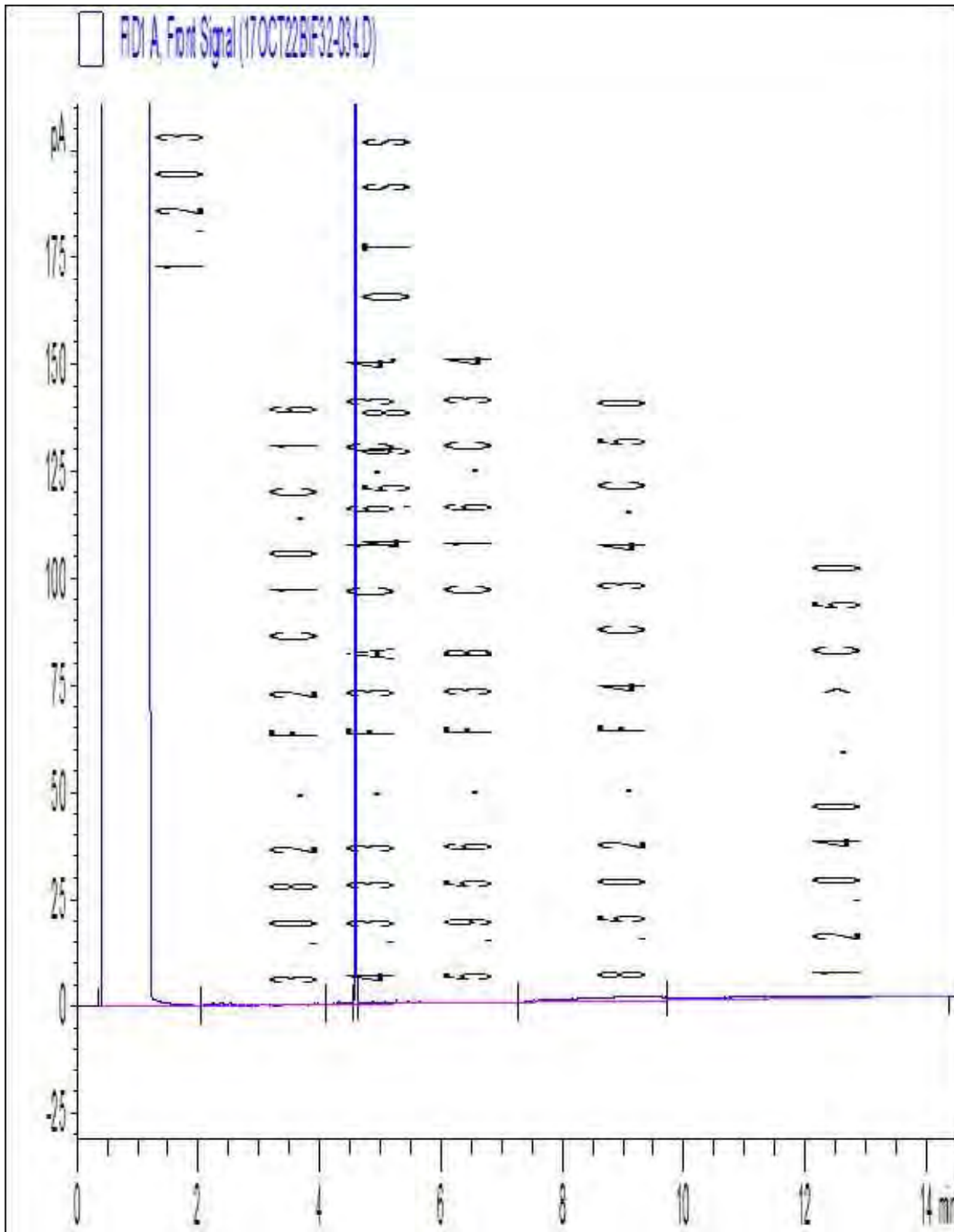
MAXXAM Duman

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



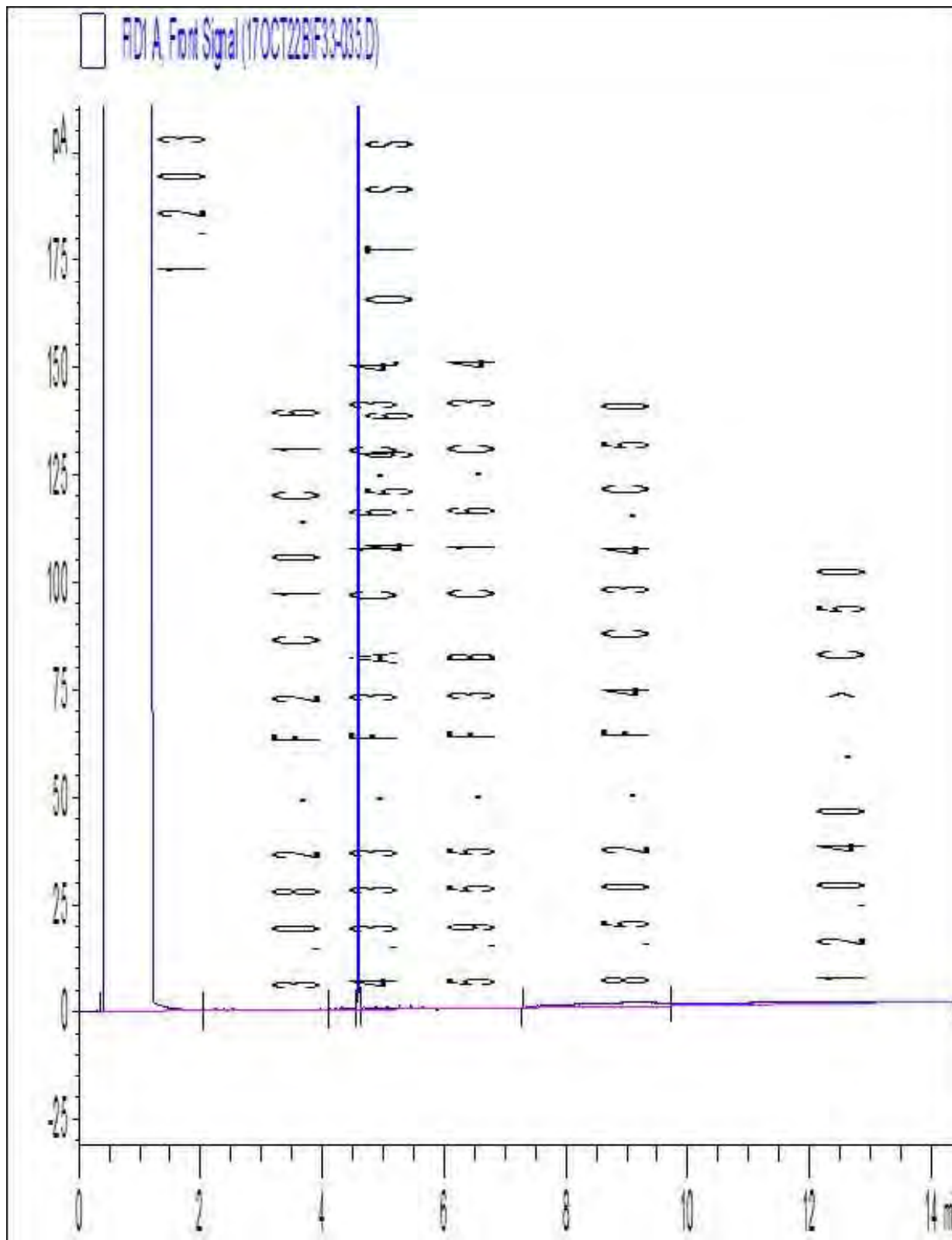
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



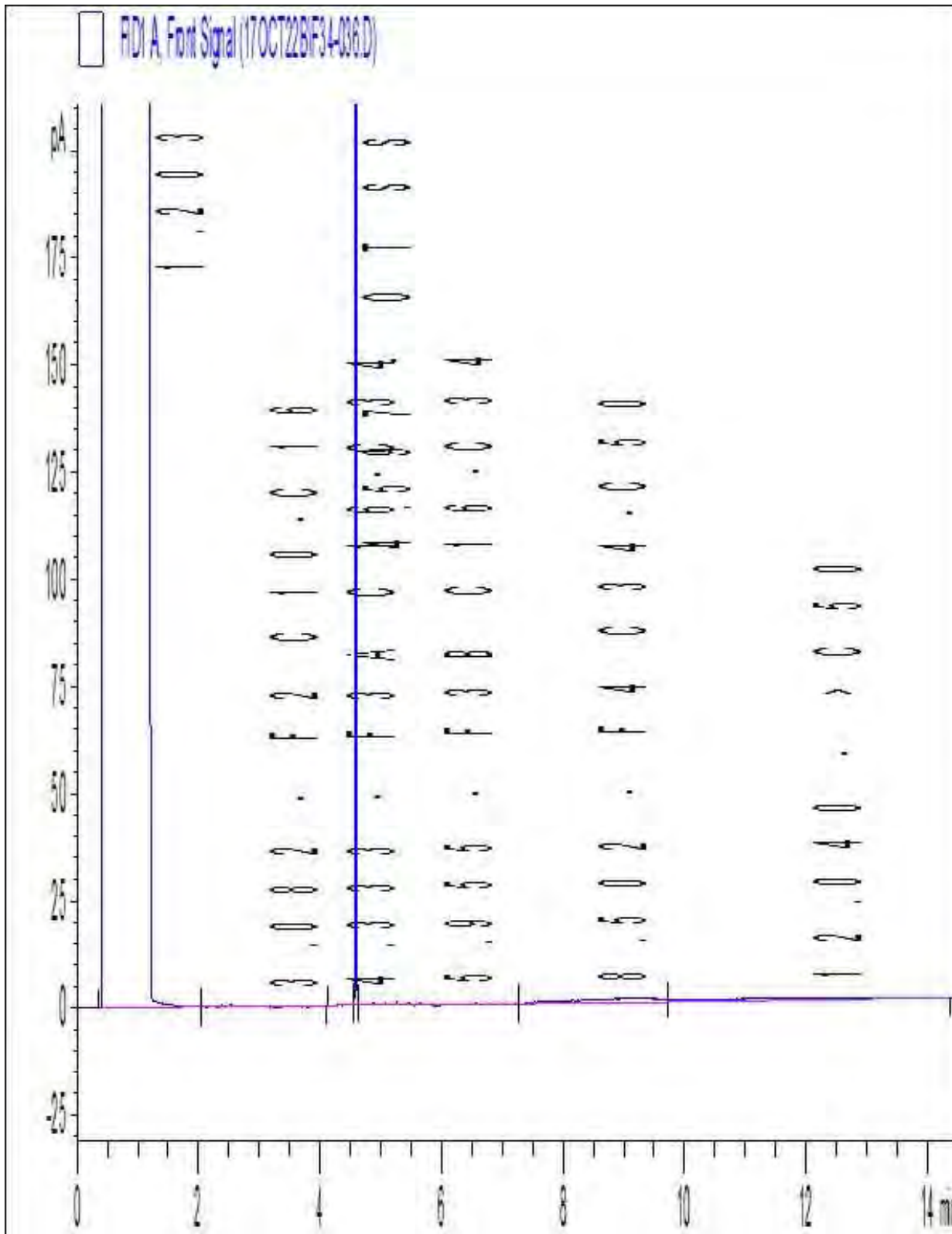
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



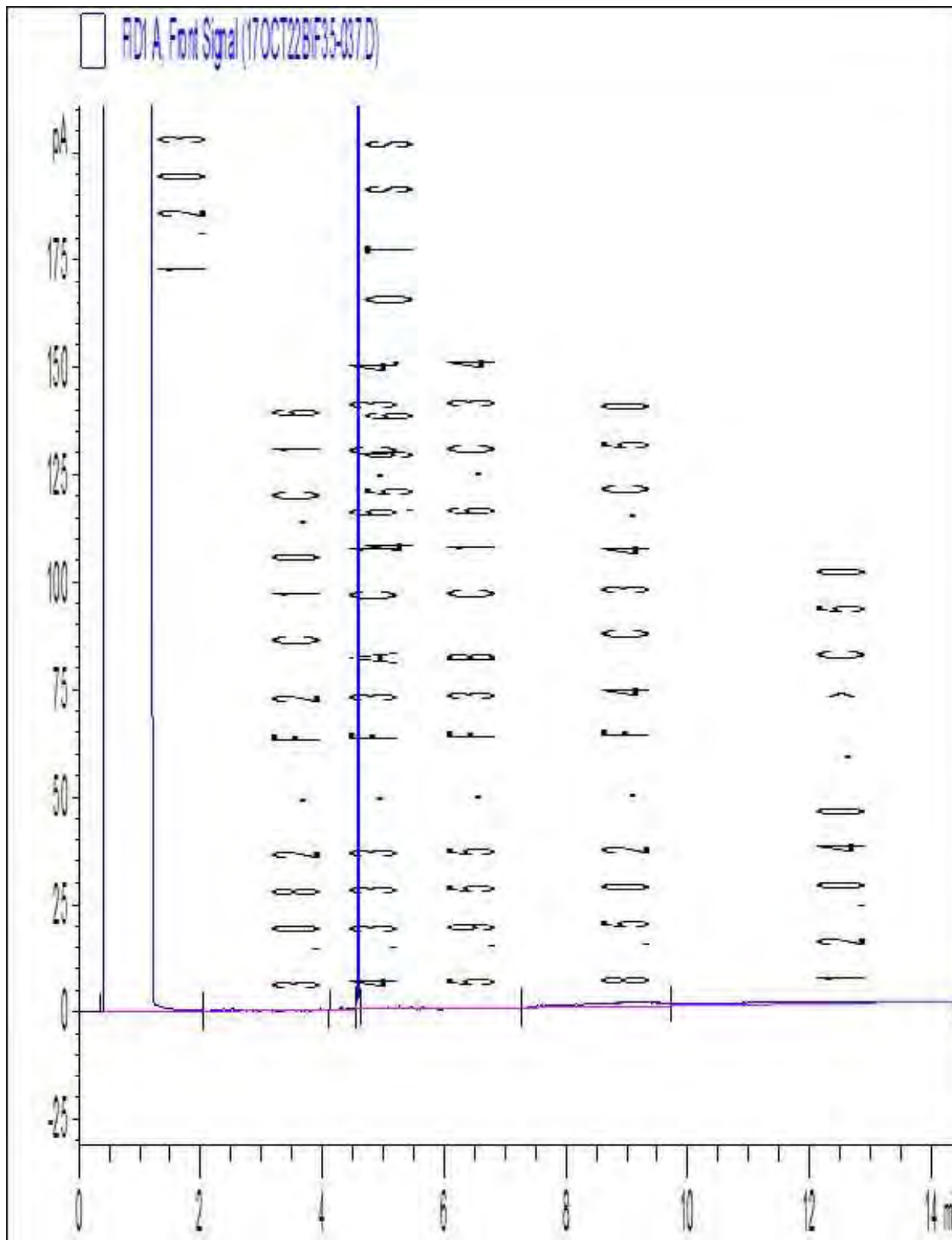
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



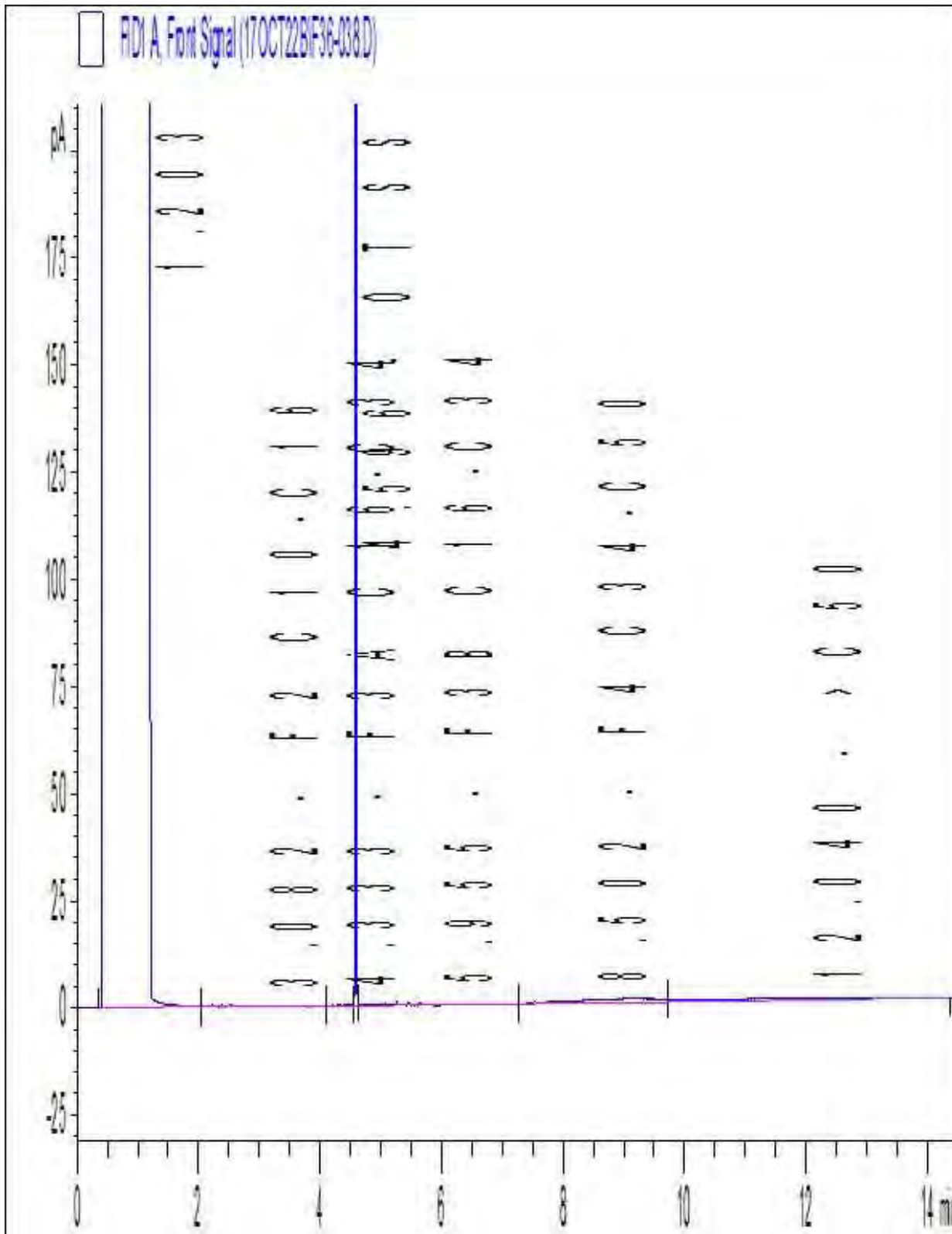
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



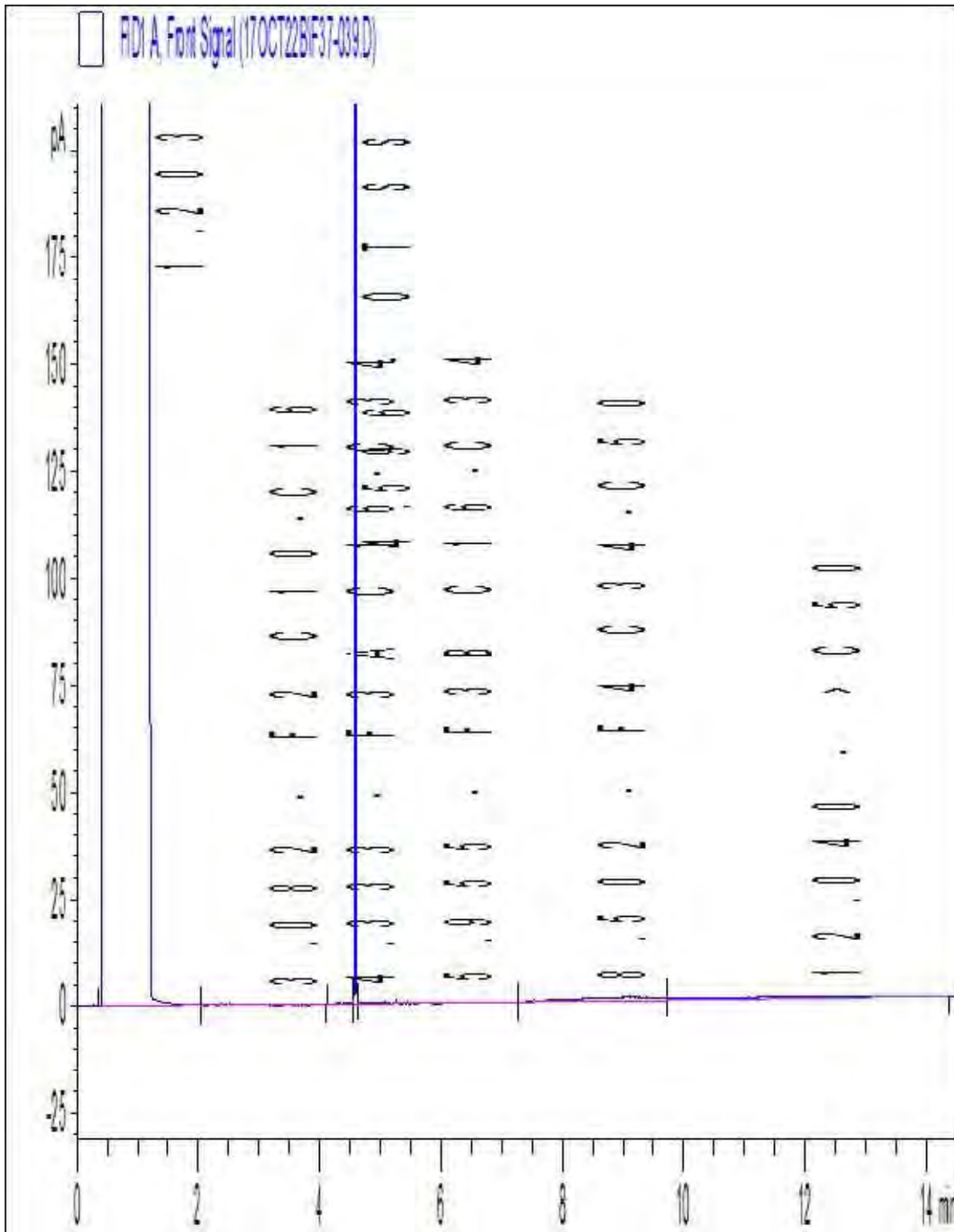
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



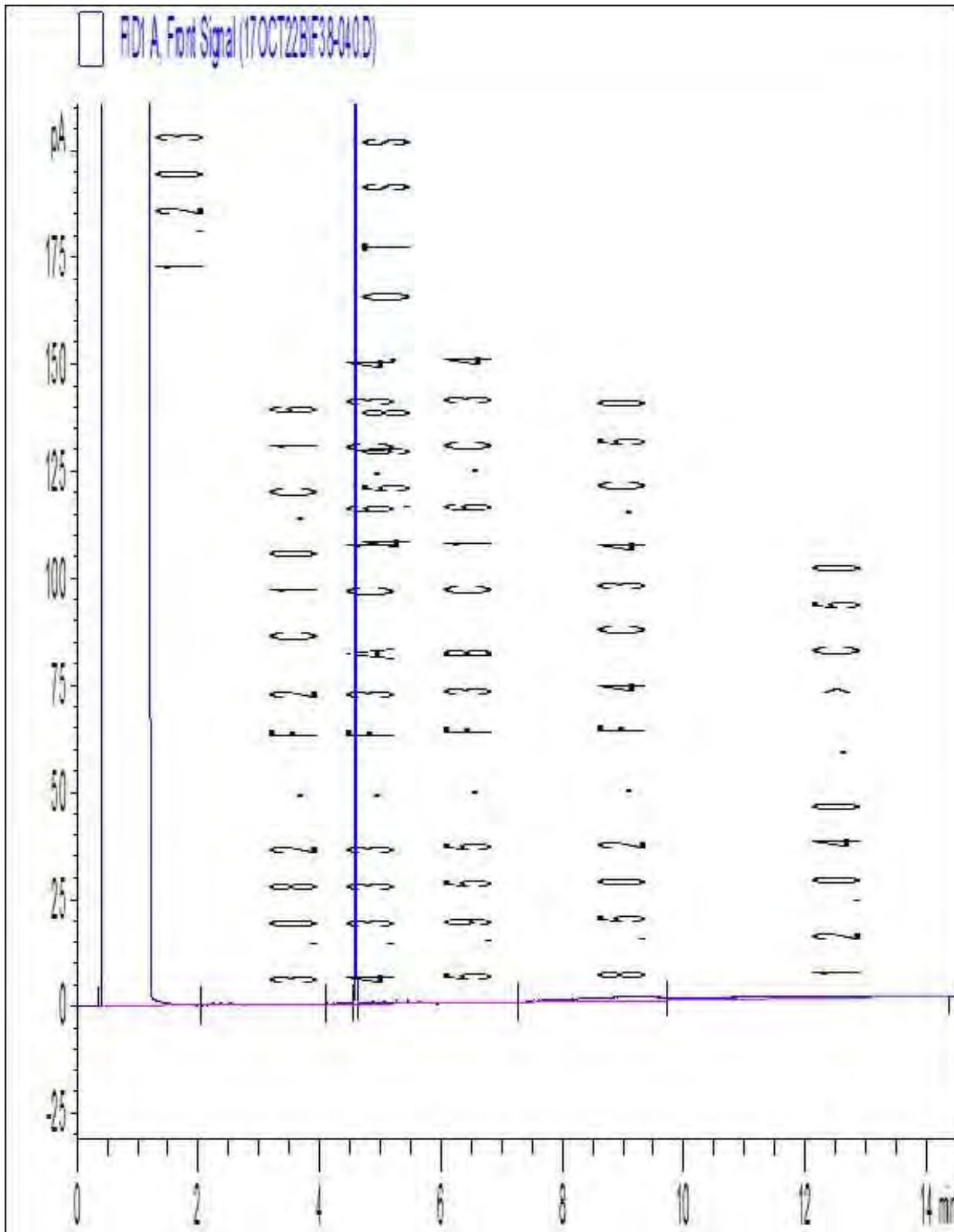
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



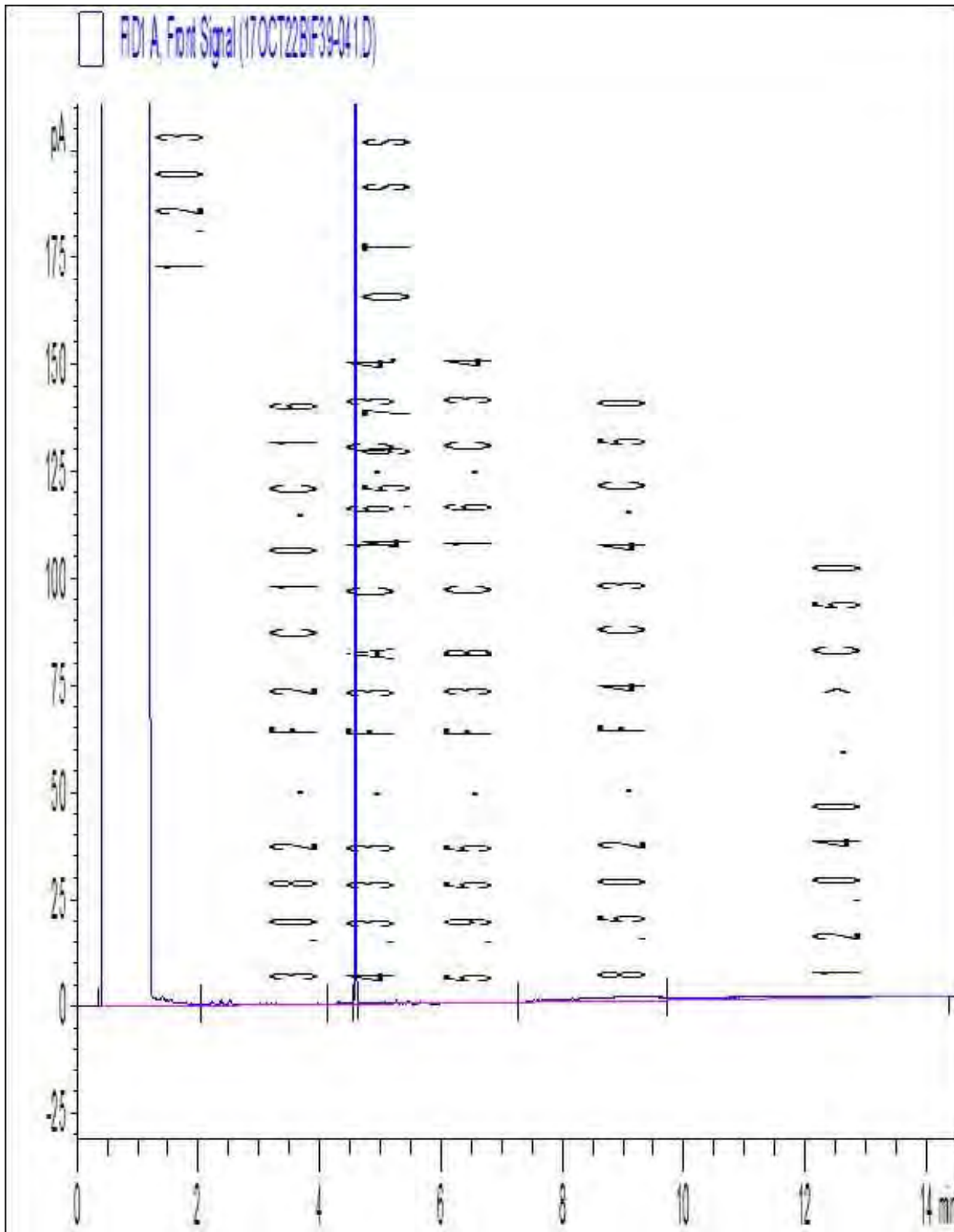
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



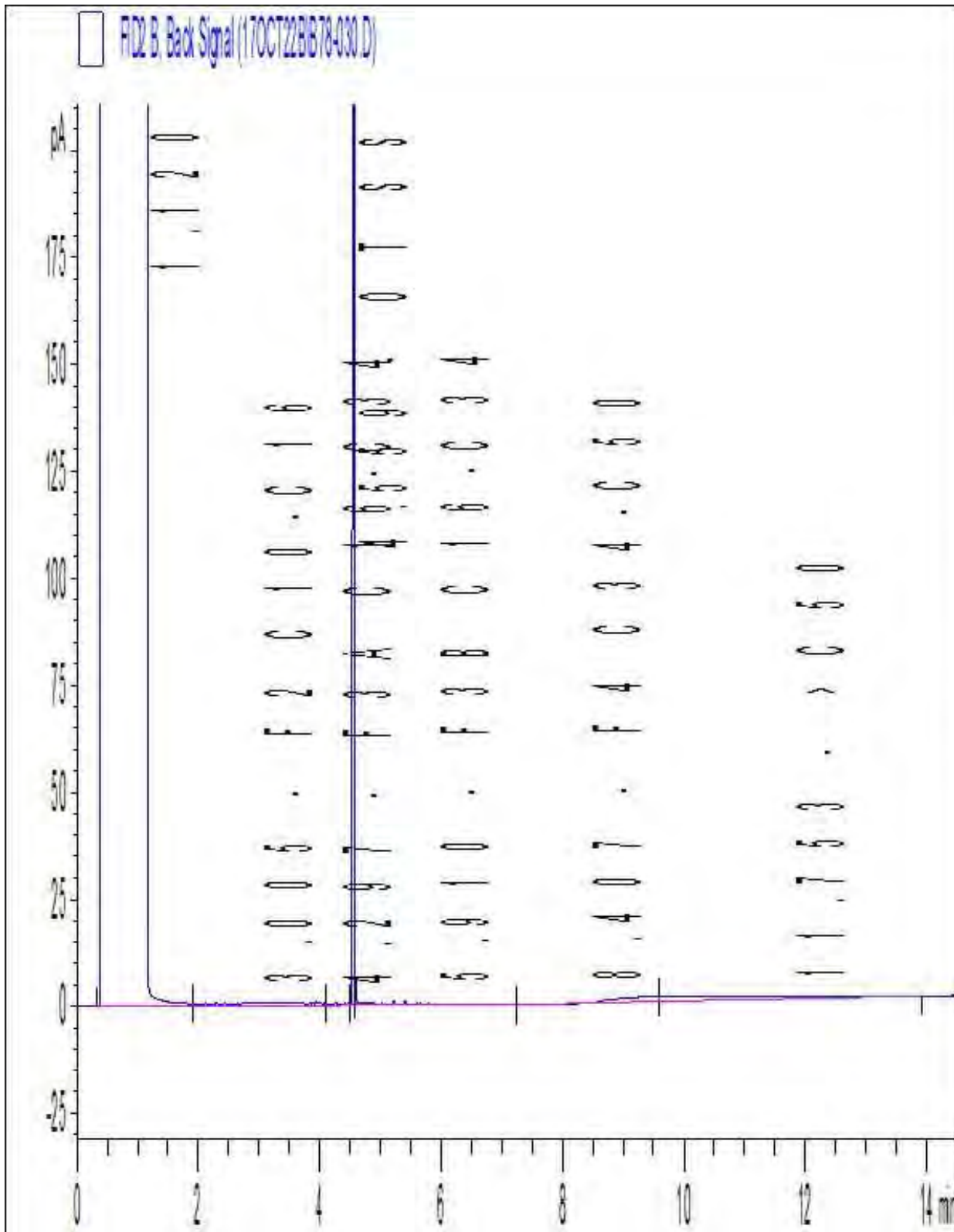
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



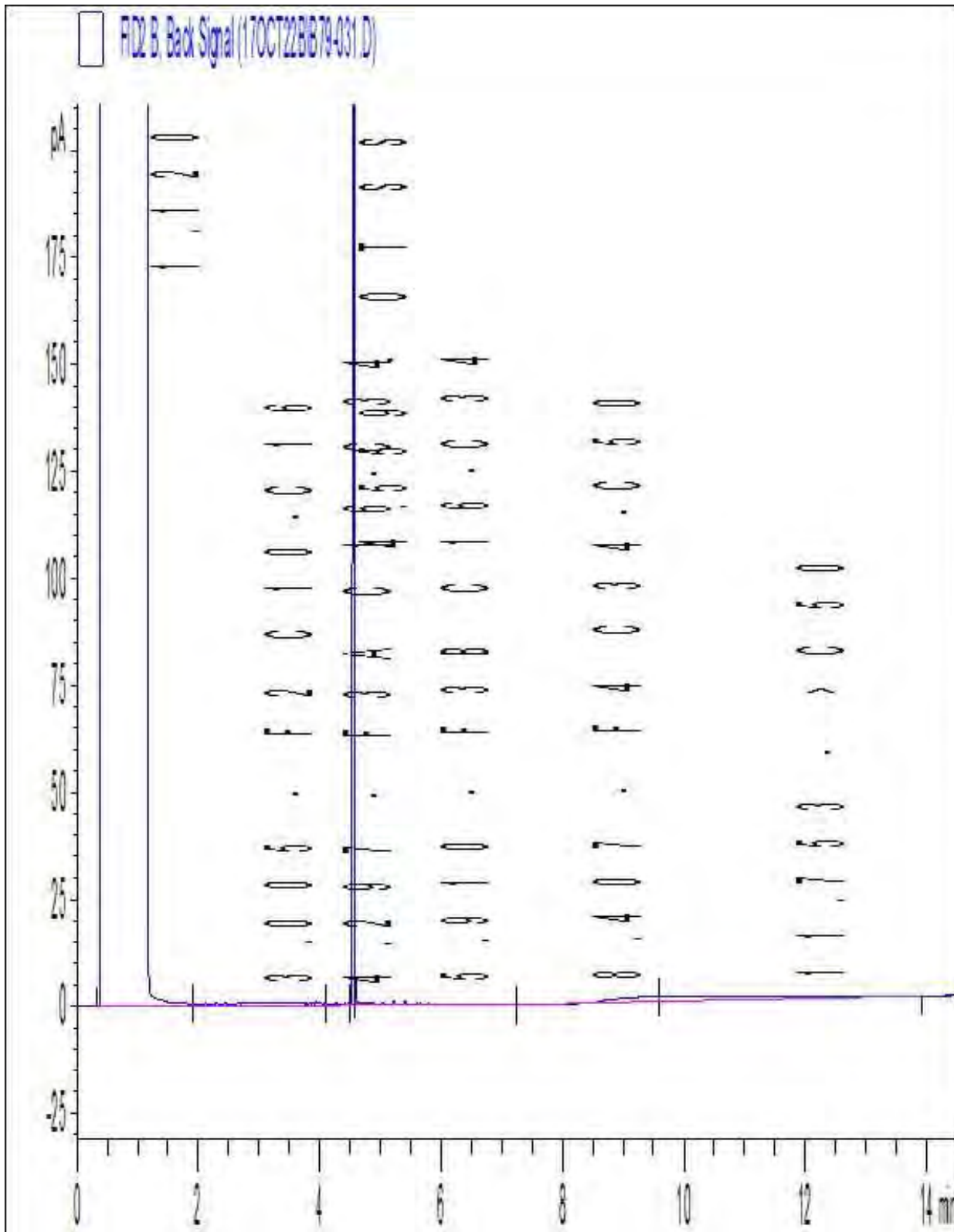
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your P.O. #: 200.400
 Your Project #: 160900764
 Site Location: CLARINGTON TS - PRIVATE WELL
 Your C.O.C. #: 633345-02-01

Attention:Report - 160900764

Stantec Consulting Ltd
 Clarington
 ON
 Canada

Report Date: 2017/10/27
 Report #: R4807227
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2030

Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	8	N/A	2017/10/27	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	6	2017/10/26	2017/10/26	CAM SOP-00301	EPA 8270 m
ABN Compounds in Water by SIM GC/MS	2	2017/10/26	2017/10/27	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	8	N/A	2017/10/26		SM 22 2310
Alkalinity	8	N/A	2017/10/22	CAM SOP-00448	SM 22 2320 B m
Carbonate, Bicarbonate and Hydroxide	8	N/A	2017/10/23	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	8	N/A	2017/10/26		EPA 8260C m
Chloride by Automated Colourimetry	8	N/A	2017/10/23	CAM SOP-00463	EPA 325.2 m
Conductivity	8	N/A	2017/10/22	CAM SOP-00414	SM 22 2510 m
Chromium (VI) in Water	8	N/A	2017/10/23	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	8	N/A	2017/10/25	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	8	N/A	2017/10/21	CAM SOP-00446	SM 22 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	8	2017/10/24	2017/10/25	CAM SOP-00316	CCME PHC-CWS m
Fluoride	8	2017/10/20	2017/10/22	CAM SOP-00449	SM 22 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2017/10/23	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	2	N/A	2017/10/25	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	8	2017/10/23	2017/10/25	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (4)	6	N/A	2017/10/21	CAM SOP-00447	EPA 6020B m
Metals Analysis by ICPMS (as received) (4)	2	N/A	2017/10/24	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2017/10/24		
Ion Balance (% Difference)	7	N/A	2017/10/25		
Anion and Cation Sum	6	N/A	2017/10/23		
Anion and Cation Sum	2	N/A	2017/10/25		
Total Coliforms/ E. coli, CFU/100mL	8	N/A	2017/10/19	CAM SOP-00551	MOE E3407
Total Ammonia-N	8	N/A	2017/10/24	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	8	N/A	2017/10/24	CAM SOP-00440	SM 22 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	1	2017/10/23	2017/10/23	CAM SOP-00309	EPA 8082A m
Polychlorinated Biphenyl in Water	7	2017/10/23	2017/10/24	CAM SOP-00309	EPA 8082A m
pH	8	N/A	2017/10/22	CAM SOP-00413	SM 4500H+ B m

Your P.O. #: 200.400
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Stantec Consulting Ltd
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Report Date: 2017/10/27
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CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2030

Received: 2017/10/19, 13:01

Sample Matrix: Water
 # Samples Received: 8

Analyses	Date		Laboratory Method	Reference
	Quantity	Extracted		
Orthophosphate	8	N/A	2017/10/23 CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2017/10/24	
Sat. pH and Langelier Index (@ 20C)	7	N/A	2017/10/25	
Sat. pH and Langelier Index (@ 4C)	1	N/A	2017/10/24	
Sat. pH and Langelier Index (@ 4C)	7	N/A	2017/10/25	
Sulphate by Automated Colourimetry	8	N/A	2017/10/23 CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	1	N/A	2017/10/24	
Total Dissolved Solids (TDS calc)	7	N/A	2017/10/25	
Total Dissolved Solids	8	2017/10/23	2017/10/24 CAM SOP-00428	SM 22 2540C m
Total Organic Carbon (TOC) (6)	8	N/A	2017/10/25 CAM SOP-00446	SM 22 5310B m
Total Suspended Solids	8	2017/10/23	2017/10/23 CAM SOP-00428	SM 22 2540D m
Turbidity	8	N/A	2017/10/21 CAM SOP-00417	SM 22 2130 B m
Volatile Organic Compounds and F1 PHCs	8	N/A	2017/10/24 CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Your P.O. #: 200.400
Your Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
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Attention:Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2017/10/27
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Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7N2030

Received: 2017/10/19, 13:01

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Maxxam Bedford
- (2) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (4) Metals analysis was performed on the sample 'as received'.
- (5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (6) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Deepthi Shaji, Project Manager

Email: dshaji@maxxam.ca

Phone# (905)817-5700 Ext:5807

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE416		FJE417		
Sampling Date		2017/10/18 11:08		2017/10/18 11:45		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	QC Batch	WG-160900764- 20171018-JK20	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	4.02	5221456	8.41	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	180	5221453	350	1.0	5221453
Calculated TDS	mg/L	220	5220337	480	1.0	5220337
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	2.1	5221453	2.3	1.0	5221453
Cation Sum	me/L	3.80	5221456	7.83	N/A	5221456
Hardness (CaCO ₃)	mg/L	170	5221454	9.2	1.0	5221587
Ion Balance (% Difference)	%	2.81	5221455	3.59	N/A	5221455
Langelier Index (@ 20C)	N/A	0.616	5220339	-0.584		5220339
Langelier Index (@ 4C)	N/A	0.366	5220340	-0.832		5220340
Saturation pH (@ 20C)	N/A	7.48	5220339	8.43		5220339
Saturation pH (@ 4C)	N/A	7.73	5220340	8.68		5220340
Inorganics						
Total Ammonia-N	mg/L	0.083	5226615	<0.050	0.050	5226615
Conductivity	umho/cm	350	5223241	780	1.0	5223932
Dissolved Organic Carbon	mg/L	0.80	5224696	1.2	0.20	5224649
Orthophosphate (P)	mg/L	<0.010	5223404	<0.010	0.010	5224849
pH	pH	8.09	5223240	7.84		5223934
Dissolved Sulphate (SO ₄)	mg/L	11	5223403	20	1.0	5224847
Alkalinity (Total as CaCO ₃)	mg/L	190	5223223	350	1.0	5223924
Dissolved Chloride (Cl)	mg/L	1.6	5223401	17	1.0	5224844
Nitrite (N)	mg/L	<0.010	5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L	<0.10	5223780	6.81	0.10	5223780
Metals						
. Aluminum (Al)	mg/L	<0.0050	5224824	0.0077	0.0050	5221838
. Antimony (Sb)	mg/L	<0.00050	5224824	<0.00050	0.00050	5221838
. Arsenic (As)	mg/L	<0.0010	5224824	<0.0010	0.0010	5221838
. Barium (Ba)	mg/L	0.16	5224824	<0.0020	0.0020	5221838
. Beryllium (Be)	mg/L	<0.00050	5224824	<0.00050	0.00050	5221838
. Boron (B)	mg/L	0.018	5224824	0.010	0.010	5221838
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE416		FJE417		
Sampling Date		2017/10/18 11:08		2017/10/18 11:45		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	QC Batch	WG-160900764- 20171018-JK20	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010	5224824	<0.00010	0.00010	5221838
. Calcium (Ca)	mg/L	43	5224824	3.0	0.20	5221838
. Chromium (Cr)	mg/L	<0.0050	5224824	<0.0050	0.0050	5221838
. Cobalt (Co)	mg/L	<0.00050	5224824	<0.00050	0.00050	5221838
. Copper (Cu)	mg/L	0.0041	5224824	0.011	0.0010	5221838
. Iron (Fe)	mg/L	1.1	5224824	<0.10	0.10	5221838
. Lead (Pb)	mg/L	<0.00050	5224824	<0.00050	0.00050	5221838
. Magnesium (Mg)	mg/L	16	5224824	0.39	0.050	5221838
. Manganese (Mn)	mg/L	0.016	5224824	<0.0020	0.0020	5221838
. Molybdenum (Mo)	mg/L	0.00073	5224824	<0.00050	0.00050	5221838
. Nickel (Ni)	mg/L	<0.0010	5224824	<0.0010	0.0010	5221838
. Phosphorus (P)	mg/L	<0.10	5224824	<0.10	0.10	5221838
. Potassium (K)	mg/L	0.97	5224824	0.37	0.20	5221838
. Selenium (Se)	mg/L	<0.0020	5224824	<0.0020	0.0020	5221838
. Silicon (Si)	mg/L	11	5224824	8.8	0.050	5221838
. Silver (Ag)	mg/L	<0.00010	5224824	<0.00010	0.00010	5221838
. Sodium (Na)	mg/L	6.7	5224824	180	0.10	5221838
. Strontium (Sr)	mg/L	0.24	5224824	0.0073	0.0010	5221838
. Thallium (Tl)	mg/L	<0.000050	5224824	<0.000050	0.000050	5221838
. Titanium (Ti)	mg/L	<0.0050	5224824	<0.0050	0.0050	5221838
. Uranium (U)	mg/L	<0.00010	5224824	0.00058	0.00010	5221838
. Vanadium (V)	mg/L	<0.00050	5224824	<0.00050	0.00050	5221838
. Zinc (Zn)	mg/L	<0.0050	5224824	<0.0050	0.0050	5221838
. Zirconium (Zr)	mg/L	<0.0010	5224824	<0.0010	0.0010	5221838
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE418		FJE419		
Sampling Date		2017/10/18 12:20		2017/10/18 13:10		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK21	QC Batch	WG-160900764- 20171018-JK22	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	7.22	5221456	8.77	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	310	5221453	330	1.0	5221453
Calculated TDS	mg/L	380	5220337	470	1.0	5221590
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	2.3	5221453	2.4	1.0	5221453
Cation Sum	me/L	6.95	5221456	8.70	N/A	5221456
Hardness (CaCO ₃)	mg/L	330	5221587	380	1.0	5221587
Ion Balance (% Difference)	%	1.93	5221455	0.430	N/A	5221455
Langelier Index (@ 20C)	N/A	1.02	5220339	1.09		5220339
Langelier Index (@ 4C)	N/A	0.774	5220340	0.837		5220340
Saturation pH (@ 20C)	N/A	6.87	5220339	6.80		5220339
Saturation pH (@ 4C)	N/A	7.12	5220340	7.05		5220340
Inorganics						
Total Ammonia-N	mg/L	<0.050	5226615	<0.050	0.050	5226615
Conductivity	umho/cm	650	5223932	810	1.0	5223932
Dissolved Organic Carbon	mg/L	0.95	5224647	1.4	0.20	5224696
Orthophosphate (P)	mg/L	<0.010	5224849	<0.010	0.010	5224849
pH	pH	7.89	5223934	7.89		5223934
Dissolved Sulphate (SO ₄)	mg/L	15	5224847	27	1.0	5224847
Alkalinity (Total as CaCO ₃)	mg/L	320	5223924	340	1.0	5223924
Dissolved Chloride (Cl)	mg/L	11	5224844	44	1.0	5224844
Nitrite (N)	mg/L	<0.010	5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L	4.00	5223780	3.53	0.10	5223780
Metals						
. Aluminum (Al)	mg/L	<0.0050	5221838	0.035	0.0050	5221838
. Antimony (Sb)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Arsenic (As)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
. Barium (Ba)	mg/L	0.043	5221838	0.052	0.0020	5221838
. Beryllium (Be)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Boron (B)	mg/L	0.010	5221838	0.016	0.010	5221838
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE418		FJE419		
Sampling Date		2017/10/18 12:20		2017/10/18 13:10		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK21	QC Batch	WG-160900764- 20171018-JK22	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010	5221838	<0.00010	0.00010	5221838
. Calcium (Ca)	mg/L	120	5221838	130	0.20	5221838
. Chromium (Cr)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Cobalt (Co)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Copper (Cu)	mg/L	0.0072	5221838	<0.0010	0.0010	5221838
. Iron (Fe)	mg/L	<0.10	5221838	<0.10	0.10	5221838
. Lead (Pb)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Magnesium (Mg)	mg/L	10	5221838	12	0.050	5221838
. Manganese (Mn)	mg/L	<0.0020	5221838	0.059	0.0020	5221838
. Molybdenum (Mo)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Nickel (Ni)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
. Phosphorus (P)	mg/L	<0.10	5221838	<0.10	0.10	5221838
. Potassium (K)	mg/L	1.0	5221838	1.3	0.20	5221838
. Selenium (Se)	mg/L	<0.0020	5221838	<0.0020	0.0020	5221838
. Silicon (Si)	mg/L	5.9	5221838	5.9	0.050	5221838
. Silver (Ag)	mg/L	<0.00010	5221838	<0.00010	0.00010	5221838
. Sodium (Na)	mg/L	6.6	5221838	23	0.10	5221838
. Strontium (Sr)	mg/L	0.21	5221838	0.25	0.0010	5221838
. Thallium (Tl)	mg/L	<0.000050	5221838	<0.000050	0.000050	5221838
. Titanium (Ti)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Uranium (U)	mg/L	0.00058	5221838	0.00099	0.00010	5221838
. Vanadium (V)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Zinc (Zn)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Zirconium (Zr)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE420		FJE421		
Sampling Date		2017/10/18 13:50		2017/10/18 14:10		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK23	QC Batch	WG-160900764- 20171018-JK24	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	9.23	5221456	9.21	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	310	5221453	310	1.0	5221453
Calculated TDS	mg/L	480	5221590	480	1.0	5221590
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.4	5221453	2.3	1.0	5221453
Cation Sum	me/L	8.88	5221456	8.71	N/A	5221456
Hardness (CaCO3)	mg/L	390	5221587	380	1.0	5221587
Ion Balance (% Difference)	%	1.93	5221455	2.80	N/A	5221455
Langelier Index (@ 20C)	N/A	1.00	5220339	0.973		5221588
Langelier Index (@ 4C)	N/A	0.754	5220340	0.725		5221589
Saturation pH (@ 20C)	N/A	6.92	5220339	6.93		5221588
Saturation pH (@ 4C)	N/A	7.17	5220340	7.18		5221589
Inorganics						
Total Ammonia-N	mg/L	<0.050	5226615	<0.050	0.050	5226615
Conductivity	umho/cm	850	5223932	850	1.0	5223241
Dissolved Organic Carbon	mg/L	0.87	5224649	0.87	0.20	5224649
Orthophosphate (P)	mg/L	<0.010	5224849	<0.010	0.010	5223404
pH	pH	7.93	5223934	7.90		5223240
Dissolved Sulphate (SO4)	mg/L	37	5224847	37	1.0	5223403
Alkalinity (Total as CaCO3)	mg/L	310	5223924	310	1.0	5223223
Dissolved Chloride (Cl)	mg/L	76	5224844	75	1.0	5223401
Nitrite (N)	mg/L	<0.010	5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L	1.25	5223780	1.31	0.10	5223780
Metals						
. Aluminum (Al)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Antimony (Sb)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Arsenic (As)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
. Barium (Ba)	mg/L	0.063	5221838	0.062	0.0020	5221838
. Beryllium (Be)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Boron (B)	mg/L	0.010	5221838	0.010	0.010	5221838
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE420		FJE421		
Sampling Date		2017/10/18 13:50		2017/10/18 14:10		
COC Number		633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK23	QC Batch	WG-160900764- 20171018-JK24	RDL	QC Batch
. Cadmium (Cd)	mg/L	<0.00010	5221838	<0.00010	0.00010	5221838
. Calcium (Ca)	mg/L	110	5221838	110	0.20	5221838
. Chromium (Cr)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Cobalt (Co)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Copper (Cu)	mg/L	0.0073	5221838	0.0039	0.0010	5221838
. Iron (Fe)	mg/L	0.34	5221838	0.22	0.10	5221838
. Lead (Pb)	mg/L	<0.00050	5221838	0.00092	0.00050	5221838
. Magnesium (Mg)	mg/L	26	5221838	26	0.050	5221838
. Manganese (Mn)	mg/L	0.0054	5221838	0.0039	0.0020	5221838
. Molybdenum (Mo)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Nickel (Ni)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
. Phosphorus (P)	mg/L	<0.10	5221838	<0.10	0.10	5221838
. Potassium (K)	mg/L	1.9	5221838	1.9	0.20	5221838
. Selenium (Se)	mg/L	<0.0020	5221838	<0.0020	0.0020	5221838
. Silicon (Si)	mg/L	6.2	5221838	6.1	0.050	5221838
. Silver (Ag)	mg/L	<0.00010	5221838	<0.00010	0.00010	5221838
. Sodium (Na)	mg/L	24	5221838	24	0.10	5221838
. Strontium (Sr)	mg/L	0.26	5221838	0.26	0.0010	5221838
. Thallium (Tl)	mg/L	<0.000050	5221838	<0.000050	0.000050	5221838
. Titanium (Ti)	mg/L	<0.0050	5221838	<0.0050	0.0050	5221838
. Uranium (U)	mg/L	0.014	5221838	0.015	0.00010	5221838
. Vanadium (V)	mg/L	<0.00050	5221838	<0.00050	0.00050	5221838
. Zinc (Zn)	mg/L	0.011	5221838	0.0059	0.0050	5221838
. Zirconium (Zr)	mg/L	<0.0010	5221838	<0.0010	0.0010	5221838
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE422	FJE422		FJE423		
Sampling Date		2017/10/18 14:37	2017/10/18 14:37		2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK25	WG-160900764- 20171018-JK25 Lab-Dup	QC Batch	WG-160900764- 20171019-JK26	RDL	QC Batch

Calculated Parameters							
Anion Sum	me/L	6.15		5221456	7.92	N/A	5221456
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220		5221453	300	1.0	5221453
Calculated TDS	mg/L	380		5221590	440	1.0	5221590
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.8		5221453	2.8	1.0	5221453
Cation Sum	me/L	5.60		5221456	8.00	N/A	5221456
Hardness (CaCO3)	mg/L	<1.0		5221587	330	1.0	5221587
Ion Balance (% Difference)	%	4.68		5221455	0.530	N/A	5221455
Langelier Index (@ 20C)	N/A	-1.62		5221588	1.10		5221588
Langelier Index (@ 4C)	N/A	-1.87		5221589	0.850		5221589
Saturation pH (@ 20C)	N/A	9.75		5221588	6.91		5221588
Saturation pH (@ 4C)	N/A	10.0		5221589	7.16		5221589

Inorganics							
Total Ammonia-N	mg/L	<0.050		5226615	0.067	0.050	5226615
Conductivity	umho/cm	620		5223932	740	1.0	5223932
Dissolved Organic Carbon	mg/L	0.67		5224647	1.3	0.20	5224647
Orthophosphate (P)	mg/L	<0.010		5224849	<0.010	0.010	5224849
pH	pH	8.13		5223934	8.01		5223934
Dissolved Sulphate (SO4)	mg/L	34		5224847	15	1.0	5224847
Alkalinity (Total as CaCO3)	mg/L	220		5223924	300	1.0	5223924
Dissolved Chloride (Cl)	mg/L	15		5224844	42	1.0	5224844
Nitrite (N)	mg/L	<0.010	<0.010	5223780	<0.010	0.010	5223780
Nitrate (N)	mg/L	8.02	8.05	5223780	6.13	0.10	5223780

Metals							
. Aluminum (Al)	mg/L	<0.0050		5224824	<0.0050	0.0050	5221838
. Antimony (Sb)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838
. Arsenic (As)	mg/L	<0.0010		5224824	<0.0010	0.0010	5221838
. Barium (Ba)	mg/L	<0.0020		5224824	0.062	0.0020	5221838
. Beryllium (Be)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		FJE422	FJE422		FJE423		
Sampling Date		2017/10/18 14:37	2017/10/18 14:37		2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK25	WG-160900764- 20171018-JK25 Lab-Dup	QC Batch	WG-160900764- 20171019-JK26	RDL	QC Batch
. Boron (B)	mg/L	<0.010		5224824	0.024	0.010	5221838
. Cadmium (Cd)	mg/L	<0.00010		5224824	<0.00010	0.00010	5221838
. Calcium (Ca)	mg/L	0.22		5224824	120	0.20	5221838
. Chromium (Cr)	mg/L	<0.0050		5224824	<0.0050	0.0050	5221838
. Cobalt (Co)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838
. Copper (Cu)	mg/L	0.0090		5224824	0.0048	0.0010	5221838
. Iron (Fe)	mg/L	<0.10		5224824	<0.10	0.10	5221838
. Lead (Pb)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838
. Magnesium (Mg)	mg/L	<0.050		5224824	10	0.050	5221838
. Manganese (Mn)	mg/L	<0.0020		5224824	<0.0020	0.0020	5221838
. Molybdenum (Mo)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838
. Nickel (Ni)	mg/L	<0.0010		5224824	<0.0010	0.0010	5221838
. Phosphorus (P)	mg/L	<0.10		5224824	<0.10	0.10	5221838
. Potassium (K)	mg/L	54		5224824	4.2	0.20	5221838
. Selenium (Se)	mg/L	<0.0020		5224824	<0.0020	0.0020	5221838
. Silicon (Si)	mg/L	6.0		5224824	5.6	0.050	5221838
. Silver (Ag)	mg/L	<0.00010		5224824	<0.00010	0.00010	5221838
. Sodium (Na)	mg/L	97		5224824	28	0.10	5221838
. Strontium (Sr)	mg/L	<0.0010		5224824	0.23	0.0010	5221838
. Thallium (Tl)	mg/L	<0.000050		5224824	<0.000050	0.000050	5221838
. Titanium (Ti)	mg/L	<0.0050		5224824	<0.0050	0.0050	5221838
. Uranium (U)	mg/L	0.00075		5224824	0.00031	0.00010	5221838
. Vanadium (V)	mg/L	<0.00050		5224824	<0.00050	0.00050	5221838
. Zinc (Zn)	mg/L	<0.0050		5224824	0.0054	0.0050	5221838
. Zirconium (Zr)	mg/L	<0.0010		5224824	<0.0010	0.0010	5221838

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

RESULTS OF ANALYSES OF WATER

Maxxam ID		FJE416	FJE416		FJE417		
Sampling Date		2017/10/18 11:08	2017/10/18 11:08		2017/10/18 11:45		
COC Number		633345-02-01	633345-02-01		633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK19 Lab-Dup	QC Batch	WG-160900764- 20171018-JK20	RDL	QC Batch

Inorganics							
Acidity	mg/L	<5.0	<5.0	5232793	38	5.0	5232793
Total Dissolved Solids	mg/L	195		5226003	440	10	5226003
Fluoride (F-)	mg/L	0.15		5223242	<0.10	0.10	5223930
Total Organic Carbon (TOC)	mg/L	0.79		5228173	1.2	0.20	5228173
Total Suspended Solids	mg/L	<10		5226002	<10	10	5226002
Turbidity	NTU	6.3		5222783	0.2	0.1	5222783
WAD Cyanide (Free)	ug/L	<1		5222618	<1	1	5222618
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FJE418	FJE419	FJE420		
Sampling Date		2017/10/18 12:20	2017/10/18 13:10	2017/10/18 13:50		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	WG-160900764- 20171018-JK23	RDL	QC Batch

Inorganics						
Acidity	mg/L	27	19	25	5.0	5232793
Total Dissolved Solids	mg/L	355	440	485	10	5226003
Fluoride (F-)	mg/L	<0.10	<0.10	<0.10	0.10	5223930
Total Organic Carbon (TOC)	mg/L	0.99	1.5	0.81	0.20	5228173
Total Suspended Solids	mg/L	<10	<10	<10	10	5226002
Turbidity	NTU	<0.1	2.6	0.9	0.1	5222783
WAD Cyanide (Free)	ug/L	<1	<1	<1	1	5222618

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

RESULTS OF ANALYSES OF WATER

Maxxam ID		FJE421		FJE422	FJE422		
Sampling Date		2017/10/18 14:10		2017/10/18 14:37	2017/10/18 14:37		
COC Number		633345-02-01		633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK24	QC Batch	WG-160900764- 20171018-JK25	WG-160900764- 20171018-JK25 Lab-Dup	RDL	QC Batch
Inorganics							
Acidity	mg/L	19	5232793	5.4		5.0	5232793
Total Dissolved Solids	mg/L	475	5226003	365		10	5226003
Fluoride (F-)	mg/L	<0.10	5223242	<0.10		0.10	5223930
Total Organic Carbon (TOC)	mg/L	0.84	5228173	0.69		0.20	5228173
Total Suspended Solids	mg/L	<10	5226002	<10		10	5226002
Turbidity	NTU	0.8	5222783	<0.1	<0.1	0.1	5223350
WAD Cyanide (Free)	ug/L	<1	5222618	<1		1	5222618
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

Maxxam ID		FJE423		
Sampling Date		2017/10/19 11:32		
COC Number		633345-02-01		
	UNITS	WG-160900764- 20171019-JK26	RDL	QC Batch
Inorganics				
Acidity	mg/L	15	5.0	5232793
Total Dissolved Solids	mg/L	425	10	5226003
Fluoride (F-)	mg/L	<0.10	0.10	5223930
Total Organic Carbon (TOC)	mg/L	1.4	0.20	5228173
Total Suspended Solids	mg/L	<10	10	5226002
Turbidity	NTU	0.2	0.1	5222783
WAD Cyanide (Free)	ug/L	<1	1	5222618
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		FJE416	FJE417	FJE417	FJE418		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 11:45	2017/10/18 12:20		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK20 Lab-Dup	WG-160900764- 20171018-JK21	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	0.92	0.93	<0.50	0.50	5221075
Mercury (Hg)	ug/L	<0.1	<0.1		<0.1	0.1	5226259

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FJE418	FJE419	FJE420		
Sampling Date		2017/10/18 12:20	2017/10/18 13:10	2017/10/18 13:50		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK21 Lab-Dup	WG-160900764- 20171018-JK22	WG-160900764- 20171018-JK23	RDL	QC Batch

Metals							
Chromium (VI)	ug/L		<0.50	<0.50	0.50	5221075	
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	0.1	5226259	

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FJE421		FJE422	FJE423		
Sampling Date		2017/10/18 14:10		2017/10/18 14:37	2017/10/19 11:32		
COC Number		633345-02-01		633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK24	QC Batch	WG-160900764- 20171018-JK25	WG-160900764- 20171019-JK26	RDL	QC Batch

Metals							
Chromium (VI)	ug/L	<0.50	5221075	<0.50	0.51	0.50	5221075
Mercury (Hg)	ug/L	<0.1	5226290	<0.1	<0.1	0.1	5226259

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

MICROBIOLOGY (WATER)

Maxxam ID		FJE416	FJE417	FJE418	FJE419	
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 12:20	2017/10/18 13:10	
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01	
	UNITS	WG-160900764-20171018-JK19	WG-160900764-20171018-JK20	WG-160900764-20171018-JK21	WG-160900764-20171018-JK22	QC Batch

Microbiological						
Background	CFU/100mL	8	NDOGT (1)	9	670	5221660
Total Coliforms	CFU/100mL	1	NDOGT (1)	0	66	5221660
Escherichia coli	CFU/100mL	0	NDOGT (1)	0	1	5221660
QC Batch = Quality Control Batch						
(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected						

Maxxam ID		FJE420	FJE421	FJE422	FJE423	
Sampling Date		2017/10/18 13:50	2017/10/18 14:10	2017/10/18 14:37	2017/10/19 11:32	
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01	
	UNITS	WG-160900764-20171018-JK23	WG-160900764-20171018-JK24	WG-160900764-20171018-JK25	WG-160900764-20171019-JK26	QC Batch

Microbiological						
Background	CFU/100mL	0	0	0	86	5221660
Total Coliforms	CFU/100mL	0	0	0	7	5221660
Escherichia coli	CFU/100mL	0	0	0	0	5221660
QC Batch = Quality Control Batch						

O.REG 153 PCBS (WATER)

Maxxam ID		FJE416	FJE417	FJE418	FJE419		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 12:20	2017/10/18 13:10		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Surrogate Recovery (%)							
Decachlorobiphenyl	%	93	97	99	101		5225988
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam ID		FJE420	FJE421	FJE422	FJE422		
Sampling Date		2017/10/18 13:50	2017/10/18 14:10	2017/10/18 14:37	2017/10/18 14:37		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK23	WG-160900764- 20171018-JK24	WG-160900764- 20171018-JK25	WG-160900764- 20171018-JK25 Lab-Dup	RDL	QC Batch

PCBs							
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5225988
Surrogate Recovery (%)							
Decachlorobiphenyl	%	90	85	82	83		5225988
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							

O.REG 153 PCBS (WATER)

Maxxam ID		FJE423		
Sampling Date		2017/10/19 11:32		
COC Number		633345-02-01		
	UNITS	WG-160900764- 20171019-JK26	RDL	QC Batch
PCBs				
Aroclor 1242	ug/L	<0.05	0.05	5225988
Aroclor 1248	ug/L	<0.05	0.05	5225988
Aroclor 1254	ug/L	<0.05	0.05	5225988
Aroclor 1260	ug/L	<0.05	0.05	5225988
Total PCB	ug/L	<0.05	0.05	5225988
Surrogate Recovery (%)				
Decachlorobiphenyl	%	88		5225988
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE416	FJE417	FJE417		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 11:45		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK20 Lab-Dup	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50		0.50	5221420
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222340
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chloroform	ug/L	<0.20	0.51	0.49	0.20	5222340
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222340
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222340
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222340
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222340
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222340
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222340
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCS BY HS & F1-F4 (WATER)

Maxxam ID		FJE416	FJE417	FJE417		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 11:45		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK20 Lab-Dup	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222340
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222340
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222340
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5228396
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5228396
Surrogate Recovery (%)						
o-Terphenyl	%	101	107	103		5228396
4-Bromofluorobenzene	%	91	89	91		5222340
D4-1,2-Dichloroethane	%	101	106	103		5222340
D8-Toluene	%	98	97	96		5222340
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE418	FJE419	FJE420		
Sampling Date		2017/10/18 12:20	2017/10/18 13:10	2017/10/18 13:50		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	WG-160900764- 20171018-JK23	RDL	QC Batch

Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5221420
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222340
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chloroform	ug/L	0.91	<0.20	<0.20	0.20	5222340
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222340
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222340
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222340
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222340
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222340
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222340
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222340

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE418	FJE419	FJE420		
Sampling Date		2017/10/18 12:20	2017/10/18 13:10	2017/10/18 13:50		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	WG-160900764- 20171018-JK23	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222340
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222340
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222340
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5228396
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5228396
Surrogate Recovery (%)						
o-Terphenyl	%	103	103	102		5228396
4-Bromofluorobenzene	%	91	90	90		5222340
D4-1,2-Dichloroethane	%	103	103	104		5222340
D8-Toluene	%	95	97	96		5222340
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Maxxam ID		FJE421	FJE422	FJE423		
Sampling Date		2017/10/18 14:10	2017/10/18 14:37	2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK24	WG-160900764- 20171018-JK25	WG-160900764- 20171019-JK26	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	5221420
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	5222340
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	5222340
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	5222340
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	5222340
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	5222340
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	5222340
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	5222340
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	5222340
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	5222340
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 VOCS BY HS & F1-F4 (WATER)

Maxxam ID		FJE421	FJE422	FJE423		
Sampling Date		2017/10/18 14:10	2017/10/18 14:37	2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK24	WG-160900764- 20171018-JK25	WG-160900764- 20171019-JK26	RDL	QC Batch
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	5222340
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	5222340
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	5222340
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	5222340
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	5222340
F1 (C6-C10)	ug/L	<25	<25	<25	25	5222340
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	5222340
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	5228396
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	5228396
Reached Baseline at C50	ug/L	Yes	Yes	Yes		5228396
Surrogate Recovery (%)						
o-Terphenyl	%	104	104	103		5228396
4-Bromofluorobenzene	%	92	91	88		5222340
D4-1,2-Dichloroethane	%	106	106	104		5222340
D8-Toluene	%	96	96	97		5222340
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE416	FJE417	FJE418	FJE419		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 12:20	2017/10/18 13:10		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5232270
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5232270
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5232270
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5232270
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5232270
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE416	FJE417	FJE418	FJE419		
Sampling Date		2017/10/18 11:08	2017/10/18 11:45	2017/10/18 12:20	2017/10/18 13:10		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK19	WG-160900764- 20171018-JK20	WG-160900764- 20171018-JK21	WG-160900764- 20171018-JK22	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5232270
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5220375
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	48 (1)	61	61	71		5232270
2-Fluorobiphenyl	%	87	75	85	85		5232270
D14-Terphenyl (FS)	%	103	102	103	100		5232270
D5-Nitrobenzene	%	85	70	80	81		5232270
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE420	FJE421	FJE422	FJE423		
Sampling Date		2017/10/18 13:50	2017/10/18 14:10	2017/10/18 14:37	2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK23	WG-160900764- 20171018-JK24	WG-160900764- 20171018-JK25	WG-160900764- 20171019-JK26	RDL	QC Batch

Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5232270
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5232270
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5232270
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5232270
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5232270
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		FJE420	FJE421	FJE422	FJE423		
Sampling Date		2017/10/18 13:50	2017/10/18 14:10	2017/10/18 14:37	2017/10/19 11:32		
COC Number		633345-02-01	633345-02-01	633345-02-01	633345-02-01		
	UNITS	WG-160900764- 20171018-JK23	WG-160900764- 20171018-JK24	WG-160900764- 20171018-JK25	WG-160900764- 20171019-JK26	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5232270
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5232270
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5232270
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5232270
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5232270
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5220375
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	47 (1)	69	59	23 (1)		5232270
2-Fluorobiphenyl	%	81	87	87	88		5232270
D14-Terphenyl (FS)	%	97	100	99	101		5232270
D5-Nitrobenzene	%	76	82	82	84		5232270
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a low bias in some results.							

TEST SUMMARY

Maxxam ID: FJE416
Sample ID: WG-160900764-20171018-JK19
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223223	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5223401	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223241	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224696	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223242	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221454	N/A	2017/10/25	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5224824	N/A	2017/10/24	Prempal Bhatti
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/25	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223240	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5223404	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5223403	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE416 Dup
Sample ID: WG-160900764-20171018-JK19
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau

TEST SUMMARY

Maxxam ID: FJE417
Sample ID: WG-160900764-20171018-JK20
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE417 Dup
Sample ID: WG-160900764-20171018-JK20
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

TEST SUMMARY

Maxxam ID: FJE418
Sample ID: WG-160900764-20171018-JK21
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224647	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5220337	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE418 Dup
Sample ID: WG-160900764-20171018-JK21
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison

TEST SUMMARY

Maxxam ID: FJE419
Sample ID: WG-160900764-20171018-JK22
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224696	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE420
Sample ID: WG-160900764-20171018-JK23
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel

TEST SUMMARY

Maxxam ID: FJE420
Sample ID: WG-160900764-20171018-JK23
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5220339	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5220340	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE421
Sample ID: WG-160900764-20171018-JK24
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/26	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223223	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5223401	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223241	N/A	2017/10/22	Yogesh Patel

TEST SUMMARY

Maxxam ID: FJE421
Sample ID: WG-160900764-20171018-JK24
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224649	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223242	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226290	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/24	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223240	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5223404	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/24	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/24	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5223403	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/24	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE422
Sample ID: WG-160900764-20171018-JK25
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/27	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224647	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu

TEST SUMMARY

Maxxam ID: FJE422
Sample ID: WG-160900764-20171018-JK25
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/25	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5224824	N/A	2017/10/24	Prempal Bhatti
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/25	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/23	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

Maxxam ID: FJE422 Dup
Sample ID: WG-160900764-20171018-JK25
Matrix: Water

Collected: 2017/10/18
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/23	Sarah Huang
Turbidity	AT	5223350	N/A	2017/10/21	Neil Dassanayake

Maxxam ID: FJE423
Sample ID: WG-160900764-20171019-JK26
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5220375	N/A	2017/10/27	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5232270	2017/10/26	2017/10/27	Milijana Avramovic
Acidity (CaCO3) in water	MT	5232793	N/A	2017/10/26	Brent Boudreau
Alkalinity	AT	5223924	N/A	2017/10/22	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	5221453	N/A	2017/10/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5221420	N/A	2017/10/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	5224844	N/A	2017/10/23	Deonarine Ramnarine

TEST SUMMARY

Maxxam ID: FJE423
Sample ID: WG-160900764-20171019-JK26
Matrix: Water

Collected: 2017/10/19
Shipped:
Received: 2017/10/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	5223932	N/A	2017/10/22	Yogesh Patel
Chromium (VI) in Water	IC	5221075	N/A	2017/10/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5222618	N/A	2017/10/25	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5224647	N/A	2017/10/21	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5228396	2017/10/24	2017/10/25	Zhiyue (Frank) Zhu
Fluoride	ISE	5223930	2017/10/20	2017/10/22	Yogesh Patel
Hardness (calculated as CaCO3)		5221587	N/A	2017/10/23	Automated Statchk
Mercury	CV/AA	5226259	2017/10/23	2017/10/25	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5221838	N/A	2017/10/21	Thao Nguyen
Ion Balance (% Difference)	CALC	5221455	N/A	2017/10/25	Automated Statchk
Anion and Cation Sum	CALC	5221456	N/A	2017/10/23	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5221660	N/A	2017/10/19	Farhana Rahman
Total Ammonia-N	LACH/NH4	5226615	N/A	2017/10/24	Charles Opoku-Ware
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5223780	N/A	2017/10/24	Sarabjit Raina
Polychlorinated Biphenyl in Water	GC/ECD	5225988	2017/10/23	2017/10/24	Sarah Huang
pH	AT	5223934	N/A	2017/10/22	Yogesh Patel
Orthophosphate	KONE	5224849	N/A	2017/10/23	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5221588	N/A	2017/10/25	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5221589	N/A	2017/10/25	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5224847	N/A	2017/10/23	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5221590	N/A	2017/10/25	Automated Statchk
Total Dissolved Solids	BAL	5226003	2017/10/23	2017/10/24	Fang Wang
Total Organic Carbon (TOC)	TOCV/NDIR	5228173	N/A	2017/10/25	Anastasia Hamanov
Total Suspended Solids	BAL	5226002	2017/10/23	2017/10/23	Fang Wang
Turbidity	AT	5222783	N/A	2017/10/21	Neil Dassanayake
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5222340	N/A	2017/10/24	James Zou

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.3°C
Package 2	4.3°C
Package 3	6.7°C
Package 4	10.7°C
Package 5	3.7°C

Sample FJE416 [WG-160900764-20171018-JK19] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJE417 [WG-160900764-20171018-JK20] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJE420 [WG-160900764-20171018-JK23] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJE421 [WG-160900764-20171018-JK24] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample FJE423 [WG-160900764-20171019-JK26] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your P.O. #: 200.400
Sampler Initials: JK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222340	4-Bromofluorobenzene	2017/10/24	99	70 - 130	99	70 - 130	93	%				
5222340	D4-1,2-Dichloroethane	2017/10/24	102	70 - 130	102	70 - 130	105	%				
5222340	D8-Toluene	2017/10/24	103	70 - 130	102	70 - 130	94	%				
5225988	Decachlorobiphenyl	2017/10/23	98	60 - 130	90	60 - 130	91	%				
5228396	o-Terphenyl	2017/10/25	105	60 - 130	108	60 - 130	104	%				
5232270	2,4,6-Tribromophenol	2017/10/26			85	50 - 130	59	%				
5232270	2-Fluorobiphenyl	2017/10/26			79	50 - 130	86	%				
5232270	D14-Terphenyl (FS)	2017/10/26			104	50 - 130	100	%				
5232270	D5-Nitrobenzene	2017/10/26			84	50 - 130	85	%				
5221075	Chromium (VI)	2017/10/23	98	80 - 120	101	80 - 120	<0.50	ug/L	0.44	20		
5221838	. Aluminum (Al)	2017/10/21	100	80 - 120	97	80 - 120	<0.0050	mg/L				
5221838	. Antimony (Sb)	2017/10/21	99	80 - 120	100	80 - 120	<0.00050	mg/L				
5221838	. Arsenic (As)	2017/10/21	98	80 - 120	96	80 - 120	<0.0010	mg/L				
5221838	. Barium (Ba)	2017/10/21	97	80 - 120	95	80 - 120	<0.0020	mg/L				
5221838	. Beryllium (Be)	2017/10/21	100	80 - 120	98	80 - 120	<0.00050	mg/L				
5221838	. Boron (B)	2017/10/21	99	80 - 120	97	80 - 120	<0.010	mg/L				
5221838	. Cadmium (Cd)	2017/10/21	96	80 - 120	98	80 - 120	<0.00010	mg/L				
5221838	. Calcium (Ca)	2017/10/21	96	80 - 120	95	80 - 120	<0.20	mg/L				
5221838	. Chromium (Cr)	2017/10/21	99	80 - 120	98	80 - 120	<0.0050	mg/L				
5221838	. Cobalt (Co)	2017/10/21	98	80 - 120	97	80 - 120	<0.00050	mg/L				
5221838	. Copper (Cu)	2017/10/21	97	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
5221838	. Iron (Fe)	2017/10/21	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
5221838	. Lead (Pb)	2017/10/21	96	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
5221838	. Magnesium (Mg)	2017/10/21	99	80 - 120	97	80 - 120	<0.050	mg/L				
5221838	. Manganese (Mn)	2017/10/21	97	80 - 120	97	80 - 120	<0.0020	mg/L				
5221838	. Molybdenum (Mo)	2017/10/21	98	80 - 120	99	80 - 120	<0.00050	mg/L				
5221838	. Nickel (Ni)	2017/10/21	97	80 - 120	98	80 - 120	<0.0010	mg/L				
5221838	. Phosphorus (P)	2017/10/21	100	80 - 120	113	80 - 120	<0.10	mg/L				
5221838	. Potassium (K)	2017/10/21	98	80 - 120	98	80 - 120	<0.20	mg/L				
5221838	. Selenium (Se)	2017/10/21	99	80 - 120	96	80 - 120	<0.0020	mg/L				

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your P.O. #: 200.400
Sampler Initials: JK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5221838	. Silicon (Si)	2017/10/21	96	80 - 120	95	80 - 120	<0.050	mg/L				
5221838	. Silver (Ag)	2017/10/21	93	80 - 120	95	80 - 120	<0.00010	mg/L				
5221838	. Sodium (Na)	2017/10/21	98	80 - 120	99	80 - 120	<0.10	mg/L				
5221838	. Strontium (Sr)	2017/10/21	98	80 - 120	97	80 - 120	<0.0010	mg/L				
5221838	. Thallium (Tl)	2017/10/21	95	80 - 120	95	80 - 120	<0.000050	mg/L				
5221838	. Titanium (Ti)	2017/10/21	97	80 - 120	95	80 - 120	<0.0050	mg/L				
5221838	. Uranium (U)	2017/10/21	95	80 - 120	96	80 - 120	<0.00010	mg/L				
5221838	. Vanadium (V)	2017/10/21	98	80 - 120	98	80 - 120	<0.00050	mg/L				
5221838	. Zinc (Zn)	2017/10/21	97	80 - 120	98	80 - 120	<0.0050	mg/L				
5221838	. Zirconium (Zr)	2017/10/21	99	80 - 120	101	80 - 120	<0.0010	mg/L				
5222340	1,1,1,2-Tetrachloroethane	2017/10/24	101	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
5222340	1,1,1-Trichloroethane	2017/10/24	92	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
5222340	1,1,2,2-Tetrachloroethane	2017/10/24	102	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5222340	1,1,2-Trichloroethane	2017/10/24	104	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
5222340	1,1-Dichloroethane	2017/10/24	101	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5222340	1,1-Dichloroethylene	2017/10/24	104	70 - 130	106	70 - 130	<0.20	ug/L	NC	30		
5222340	1,2-Dichlorobenzene	2017/10/24	92	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
5222340	1,2-Dichloroethane	2017/10/24	106	70 - 130	107	70 - 130	<0.50	ug/L	NC	30		
5222340	1,2-Dichloropropane	2017/10/24	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222340	1,3-Dichlorobenzene	2017/10/24	97	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5222340	1,4-Dichlorobenzene	2017/10/24	101	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5222340	Acetone (2-Propanone)	2017/10/24	99	60 - 140	90	60 - 140	<10	ug/L	NC	30		
5222340	Benzene	2017/10/24	97	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5222340	Bromodichloromethane	2017/10/24	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5222340	Bromoform	2017/10/24	101	70 - 130	99	70 - 130	<1.0	ug/L	NC	30		
5222340	Bromomethane	2017/10/24	99	60 - 140	100	60 - 140	<0.50	ug/L	NC	30		
5222340	Carbon Tetrachloride	2017/10/24	91	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5222340	Chlorobenzene	2017/10/24	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222340	Chloroform	2017/10/24	93	70 - 130	94	70 - 130	<0.20	ug/L	4.2	30		
5222340	cis-1,2-Dichloroethylene	2017/10/24	93	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your P.O. #: 200.400
Sampler Initials: JK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5222340	cis-1,3-Dichloropropene	2017/10/24	96	70 - 130	97	70 - 130	<0.30	ug/L	NC	30		
5222340	Dibromochloromethane	2017/10/24	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5222340	Dichlorodifluoromethane (FREON 12)	2017/10/24	93	60 - 140	93	60 - 140	<1.0	ug/L	NC	30		
5222340	Ethylbenzene	2017/10/24	94	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5222340	Ethylene Dibromide	2017/10/24	101	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
5222340	F1 (C6-C10) - BTEX	2017/10/24					<25	ug/L	NC	30		
5222340	F1 (C6-C10)	2017/10/24	90	60 - 140	90	60 - 140	<25	ug/L	NC	30		
5222340	Hexane	2017/10/24	101	70 - 130	102	70 - 130	<1.0	ug/L	NC	30		
5222340	Methyl Ethyl Ketone (2-Butanone)	2017/10/24	101	60 - 140	93	60 - 140	<10	ug/L	NC	30		
5222340	Methyl Isobutyl Ketone	2017/10/24	97	70 - 130	92	70 - 130	<5.0	ug/L	NC	30		
5222340	Methyl t-butyl ether (MTBE)	2017/10/24	94	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
5222340	Methylene Chloride(Dichloromethane)	2017/10/24	96	70 - 130	98	70 - 130	<2.0	ug/L	NC	30		
5222340	o-Xylene	2017/10/24	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222340	p+m-Xylene	2017/10/24	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5222340	Styrene	2017/10/24	94	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
5222340	Tetrachloroethylene	2017/10/24	89	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
5222340	Toluene	2017/10/24	93	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5222340	Total Xylenes	2017/10/24					<0.20	ug/L	NC	30		
5222340	trans-1,2-Dichloroethylene	2017/10/24	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5222340	trans-1,3-Dichloropropene	2017/10/24	106	70 - 130	106	70 - 130	<0.40	ug/L	NC	30		
5222340	Trichloroethylene	2017/10/24	90	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5222340	Trichlorofluoromethane (FREON 11)	2017/10/24	95	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5222340	Vinyl Chloride	2017/10/24	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
5222618	WAD Cyanide (Free)	2017/10/25	97	80 - 120	101	80 - 120	<1	ug/L	NC	20		
5222783	Turbidity	2017/10/21			100	85 - 115	<0.1	NTU	7.5	20		
5223223	Alkalinity (Total as CaCO3)	2017/10/22			96	85 - 115	<1.0	mg/L	0.90	20		
5223240	pH	2017/10/22			101	98 - 103			0.076	N/A		
5223241	Conductivity	2017/10/22			101	85 - 115	<1.0	umho/cm	0	25		
5223242	Fluoride (F-)	2017/10/22	108	80 - 120	105	80 - 120	<0.10	mg/L	1.9	20		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5223350	Turbidity	2017/10/21			101	85 - 115	<0.1	NTU	NC	20		
5223401	Dissolved Chloride (Cl)	2017/10/23	102	80 - 120	102	80 - 120	<1.0	mg/L	2.8	20		
5223403	Dissolved Sulphate (SO4)	2017/10/23	109	75 - 125	104	80 - 120	<1.0	mg/L	0.36	20		
5223404	Orthophosphate (P)	2017/10/23	100	75 - 125	101	80 - 120	<0.010	mg/L	1.3	25		
5223780	Nitrate (N)	2017/10/24	NC	80 - 120	97	80 - 120	<0.10	mg/L	0.41	20		
5223780	Nitrite (N)	2017/10/24	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
5223924	Alkalinity (Total as CaCO3)	2017/10/22			97	85 - 115	<1.0	mg/L	0.33	20		
5223930	Fluoride (F-)	2017/10/22	107	80 - 120	105	80 - 120	<0.10	mg/L	1.9	20		
5223932	Conductivity	2017/10/22			101	85 - 115	<1.0	umho/cm	0.34	25		
5223934	pH	2017/10/22			101	98 - 103			0.025	N/A		
5224647	Dissolved Organic Carbon	2017/10/21	97	80 - 120	100	80 - 120	<0.20	mg/L	0.78	20		
5224649	Dissolved Organic Carbon	2017/10/21	91	80 - 120	96	80 - 120	0.23, RDL=0.20	mg/L	0.97	20		
5224696	Dissolved Organic Carbon	2017/10/21	94	80 - 120	97	80 - 120	0.26, RDL=0.20	mg/L	0.46	20		
5224824	. Aluminum (Al)	2017/10/24	93	80 - 120	94	80 - 120	<0.0050	mg/L	0.99	20		
5224824	. Antimony (Sb)	2017/10/24	101	80 - 120	102	80 - 120	<0.00050	mg/L				
5224824	. Arsenic (As)	2017/10/24	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
5224824	. Barium (Ba)	2017/10/24	92	80 - 120	95	80 - 120	<0.0020	mg/L	1.0	20		
5224824	. Beryllium (Be)	2017/10/24	97	80 - 120	91	80 - 120	<0.00050	mg/L				
5224824	. Boron (B)	2017/10/24	87	80 - 120	87	80 - 120	<0.010	mg/L				
5224824	. Cadmium (Cd)	2017/10/24	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5224824	. Calcium (Ca)	2017/10/24	NC	80 - 120	92	80 - 120	<0.20	mg/L				
5224824	. Chromium (Cr)	2017/10/24	92	80 - 120	91	80 - 120	<0.0050	mg/L	NC	20		
5224824	. Cobalt (Co)	2017/10/24	93	80 - 120	93	80 - 120	<0.00050	mg/L				
5224824	. Copper (Cu)	2017/10/24	92	80 - 120	98	80 - 120	<0.0010	mg/L	0.083	20		
5224824	. Iron (Fe)	2017/10/24	94	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
5224824	. Lead (Pb)	2017/10/24	92	80 - 120	95	80 - 120	<0.00050	mg/L	2.0	20		
5224824	. Magnesium (Mg)	2017/10/24	93	80 - 120	96	80 - 120	<0.050	mg/L				
5224824	. Manganese (Mn)	2017/10/24	94	80 - 120	93	80 - 120	<0.0020	mg/L	NC	20		

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your P.O. #: 200.400
Sampler Initials: JK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5224824	. Molybdenum (Mo)	2017/10/24	96	80 - 120	97	80 - 120	<0.00050	mg/L				
5224824	. Nickel (Ni)	2017/10/24	92	80 - 120	92	80 - 120	<0.0010	mg/L				
5224824	. Phosphorus (P)	2017/10/24	93	80 - 120	100	80 - 120	<0.10	mg/L				
5224824	. Potassium (K)	2017/10/24	93	80 - 120	95	80 - 120	<0.20	mg/L				
5224824	. Selenium (Se)	2017/10/24	95	80 - 120	99	80 - 120	<0.0020	mg/L	NC	20		
5224824	. Silicon (Si)	2017/10/24	95	80 - 120	93	80 - 120	<0.050	mg/L				
5224824	. Silver (Ag)	2017/10/24	93	80 - 120	96	80 - 120	<0.00010	mg/L				
5224824	. Sodium (Na)	2017/10/24	90	80 - 120	90	80 - 120	<0.10	mg/L	0.22	20		
5224824	. Strontium (Sr)	2017/10/24	95	80 - 120	95	80 - 120	<0.0010	mg/L				
5224824	. Thallium (Tl)	2017/10/24	94	80 - 120	97	80 - 120	<0.000050	mg/L				
5224824	. Titanium (Ti)	2017/10/24	90	80 - 120	91	80 - 120	<0.0050	mg/L				
5224824	. Uranium (U)	2017/10/24	96	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
5224824	. Vanadium (V)	2017/10/24	91	80 - 120	91	80 - 120	<0.00050	mg/L				
5224824	. Zinc (Zn)	2017/10/24	95	80 - 120	95	80 - 120	<0.0050	mg/L	1.7	20		
5224824	. Zirconium (Zr)	2017/10/24	98	80 - 120	101	80 - 120	<0.0010	mg/L				
5224844	Dissolved Chloride (Cl)	2017/10/23	NC	80 - 120	104	80 - 120	<1.0	mg/L	2.6	20		
5224847	Dissolved Sulphate (SO4)	2017/10/23	NC	75 - 125	103	80 - 120	<1.0	mg/L	0.23	20		
5224849	Orthophosphate (P)	2017/10/23	120	75 - 125	101	80 - 120	<0.010	mg/L	NC	25		
5225988	Aroclor 1242	2017/10/23					<0.05	ug/L	NC	30		
5225988	Aroclor 1248	2017/10/23					<0.05	ug/L	NC	30		
5225988	Aroclor 1254	2017/10/23					<0.05	ug/L	NC	30		
5225988	Aroclor 1260	2017/10/23	118	60 - 130	106	60 - 130	<0.05	ug/L	NC	30		
5225988	Total PCB	2017/10/23	118	60 - 130	106	60 - 130	<0.05	ug/L	NC	40		
5226002	Total Suspended Solids	2017/10/23					<10	mg/L	3.9	25	100	85 - 115
5226003	Total Dissolved Solids	2017/10/24					<10	mg/L	8.3	25	95	90 - 110
5226259	Mercury (Hg)	2017/10/25	103	75 - 125	99	80 - 120	<0.1	ug/L	NC	20		
5226290	Mercury (Hg)	2017/10/25	101	75 - 125	98	80 - 120	<0.1	ug/L	NC	20		
5226615	Total Ammonia-N	2017/10/24	97	80 - 120	97	85 - 115	<0.050	mg/L	NC	20		
5228173	Total Organic Carbon (TOC)	2017/10/24	94	80 - 120	97	80 - 120	<0.20	mg/L	13	20		
5228396	F2 (C10-C16 Hydrocarbons)	2017/10/25	96	50 - 130	95	60 - 130	<100	ug/L	NC	30		

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - PRIVATE WELL
Your P.O. #: 200.400
Sampler Initials: JK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5228396	F3 (C16-C34 Hydrocarbons)	2017/10/25	98	50 - 130	97	60 - 130	<200	ug/L	NC	30		
5228396	F4 (C34-C50 Hydrocarbons)	2017/10/25	95	50 - 130	95	60 - 130	<200	ug/L	NC	30		
5232270	1,2,4-Trichlorobenzene	2017/10/26			58	40 - 130	<0.1	ug/L	6.6	30		
5232270	1-Methylnaphthalene	2017/10/26			82	50 - 130	<0.2	ug/L	0.98	30		
5232270	2,4,5-Trichlorophenol	2017/10/26			108	50 - 130	<0.2	ug/L	0.77	30		
5232270	2,4,6-Trichlorophenol	2017/10/26			102	50 - 130	<0.2	ug/L	4.4	30		
5232270	2,4-Dichlorophenol	2017/10/26			80	50 - 130	<0.1	ug/L	1.8	30		
5232270	2,4-Dimethylphenol	2017/10/26			75	30 - 130	<0.5	ug/L	76 (1)	30		
5232270	2,4-Dinitrophenol	2017/10/26			92	30 - 130	<2	ug/L	13	30		
5232270	2,4-Dinitrotoluene	2017/10/26			100	50 - 130	<0.3	ug/L	0.25	30		
5232270	2,6-Dinitrotoluene	2017/10/26			100	50 - 130	<0.3	ug/L	0.68	30		
5232270	2-Chlorophenol	2017/10/26			78	50 - 130	<0.1	ug/L	3.8	30		
5232270	2-Methylnaphthalene	2017/10/26			77	50 - 130	<0.2	ug/L	0.45	30		
5232270	3,3'-Dichlorobenzidine	2017/10/26			101	30 - 130	<0.5	ug/L	14	30		
5232270	Acenaphthene	2017/10/26			95	50 - 130	<0.2	ug/L	0.52	30		
5232270	Acenaphthylene	2017/10/26			92	50 - 130	<0.2	ug/L	0.26	30		
5232270	Anthracene	2017/10/26			92	50 - 130	<0.05	ug/L	0.52	30		
5232270	Benzo(a)anthracene	2017/10/26			109	50 - 130	<0.05	ug/L	0.98	30		
5232270	Benzo(a)pyrene	2017/10/26			103	50 - 130	<0.01	ug/L	0.27	30		
5232270	Benzo(b/j)fluoranthene	2017/10/26			118	50 - 130	<0.05	ug/L	1.8	30		
5232270	Benzo(g,h,i)perylene	2017/10/26			97	50 - 130	<0.05	ug/L	0.72	30		
5232270	Benzo(k)fluoranthene	2017/10/26			102	50 - 130	<0.05	ug/L	3.5	30		
5232270	Biphenyl	2017/10/26			88	50 - 130	<0.1	ug/L	1.3	30		
5232270	Bis(2-chloroethyl)ether	2017/10/26			82	50 - 130	<0.5	ug/L	2.3	30		
5232270	Bis(2-chloroisopropyl)ether	2017/10/26			79	50 - 130	<0.5	ug/L	2.8	30		
5232270	Bis(2-ethylhexyl)phthalate	2017/10/26			123	50 - 130	<1	ug/L	1.1	30		
5232270	Chrysene	2017/10/26			102	50 - 130	<0.05	ug/L	0.66	30		
5232270	Dibenz(a,h)anthracene	2017/10/26			96	50 - 130	<0.1	ug/L	2.0	30		
5232270	Diethyl phthalate	2017/10/26			102	50 - 130	<0.1	ug/L	1.1	30		
5232270	Dimethyl phthalate	2017/10/26			101	50 - 130	<0.1	ug/L	0.87	30		

QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5232270	Fluoranthene	2017/10/26			98	50 - 130	<0.2	ug/L	1.2	30		
5232270	Fluorene	2017/10/26			88	50 - 130	<0.2	ug/L	0.011	30		
5232270	Indeno(1,2,3-cd)pyrene	2017/10/26			109	50 - 130	<0.1	ug/L	2.0	30		
5232270	Naphthalene	2017/10/26			90	50 - 130	<0.2	ug/L	1.3	30		
5232270	p-Chloroaniline	2017/10/26			88	30 - 130	<1	ug/L	14	30		
5232270	Pentachlorophenol	2017/10/26			90	50 - 130	<0.1	ug/L	42 (1)	30		
5232270	Phenanthrene	2017/10/26			98	50 - 130	<0.1	ug/L	0.25	30		
5232270	Phenol	2017/10/26			39	30 - 130	<0.5	ug/L	3.7	30		
5232270	Pyrene	2017/10/26			113	50 - 130	<0.05	ug/L	0.34	30		
5232793	Acidity	2017/10/26	84	80 - 120	102	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Colleen Acker, Supervisor, General Chemistry



Cristina Carriere, Scientific Service Specialist



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist



Farhana Rahman

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD
CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEMP 0 1 6
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID 2
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEMP 6 3 4
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID 3
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEMP 8 7 5
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID 4
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEMP 10 9 13
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID 5
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INTACT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEMP 4 3 4
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	

MAXXAM JOB#:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	

RECEIVED BY (SIGN & PRINT) <i>Adithi Reddy</i>	<i>ASHTI REDDY</i>	DATE (YYYY/MM/DD) 2017/10/19	TIME (HH:MM) 13:01
---	--------------------	---------------------------------	-----------------------

19-Oct-17 13:01

Deepthi Shaji

B7N2030

KES ENV-899

INVOICE INFORMATION:
 Client: #9197 Stantec Consulting Ltd
 Contact Name: Accounts Payable
 Address: 300 Hagey Blvd Suite 100
 Waterloo ON N2L 0A4
 Phone: (519) 579-4410 x Fax: (519) 579-6733 x
 Email: accounts.payable.invoices@stantec.com

REPORT INFORMATION (if differs from invoice):
 Company Name: #18379 Stantec Consulting Ltd
 Contact Name: Report - 160900764
 Address: ON
 Phone: Fax:
 Email: aaron.warkentin@stantec.com, jamie.koch@stantec.co

PROJECT INFORMATION:
 Quotation #: B48218
 Task #: 200.400
 Project #: 160900764
 Profit Centre: 1609
 Site #: Clarington TS - Private Well
 Sampled By: JIC

Page 1 of 3
 Only:
 Bottle Order #: 633345
 Project Manager: Deepthi Shaji
 Barcode: C#633345-02-01

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)
 Table 1 Res/Park Medium/Fine
 Table 2 Ind/Comm Coarse
 Table 3 Agri/Other For RSC
 Table _____

Other Regulations
 CCME Sanitary Sewer Bylaw
 Reg 558 Storm Sewer Bylaw
 MISA Municipality _____
 PWQO
 Other _____

Special Instructions

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle): Metals / Hg / Cr / V /	Azody	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	Total Coliforms / E. coli Background	TDS & TSS	RCMP - Comprehensive (Drinking Water) - No lead filter	Reg 153 PCBs	Reg 153 VOCs & F1-F4	SVOCs
---	-------	-------------------	----------------------	---------------	--------------------------------------	-----------	--	--------------	----------------------	-------

Turnaround Time (TAT) Required:
 Please provide advance notice for rush projects

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified):
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
 Date Required: _____ Time Required: _____
 Rush Confirmation Number: _____ (call lab for #)

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / V /	Azody	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	Total Coliforms / E. coli Background	TDS & TSS	RCMP - Comprehensive (Drinking Water) - No lead filter	Reg 153 PCBs	Reg 153 VOCs & F1-F4	SVOCs	# of Bottles	Comments
1	WG-160900764-20171018-JK19	19 OCT 18 2017	1108	GW	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19	BACT1
2	WG-160900764-20171018-JK20		1145	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		analysis per quote
3	WG-160900764-20171018-JK21		1226	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
4	WG-160900764-20171018-JK22		1310	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		not reportable.
5	WG-160900764-20171018-JK23		1350	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6	WG-160900764-20171018-JK24		1410	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
7	WG-160900764-20171018-JK25		1437	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8	WG-160900764-20171019-JK26	19 OCT 18 2017	1132	GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
9	WG-160900764-201710			GW													
10	WG-160900764-201710			GW													

*** RELINQUISHED BY: (Signature/Print)** *Jamie Koch* **Date: (YY/MM/DD)** 07/10/19 **Time** 1255

RECEIVED BY: (Signature/Print) *Deepthi Shaji* **Date: (YY/MM/DD)** 2017/10/19 **Time** 13:01

Jars used and not submitted _____

Laboratory Use Only

Time Sensitive	Temperature (°C) on Receipt	Custody Seal Present	Yes	No
	REFER TO ACT	Intact		

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO MAXXAM'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.MAXXAM.CA/TERMS.

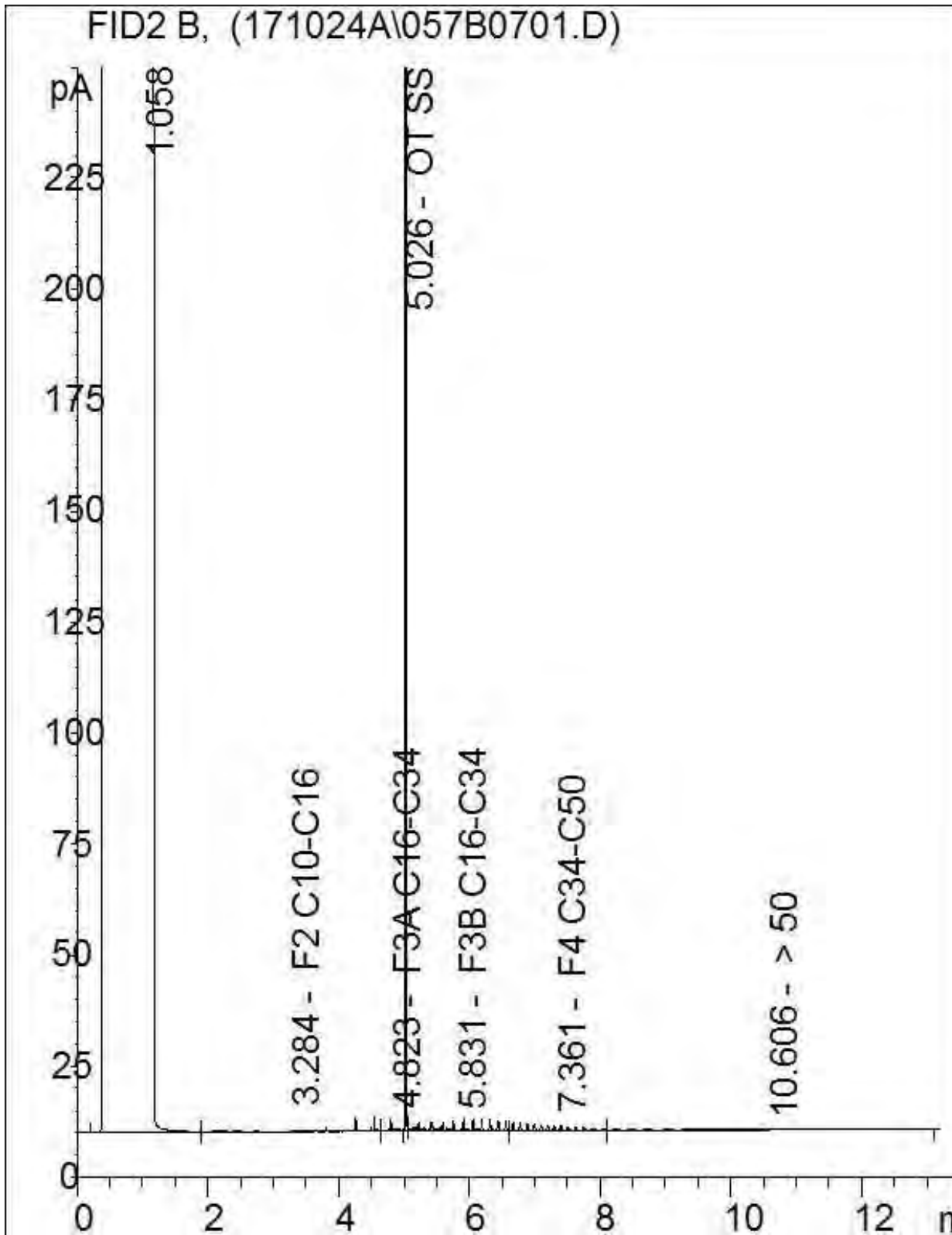
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT HTTP://MAXXAM.CA/WP-CONTENT/UPLOADS/ONTARIO-COC.PDF.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

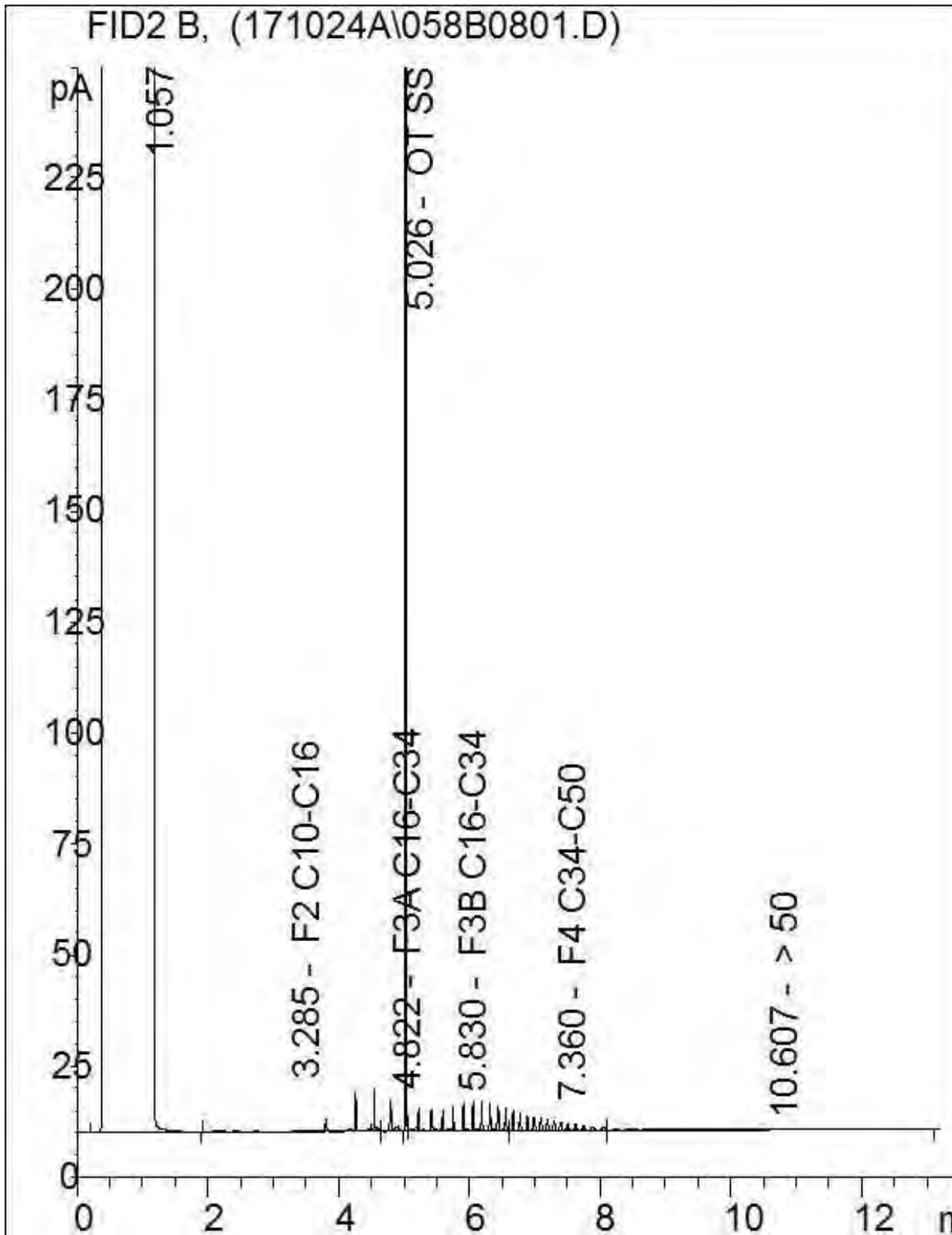
White: Maxxa Yellow: Client

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



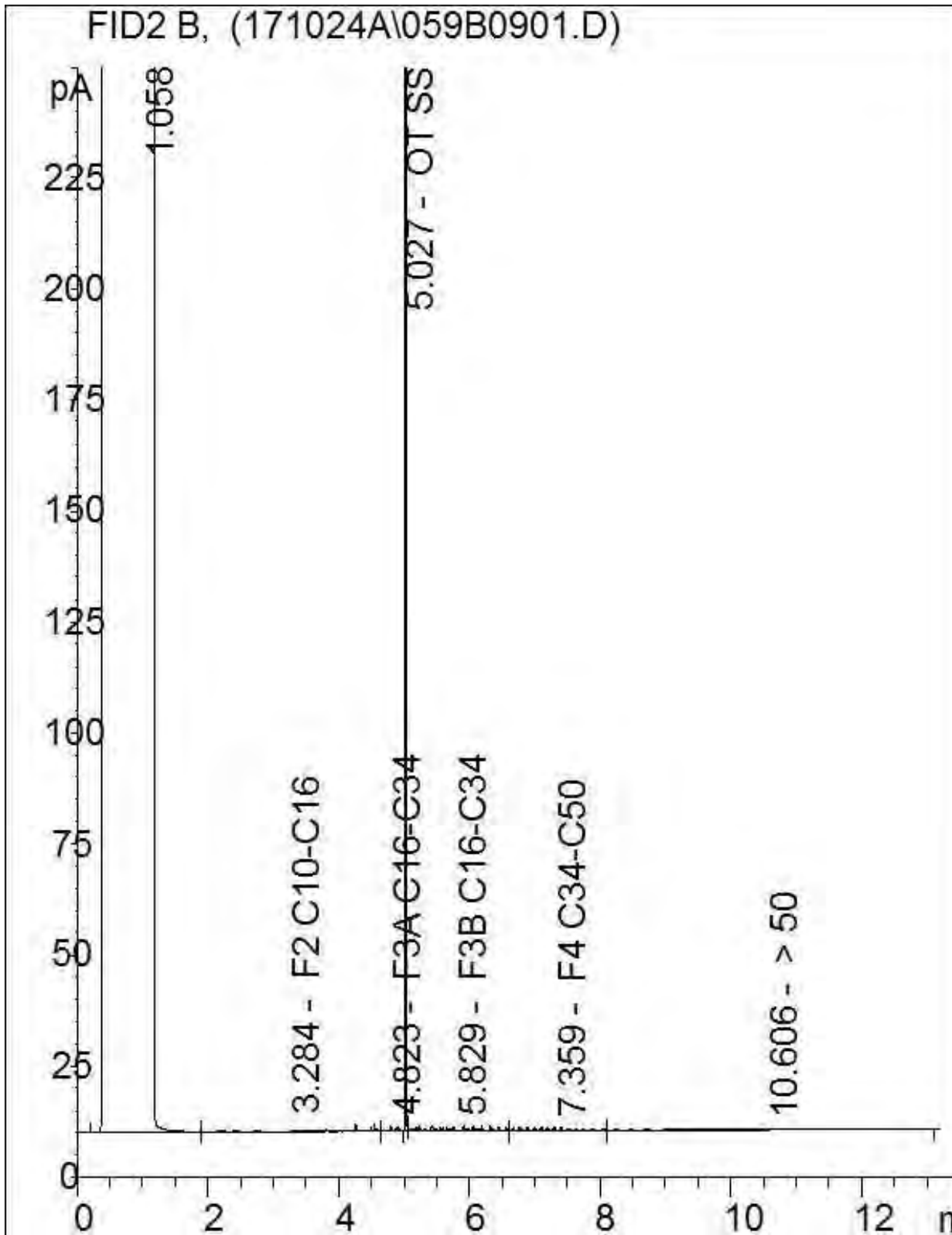
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



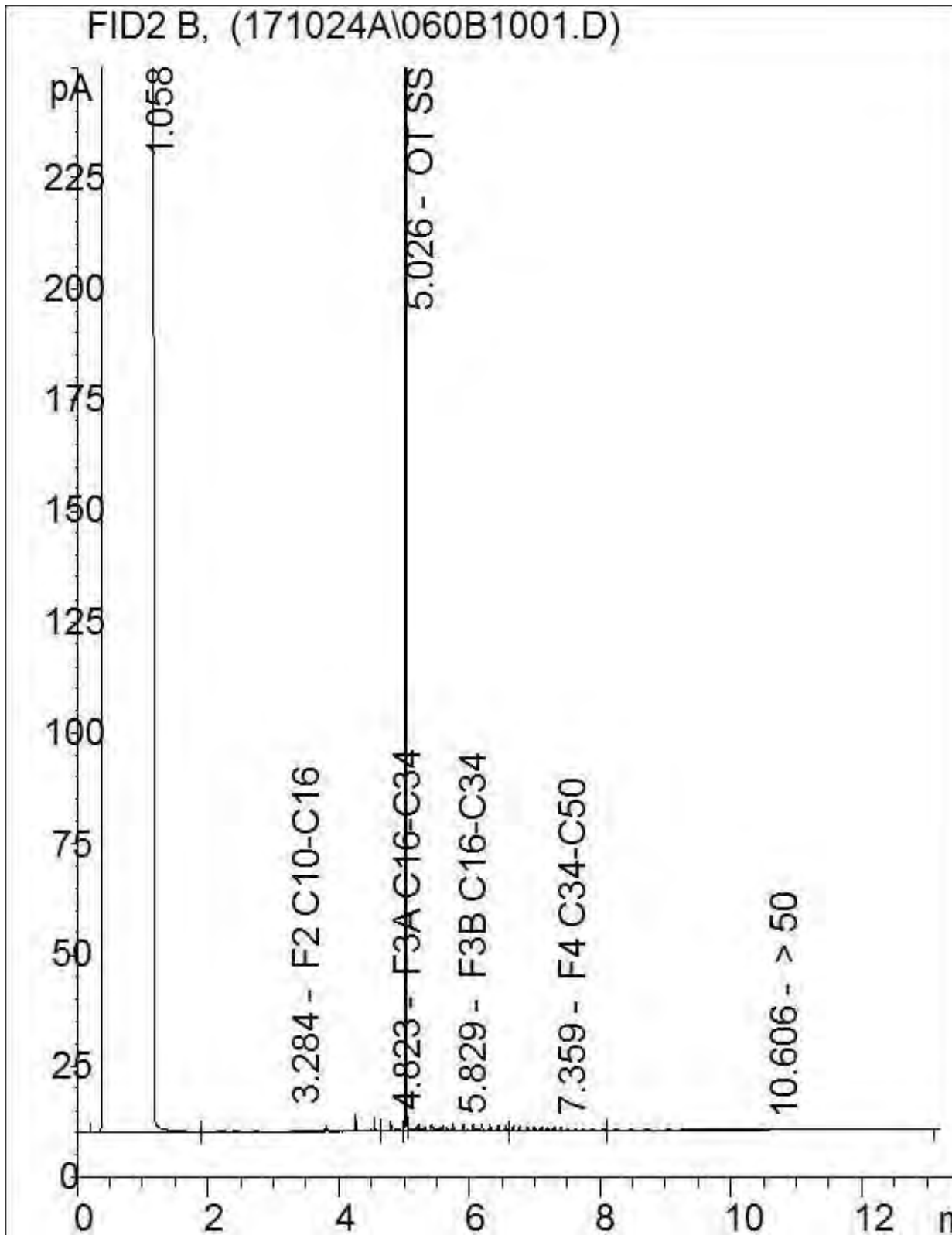
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



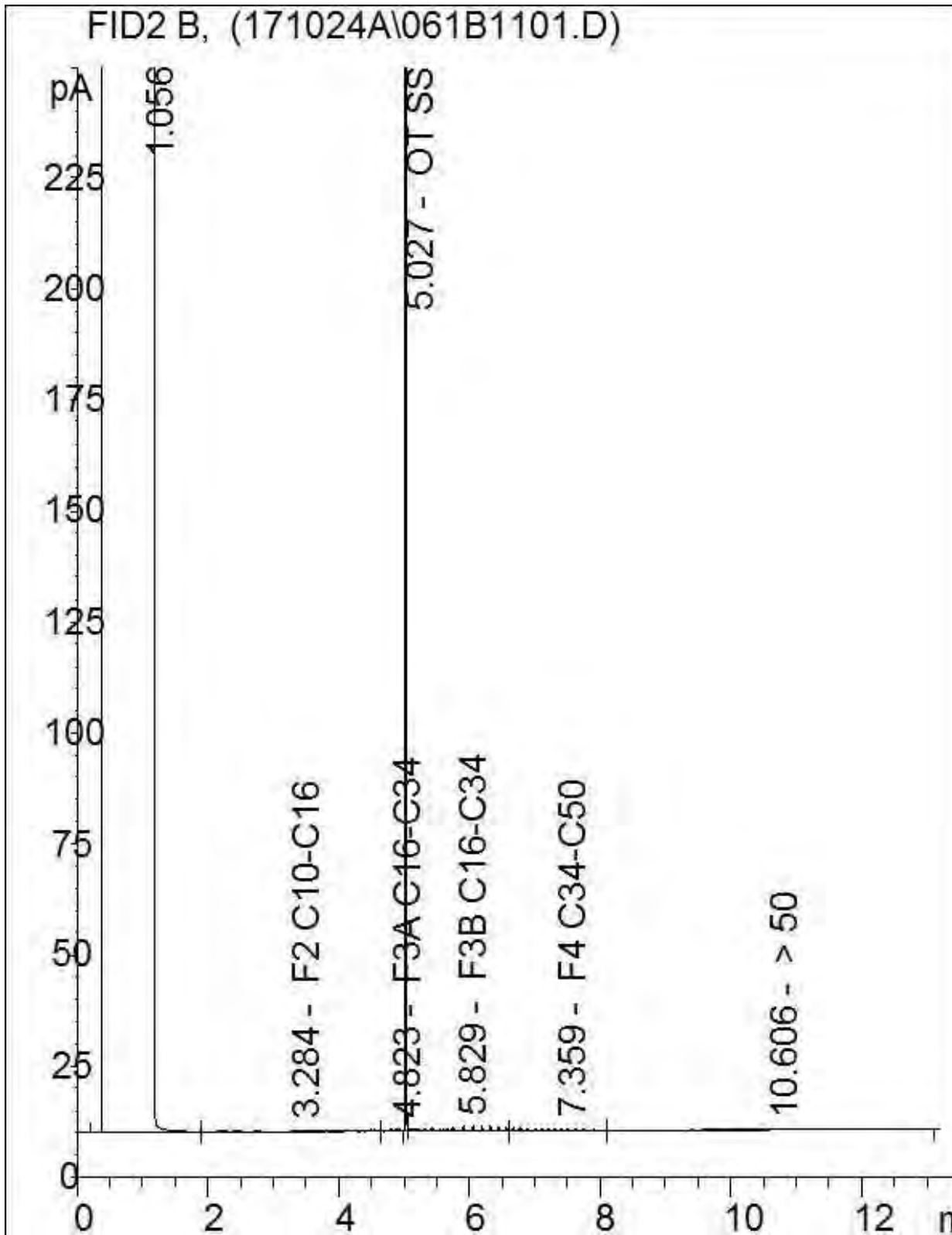
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



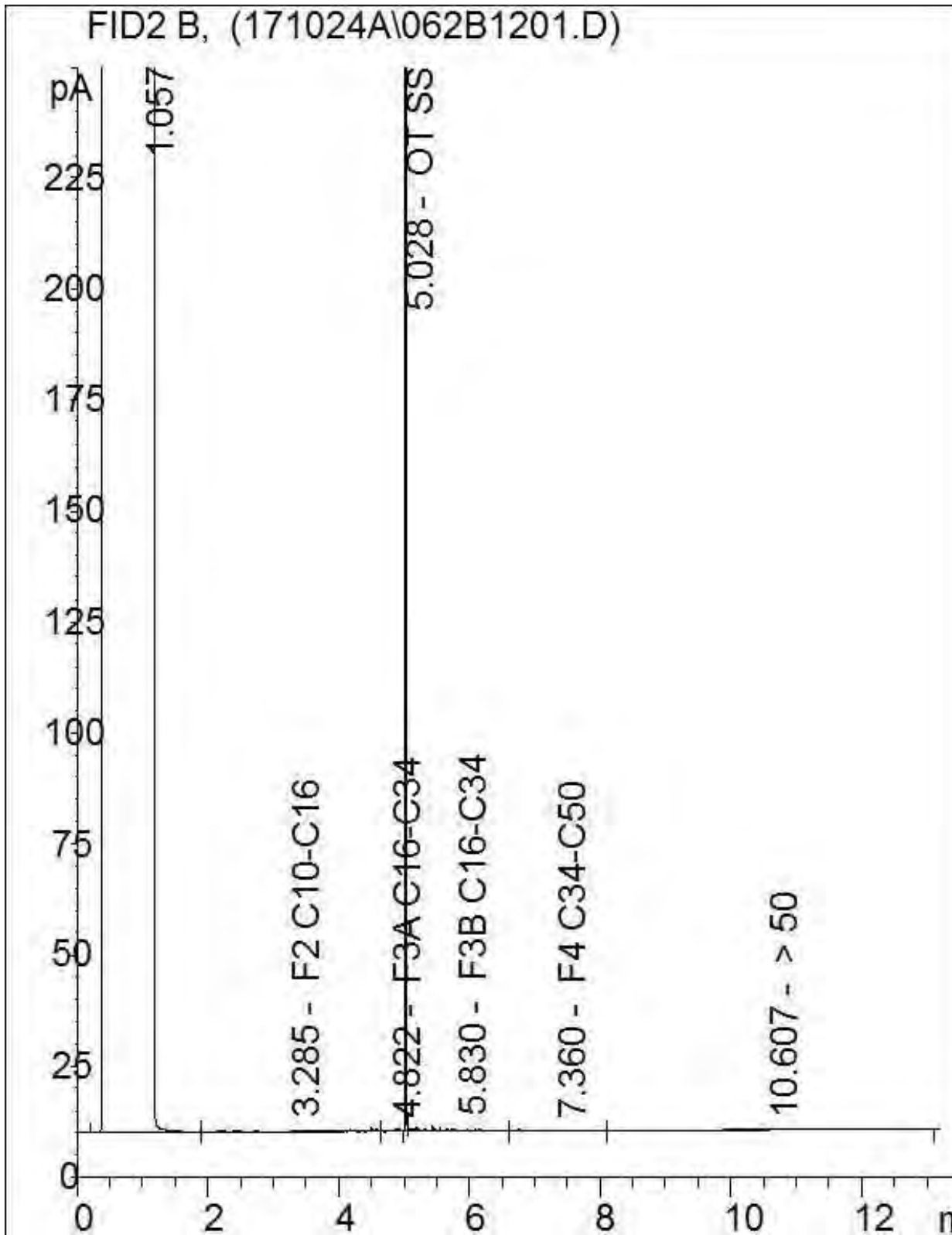
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



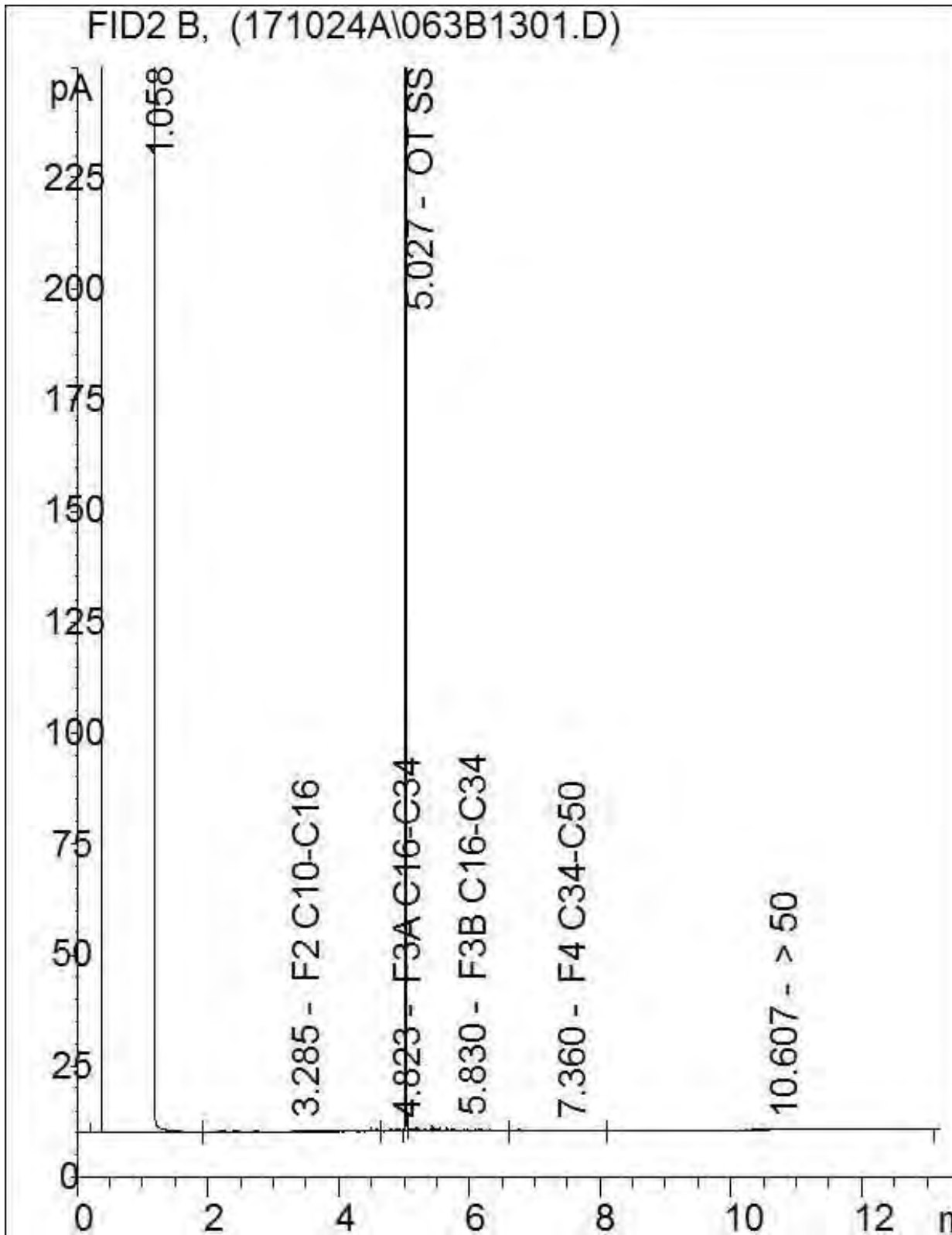
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



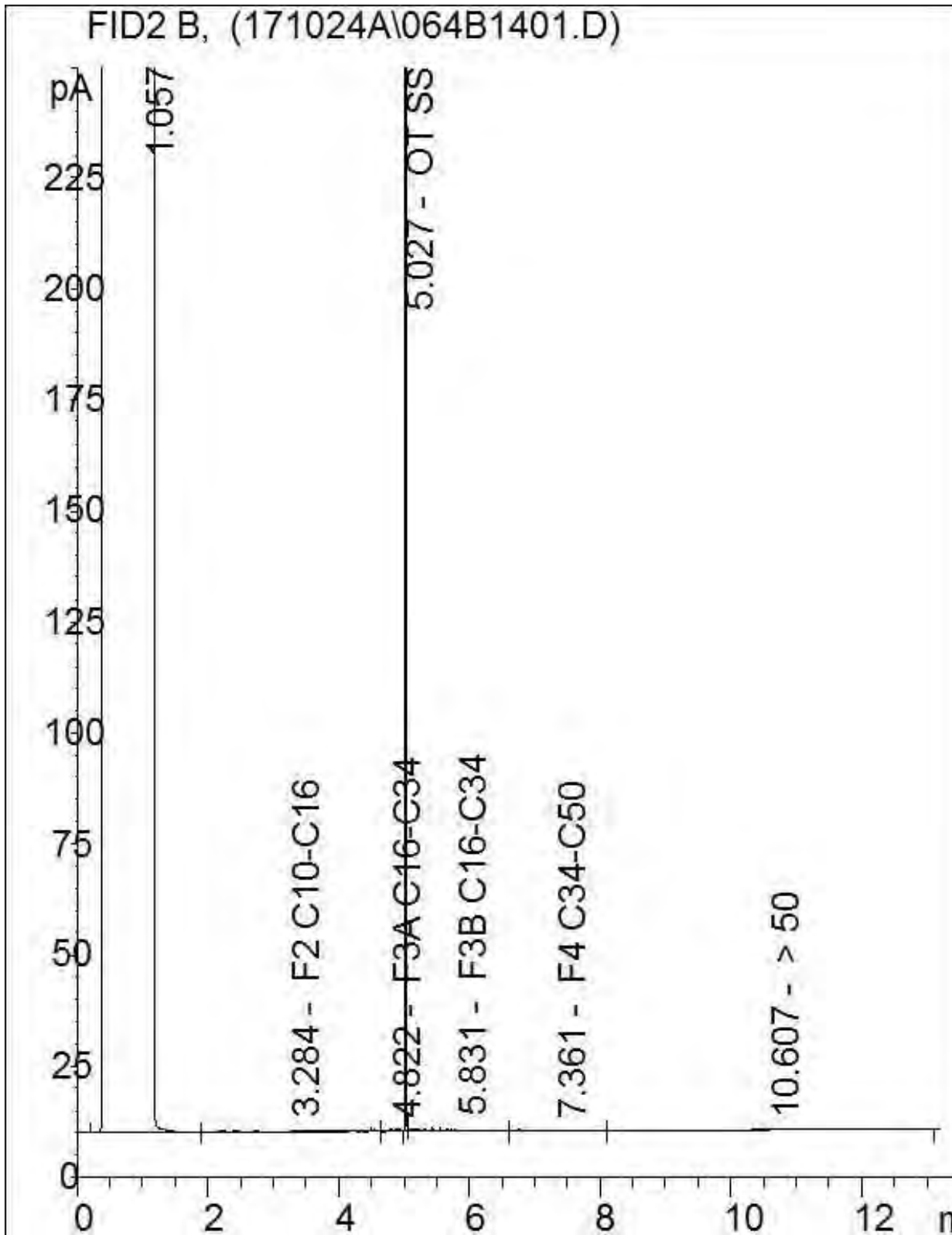
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



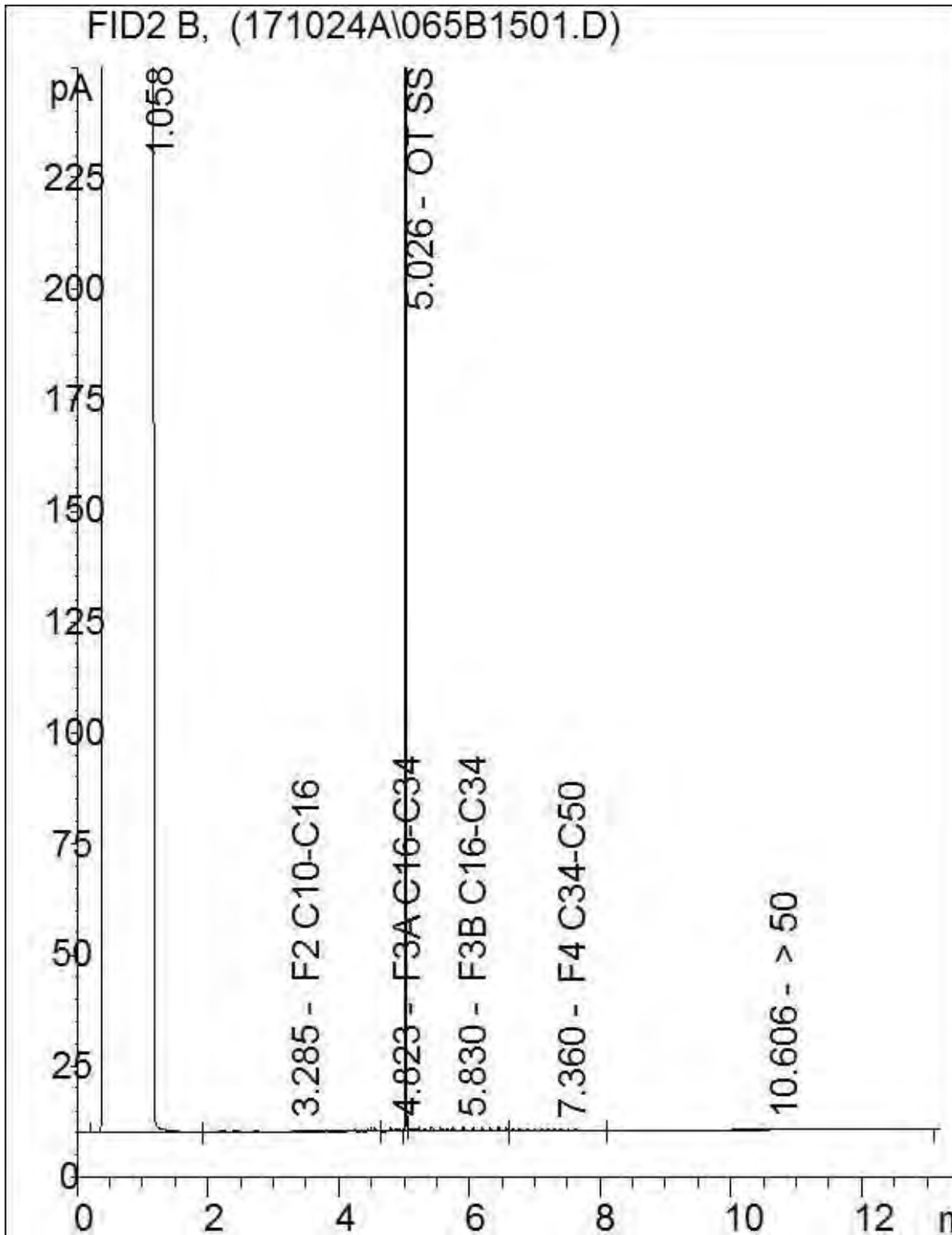
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.